

JUNCTION IMPROVEMENTS A129 LONDON ROAD/ DOWN HALL ROAD/CRESWICK AVE RAYLEIGH

1 PURPOSE OF REPORT

- 1.1. To appraise Members of the proposals for improvements at the junction of A129 London Rd, Down Hall Road and Creswick Ave.

2 BACKGROUND

- 2.1 In September 2000 Local Members and Officers met to discuss the problems at this junction. It is busy with high traffic flow along the A129 that results in some peak time delays to vehicles leaving Down Hall Rd.

Options discussed at that time were:

- Adjusting kerblines in Down Hall Road
- Mini Roundabout
- Closing of Creswick Ave
- Full size roundabout
- Double mini roundabout
- Relocating crossing and introducing another in Station Road
- Installing "Keep Clear" road markings across the Down Hall Road junction on London Rd
- Traffic signals

The advantages and disadvantages of each option were discussed fully and resulted in three items being considered for action

- Keep Clear markings
- Relocate crossing and consider new crossing
- Commission study for traffic signals

3 MEETING OF INTERESTED PARTIES TO DISCUSS THE JUNCTION 18th JUNE 2001

- 3.1 This meeting was convened primarily to discuss the feasibility study for traffic signals, to discuss matters arising since last September and to consider the suggested improvement measures.
- 3.2 **Traffic Signals** - Essex County Council commissioned a study from its specialist consultant, SA2000, with a brief to undertake a feasibility

study into the likely effect of signalling the crossroads with respect to junction capacity. Various signal options were considered and capacity limitations and delays were modelled using the industry standard LINSIG2 signal program. SA 2000 recommended option 3 from the study but acknowledged that signals would produce some delays especially in the evening peak. A series of capacity checks carried out indicated that the introduction of signals would result in a practical reserve capacity of 6.6% with a 5% margin for error. This means that there would be no spare capacity and no scope for future growth. The County recommendation for all new signal arrangements is a minimum of 15% (the national standard is 20%). The presented figures give grave cause for concern for the system's ability to cope from day one of a proposed installation. Officers recommended that the scheme to signalise the junction would not demonstrate best use of public funds and that other measures for improvement should be considered.

- 3.3 **“Keep Clear” markings** – These markings were introduced to provide road space for drivers wishing to join London Rd from Down Hall Rd. It was agreed that there had been a measure of success, more drivers having been encouraged to leave gaps allowing drivers to enter and leave Down Hall Road.
- 3.4 **Relocate crossing and consider new crossing** – The suggested site for the crossing relocation to the west of the junction would not be on the “pedestrian desire” line and the change would be unpopular with pedestrians who may not use the facility. Visibility from one direction was not ideal and changes to footway levels may make the crossing and footway approaches less accessible for disabled users. The suggestion for a second crossing point in Station Road remains an option for future consideration and is included on the list of Pedestrian Facilities in the Locally Determined Programme. It was agreed that no further consideration be given to re-siting the crossing.

4 CONSIDERATION OF OTHER OPTIONS

- 4.1 **Upgrade existing “Zebra” crossing in the vicinity of the junction to a “Puffin.”**

This option was welcomed because it offers congestion relief at peak times. Pedestrian streams would be broken up to cut delays to traffic whilst allowing pedestrians, particularly vulnerable pedestrians, to cross in confidence. Gaps in the main road traffic flow will allow opportunities for drivers to exit the side roads. Puffin technology eliminates wasted time by cancelling unnecessary demands for pedestrian phases. For example, if the pedestrian moves away from the crossing after pressing the button. The speed at which pedestrians cross is also monitored.

The proposed layout would be subject to safety audit as it may be necessary to move the crossing point away from the junction by a short distance. This would need to be discussed with shop owners to ensure that any concerns are considered.

4.2 Highlight “Keep Clear” markings

The improvements already achieved by the keep clear markings may be improved upon by highlighting the markings with a red background. It is expected that even more drivers would comply with the markings.

4.3 Minor Carriageway realignment in Down Hall Road

Drivers queuing in Down Hall Road tend to form two lanes at peak times. Minor adjustments to the kerbline in the vicinity of Harper Way will allow this informal arrangement to extend further along Down Hall Road. This could minimise the delay to drivers wishing to make a left turn into London Road who are at present held up by drivers turning right.

4.4 Mark out “right turn” lane

The introduction of a designated right turn lane for traffic turning into Down Hall Road from London Road should assist drivers in adopting the most appropriate position to make the turn.

5 RESOURCE IMPLICATIONS

- 5.1 A total of £95,000 is available to fund recommended improvements during the Financial year 2001/2002.
£50,000 from Rochford District Council
£45,000 from Essex County Council Capital Budget

6 RECOMMENDATION

It is proposed that the Committee **RESOLVES:**

That, subject to advice from Safety Audit, the options recommended in Item 4 be implemented.

- Upgrade existing “Zebra” crossing in the vicinity of the junction to a “Puffin.”
- Highlight “Keep Clear” markings
- Minor Carriageway realignment in Down Hall Road
- Mark out “right turn” lane

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Background Papers:

Feasibility Study for Proposed Signalisation of the junction:

A129 London Road/ Down Hall Road / Creswick Avenue, Rayleigh, Essex

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