

Planning application for residential development south of Tilden Gill, Tenterden – Report on improvements to Junction of Ashford Road and Beacon Oak Road for Tenterden Town Council

Introduction

1. I was approached by the Deputy Town Clerk at Tenterden Town Council on 23rd July 2018 through my company website to ask if I would be willing to support them by producing a report on the most suitable layout for the Beacon Oak Road (B2080)/Ashford Road (A28) junction in relation to the proposed development of land south of Tilden Gill by Redrow Homes Ltd for 100 dwellings. Tilden Gill is an estate road in a mixed housing development on the south side of Beacon Oak Road some half a mile from the junction with the A28.

Background

2. Tenterden is a small town with a population just over 9,000 in Kent. It lies within the administrative areas of Ashford Borough Council and Kent County Council. Until the 1970s it had its own Borough Council but after local government reorganisation the old borough council resolved to designate itself as the Town Council.
3. The site in question lies to the south of existing development and has been the subject of several planning applications in the past by several house building companies. In November 2014 an application by Gatefield Estates Limited was refused and an appeal was lodged which was heard in early 2016. The appeal was successful and included a commitment from the developers to improve the junction of Beacon Oak Road and Ashford Road. The current planning application by Redrow Homes proposes to replace this roundabout solution with a traffic signal layout to obviate the need to relocate an existing BT box at a broad outline cost of £500k.

Existing Road Layout

4. The existing road layout at the junction, see **Figure 1** below for a general view of the junction, is patently unsatisfactory as noted in the report prepared by WSP for the developers at Section 2.2. The A28 is not included in the Major Road Network proposed by the Department for Transport and as such is unlikely to qualify for central government funding to improve it. The existing Strategic Road Network route between Ashford and Hastings (A2070 and A259 Trunk Roads) provides the link between the two towns and the M20 and the south coast strategic route (A259/A27/M27). Therefore, any improvement to this junction by Kent County Council will have a low priority although as noted there are issues which ought to be addressed if the proposed development does not go ahead and the junction improved as a result.



Figure 1: General view of junction from SE corner of Beacon Oak Road and Ashford Road

5. Traffic on the A28 from the north can diverge directly into Beacon Oak Road without any requirement to slow down, see **Figure 2** below, which is particularly dangerous given that there is an uncontrolled pedestrian crossing facility immediately around the corner only designated by a drop kerb and tactile paving, see **Figure 3** below, which would not be visible to drivers coming from either direction. As can be seen from the analysis carried out by WSP an accident has been recorded where a pedestrian using this facility was hit by a vehicle turning from the A28 onto the B2080 Beacon Oak Road from the north west to the south east.



Figure 2: View from north of exit from A28 to Beacon Oak Road



Figure 3: View of uncontrolled pedestrian crossing in Beacon Oak Road

6. From the south vehicles turning right off Ashford Road are given a very short length, barely more than one or two vehicle lengths of marked stacking area in Beacon Oak Road, see **Figure 4** below, before they must give way to the vehicles travelling southbound on the A28 and exiting onto Beacon Oak Road mentioned at paragraph 5 above and shown in the photo below. This length of stacking area is insufficient for safe usage by waiting HGVs and buses which then block through traffic on the A28 in both directions due to overhang which could lead to potential side on collisions with through traffic southbound on Ashford Road.



Figure 4: View of stacking area for right turning vehicles from Ashford Road northbound into Beacon Oak Road

7. The analysis provided by WSP, see section 2.5 in their report and in particular paragraphs 2.5.9 to 2.5.13 and Table 2, shows that with the development the junction will be over capacity in the AM peak for traffic exiting Beacon Oak Road. Traffic on Ashford Road is always below capacity.
8. The signage at the junction is within the sightline of drivers exiting from Beacon Oak Road who are driving HGVs, LGVs or SUVs thus shortening their visibility of approaching vehicles from the north to less than 100 m. Any improvement to the junction should address this situation. In **Figure 5** below, taken from inside a large SUV, it can be seen that the signage is also in the sightline of the driver of the van approaching from the north along the A28.



Figure 5: View of signage at junction from inside vehicle

Visible statutory undertakers' plant

9. There are two green cabinets, see **Figure 7**, in the eastern verge of Ashford Road at the junction, the one closest to the kerb line, see **Figure 6**, being the aforementioned BT box and the other an electricity box. On the opposite side of Ashford Road at the junction there is another larger electricity installation, owned by UK Power Networks, within a locked enclosure which prevents widening on the western side of the road.



