

RS15003 Shirehampton Road / Kingsweston Road

- Junction Improvements - Update November 2016.

The Avonmouth and Kingsweston Neighbourhood Partnership identified a number of issues and road safety concerns. The objectives of the scheme set out were:

- Redesign the junction sufficiently to reduce the frequency and severity of road traffic accidents particularly for cyclists and pedestrians.

Improve pedestrian facilities and safety around the junction to accommodate the desire line for pupils from the Oasis Academy School in Penpole Lane to Sea Mills and for pedestrians to be able to access bus stops around the junction.

Additional issues raised by Council Officers:

- Update the bus stops in the area to provide real time information panels, weather protection and improved boarding facilities.
- The road surface through the junction is approaching the end of its design life.
- Junction forms part of an aspirational strategic cycle route linking the A4018 with a number of other.

The Feasibility Study undertaken on behalf of the Avonmouth and Kingsweston Neighbourhood Partnership concluded that only Option 5 (signalise the junction) and Option 12 (change priority from north south to east west) were likely to offer significant accident reduction benefits as well as providing the opportunity to realise the other improvements desired.

Surveys and tracking work have now been undertaken on the following options:

Option 5 - Signalisation of Junction.

Whilst certain assumptions were made in the initial feasibility study, which indicated that this option was viable, further detailed work has identified issues that have challenged this position. Specifically the movements of vehicles have been tracked at the proposed signalised junction with bus terminus and it has been concluded that there is a particular danger of HGV's tipping when turning right. The design would result in pedestrian facilities only being provided on one arm of the junction and out of the desire line. Furthermore it is estimated that signalising the junction due to more substantial civils works that are now considered necessary would cost in the region of £500k, which is over twice as much of what potentially could be available. **This option has therefore been discounted.**

Option 12 - Change priority from north south to east west

Further work has been undertaken since the initial feasibility study, which raises questions over this option. In this proposal all traffic travelling from Kings Weston Road would have to make two turns (right and then left) to be able to carry on the B4054 to Sea Mills. In the other direction vehicles would have to turn right and then left. Further consideration has been undertaken in light of the surveys and in both instances it would likely due to traffic flows that vehicles would have to queue to make the manoeuvre and there would be a further risk of road accidents. Furthermore adding two

lanes on the northbound approach would make it more difficult for pedestrians to cross at this point to access the proposed new location of the bus stops. There are concerns that the Bus Only gate would cause problems for vehicles trying to get past buses queuing from Sea Mills to travel to Kings Weston as well.

There is also concern that buses would find it difficult to turn left despite the proposed island being cut back. Furthermore the accident type that is occurring at the junction results in cyclists being hit when travelling down Shirehampton Road from vehicles travelling from Westbury Lane would not be addressed by this scheme as the cycle lane proposed is in the opposite direction.

It has been concluded that the number of turning movements would be unacceptable in both delaying traffic and would likely cause more road accident problems than it would solve.

Option 9 – New deflections, widths and alignments.

The others options have been looked at again and it has been concluded that Option 9 with amendments could provide the best design now that the other options have been explored.

The Feasibility Report concluded that the proposals would help to improve the pedestrian and cycle safety and reduce accidents by use of build-outs, new lane arrangements/separations and tightening up lane widths. The disadvantage of this scheme is that it would not change the bus stop locations.

It should be possible to tweak the design to add another pedestrian refuge island on Shirehampton Road, near Park Lodge and perhaps another island on Kings Weston Road and further narrowings of junctions as per the Option 11, once design work has been undertaken.

Consultation with the Neighbourhood Partnership and then the public will be undertaken once detailed design has been undertaken.

Cath Boutwood

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