DRAFT

A307 Portsmouth Road at Tartar Hill – Proposed pedestrian crossing facilities following permanent removal of existing over bridge

A pedestrian survey was undertaken in March 2008. The data showed that in the period 07:00 – 19:00 a total of 227 pedestrians crossed the A307 in the vicinity of the bridge. 35 of those used the bridge, 6 crossed at the northern end of the pedestrian guard railing and 186 crossed in the vicinity of the bus stop near the health centre.

Following the removal of the bridge, a survey was undertaken in April 2012. In the period as 07:00 – 19:00, a total of 201 pedestrians crossed. The smaller total may have been due to a change in habit but was more likely to be due to the inclement weather. Of this total, 9 pedestrians crossed at the northern end of the guard railing, and 192 crossed near the health centre; making use of the central island at the bus stop.

There is local concern that speed at this location is high. A speed survey was undertaken on 17 May 2012 for the periods 10:00 - 11:00 and 14:00 - 15:00. Some vehicles were found to be travelling over 40mph, and some under 30mph, though for south westbound (towards Cobham) traffic, average speed was found to be 35mph. For north eastbound (towards Esher) traffic, average speed was found to be 34mph.

It is noted that vehicles approaching from the north east, slow down at the central island near Brunswick Grove, due to the narrow running lane.

In light of the fact that the over bridge is to be permanently removed, the following options have been investigated:

- a) Do nothing and encourage use of existing crossing facilities near Northfield Road and Brunswick Grove
- b) Install a Zebra crossing
- c) Install a signal-controlled crossing at the site of the old over bridge
- d) Install a signal-controlled crossing near the health centre
- e) Improve existing central island near health centre
- f) Install new pedestrian refuge at the site of the old over bridge

a) Do nothing and encourage use of existing crossing facilities near Northfield Road and Brunswick Grove

The pedestrian surveys and general site observations show that there is a definite need to provide some form of crossing facility in this area.

Pedestrians cross in this vicinity to access the health centre, Old Common and St Andrew's school.

Install a Zebra crossing

As Portsmouth Road is an 'A' classified road, its function is to carry a large volume of traffic; a portion of which will be Heavy Goods Vehicles. It could therefore be hazardous for pedestrians to establish precedence when crossing. Furthermore, if priority is established during peak periods when pedestrian flow is at its highest, queuing will occur and drivers will be keen to establish precedence, leading to conflict.

Zebra crossings work best when pedestrian flow is light but regular and vehicular flow is moderate.

b) Install a signal-controlled crossing at the site of the old over bridge

A controlled crossing would give pedestrians a more controlled environment in which to cross, and also allows pedestrian flow to be governed. Even so it is likely that vehicular traffic will queue during peak times, and pedestrians could be tempted to cross injudiciously rather than wait. There is more likely to be conflict if pedestrians were to cross heedless of the 'red man' signal.

As shown through the pedestrian survey data, historically pedestrians have preferred to cross near the health centre than use the bridge. One reason for this is that the bridge was not user friendly for those in wheelchairs or pushing bicycles. A further reason was that the location of the bridge is also off of the pedestrian desire line and is slightly too far north for most users. It is unlikely that this would be a popular location for a permanent crossing facility.

c) Install a signal-controlled crossing near the health centre

A facility at this location would be popular being that it is on the existing desire line for most pedestrians. Though given the close proximity of the health centre access and the access to Old Common, this location does not lend itself to accommodating a signal-controlled crossing, in line with existing regulations.

Additionally, it is unlikely to be a popular location for such a crossing, for those living in Nos. 170 to 184 Portsmouth Road, whose properties directly front the highway as signalised crossings are by their nature visually intrusive.

The existing bus stop would need to be relocated to accommodate a crossing here.

d) Improve existing central island near health centre

As stated above, this would be a popular location for a permanent crossing, and the existing island is already heavily in use. The existing island could be modified relatively easily to provide a more suitable facility for pedestrians.

Although vehicular flow is relatively high and such a measure would not give priority to pedestrians, site observations have shown that generally there are sufficient gaps in the traffic to allow pedestrians to cross.

The existing bus stop would need to be relocated to accommodate a crossing here.

e) Install new pedestrian refuge at the site of the old over bridge

A facility at this location is unlikely to be popular with the majority of pedestrians, as it would be off of the desire line and therefore not used.

Although vehicular flow is relatively high and such a measure would not give priority to pedestrians, site observations have shown that generally there are sufficient gaps in the traffic to cross.

Conclusion

It is not considered appropriate to do nothing.

The survey data and site observations show that the majority of pedestrians prefer to cross near the health centre, utilising the existing central island.

The existing highway geometry does not lend itself to the installation of a controlled crossing near the health centre. Furthermore the provision of a controlled crossing could lead to uncertainty, and would cause queuing of vehicular traffic. Such a facility could also give rise to either pedestrians or drivers taking chances, when precedence has been established by an opposing traffic flow.

Representation from those properties fronting the highway near the health centre is likely to be received, if a significant amount of street furniture is installed outside their frontages.

Speed surveys show that average vehicle speed is above the posted limit of 30mph. Approach speed would need to be addressed as part of any scheme.

The relocation of the bus stop could have implications, as it is unlikely that Elmbridge Borough Council would approve the relocation of the shelter on to the nearby common land. The shelter currently displays advertising and there would be a financial penalty to remove the structure altogether, though agreement could be reached to keep it at its current location, although that site would be redundant as a bus stop.

Recommendation

It is recommended that the existing central island near the health centre be modified to better accommodate pedestrians and further narrow the carriageway.

Furthermore, it is recommended that a central island be located in the vicinity of the old over bridge, to narrow the running lane and govern the approach speed of vehicles travelling from Esher.

The existing bus stop to be relocated approximately 30 metres northeast.

Central hatching with right turn lanes for Lyster Mews and Portsmouth Road (south) to be installed to reduce the running lanes throughout this location. Also to allow vehicles travelling towards Esher the opportunity to pass stationary buses, given that forward visibility would be slightly restricted.