Figure 6: View of BT Box with electricity facility on opposite side of A28 behind close boarded fence



Figure 7: View looking north along A28 to the junction showing both utility boxes

Alternative Junction Layouts

10. There are 3 basic options for the junction layout in question between Beacon Oak Road and Ashford Road. On the basis that the existing layout is unsatisfactory it could be either remodelled to remove some of the problems identified, replaced as now proposed by a traffic signal layout or a compact roundabout layout such as was previously proposed.

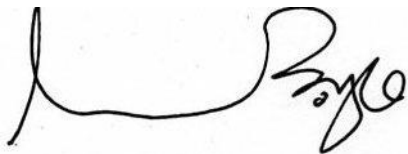
11. The existing road layout could be improved by reversing the priorities within the junction by allowing right turning vehicles into Beacon Oak Road from the south to have priority over vehicles making a left turn southbound off the A28. This would achieve two advantages. Firstly, it would remove the overhang of long vehicles across traffic on the A28 and secondly, the through traffic turning right onto Beacon Oak Road would clearly see pedestrians seeking to cross the road, whilst left turning traffic from the north would in all cases have to slow down at the Give Way marking although if they see the way ahead clear many might be tempted to drive straight through at high speed. The signage at the junction could be raised so as not to be in the sightline of drivers seeking to turn out of Beacon Oak Road to the north along the A28.
12. The next option is the traffic signal layout as proposed although we might recommend some minor alterations. The WSP proposals have been reviewed and although there are some discrepancies in their calculations which marginally change some of the outputs, we still consider that the traffic signal layout will work satisfactorily. The report on this is attached at Appendix A. Traffic signal layouts are often more appropriate for urban situations and provide the opportunity to segregate pedestrians and cyclists from vehicle traffic by the provision of dedicated phases in the traffic signal cycle and through the use of road markings to provide stacking areas for cyclists. This ability to provide especially for pedestrians would resolve the current unsafe provision which has given rise to accidents in the past.
13. The final option is to revert to the compact roundabout solution whilst recognising the need to move the BT box. The review that we have carried out, whilst showing some inaccuracies in the figures used for the original analysis, confirms that this was broadly correct and that a roundabout solution would have higher reserve capacity than the traffic signal layout. However, it is not as easy to provide for pedestrian movements which are clearly separated from vehicle movements without providing signalised crossings on the arms of the roundabout which experience the highest pedestrian movements, and this would of course impact on the operation of the roundabout for vehicle movements. In addition cyclists are normally safer at traffic signals than roundabouts which is borne out by the national casualty figures The report on this work is at Appendix 2.

Conclusions

14. The final choice can either be looked at in terms of pure traffic impact and suitability, including the safety of pedestrians, cyclists and other vulnerable road users, or by including cost and other issues such as the diversion of utility equipment.
15. The present junction layout is unsatisfactory as identified in the WSP report at paragraph 2.2, so should in any case be reviewed by the highway authority. It is however recognised that the A28 is not included within the proposals from central government for the Main Road Network which will receive designated funding from

the receipts of Vehicle Excise Duty, and therefore is unlikely to be a high priority for Kent Highways.

16. Assuming that the development goes ahead the choice then is between the original compact roundabout solution and the traffic signal layout now proposed. There are pros and cons as there often are with neither solution providing a standout in terms of traffic performance. It appears that the roundabout solution provides a better reserved capacity which would allow further growth to take place which may or may not be acceptable to the town and district councils. However, a traffic signal layout would enable safer crossing facilities to be provided for pedestrians and to a lesser degree, cyclists. So, on traffic grounds there are arguments for either option.
17. The presence of the BT box then comes in to play. Clearly the developers are unwilling to pay for its removal and re-siting as the cost would eat into their profit from the development, adding an additional £5000 to the cost of building each dwelling. That effectively scuppers the chances of the roundabout solution unless the cost of the alterations to this box are met by some other body. It is unlikely that Kent Highways would be willing and able to fund this although as has been pointed out there are quite serious deficiencies in the current layout of the junction that need to be addressed.
18. Our advice is that if there were no problem with the BT box then a roundabout would be marginally preferable but given that there is a problem and that the traffic signal layout would provide a marginally safer situation for pedestrians and cyclists the current proposal seems the most feasible. I would therefore recommend that the Council support the current proposals.



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Appendix A

Review of Traffic Signals

Appendix B

Review of Roundabout