

Springfield Way, Anlaby, Hull - Traffic Signals

Sanderson Associates were instructed by Derwent Holdings to provide highway advice for a development on the Springfield Way retail park in Hull. This initially involved the writing of a detailed Transport Assessment and Travel Plan. Planning Permission was then granted following various meetings with East Riding Council and Hull City Council Engineers and Planners. The off site works assessed necessitated the requirement for two new traffic signal junctions to provide access to the retail development.

The retail park is served off a service road shared with an adjacent supermarket and a builders merchants. Each end of the service road formed a priority junction with the B1231 Springfield Way to the West of Hull City Centre and needed to be signalised to accommodate the additional traffic generated by the retail site.



Western junction - before

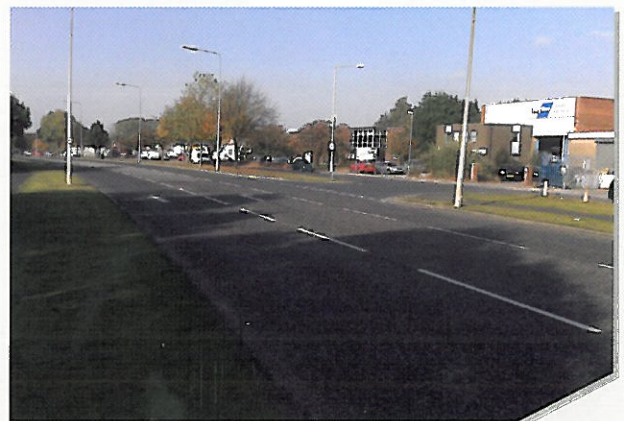
Initially the two junctions were assessed using Picady which identified capacity and queuing issues on the service road approach to the main B1231. Following this modelling Linsig (a sophisticated traffic simulation program) was utilised to see how the junction would perform under traffic signal control. This modelling showed that traffic signals with pedestrian facilities could be accommodated at both junctions and resolve the capacity, queuing and delay issues.

When the signal junction designs and layouts had been agreed with East Riding of Yorkshire Council the installation on site began.




Western junction - after

The equipment for the Eastern junction was installed first. Due to the nature of the service road the junction was closed and all traffic routed through the Western junction. This caused some short term queuing concerns with the nearby access to the supermarket, but these were quickly resolved on site.



Eastern junction - before



When the on site installation was completed the new signals were commissioned then installation began on the Western junction. All traffic was routed through the new Eastern junction operating under the new traffic signals. Once this installation was complete this junction was switched on and both junctions were back to full operation under signal control.

Both junctions had complications that were resolved at the design stage. On the Eastern junction there are two accesses into a builders merchants which needed to be kept clear for delivery vehicles to access the yards. In order to ensure this a secondary stopline was designed to hold back any traffic wishing to exit from the service road onto Springfield Way and was incorporated into the signal staging. The Western junction is in close proximity to an existing toucan crossing so to ensure consistent changes between the two they had to be linked. This was done using a hard wired link and within software in the new signal controller.

Post commissioning site visits have shown that both junctions are operating safely and efficiently.



Eastern junction - after



Eastern junction - secondary stopline