

**HERTFORDSHIRE COUNTY COUNCIL  
ENVIRONMENT DEVELOPMENT CONTROL COMMITTEE  
TUESDAY 21 NOVEMBER AT 10:30 AM**

**Agenda No.**

**5**

**NORTH HERTFORDSHIRE  
VERULAM ROAD/WALSWORTH ROAD ROUNDABOUT, HITCHIN**

*Report of the Director of Environment*

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Local Member: D A Ashley

Adjoining Member: D E Billing

**1. Purpose of the report**

1.1 To inform Members of objections made by the North Hertfordshire Highways Partnership (NHHP) Panel to the design of the roundabout at Verulam Road and Walsworth Road, and the implications of the proposals suggested by the Panel, and the wider effect on Safety Schemes.

**2. Summary**

2.1 The junction of the B656 Walsworth Road and Verulam Road appeared in the 1997 Hazardous Sites report and was investigated. In the three year study period from 1.2.95 to 31.1.98 there were 13 injury accidents (1 serious and 12 slight). There is a large and constant flow of traffic using the B656 Walsworth Road, with a high degree of traffic using the side roads. The junction layout at that time was a four arm mini roundabout installed by North Hertfordshire District Council (NHDC).

2.2 An accident remedial scheme was designed in the form of a normal kerbed roundabout, rather than a mini roundabout, which afforded more protection for vulnerable road users. The design was progressed by NHDC and installed before the formation of the North Hertfordshire Highways Partnership. The junction is now a four arm small roundabout, with a central island 4-5 metres in diameter. The layout of the roundabout island consists of 'Trief' kerbing with a chevron block layer with plastic bollards located on the top. (See Photograph 1)

2.3 The Hitchin Forum, the Historical Society and a number of local residents objected to the aesthetic appearance of the roundabout. Conversely, some local residents have stated approval for the scheme and the design. The main concern of the Hitchin Forum and Historical Society relates to the location of the roundabout, in that it is on the immediate boundary of a conservation area. Those objections have been supported by the NHHP Panel.

2.4 The Panel requested that five alternatives be investigated, which included revisions to the layout of the roundabout and street lighting levels. The Panel's proposals have been investigated by Mouchel Consulting who advised that whilst the removal of the

bollards, to be replaced with signs, would not compromise the 'safety' element of the scheme, the removal of the chevron block layer, to be replaced by planting, is considered to be detrimental to safety.

### **3. Conclusions**

- 3.1 The roundabout was installed as an accident remedial scheme, which has resulted in only one accident occurring since its implementation. To make modifications to the design of the roundabout could result in an increase in road accidents and casualties.
- 3.2 The chevrons blocks are an integral part of the accident remedial scheme design, being highly visible to oncoming drivers. The bollards on the top of the roundabout can be replaced with signs without seriously reducing the advance visibility of the roundabout.
- 3.3 It is current policy to limit levels of public consultation on accident remedial schemes unless there is a range of options which offer similar safety benefits and economic rates of return.
- 3.4 Removal of a fundamental safety element from an accident remedial scheme due to objections on aesthetic or environmental grounds requires careful consideration of all possible ramifications. It would be contrary to existing policy

## 1. Background

- 1.1 The accident investigation report identified that 10 of the accidents at the site had involved pedal cycles/mopeds or motorcycles. Of those 10, 7 occurred on the circulatory carriageway, and in each case the two-wheeled vehicle had passed beyond the central dome before being struck by another vehicle. 7 of the accidents had occurred in the wet, and 2 in dark conditions.
- 1.2 The accident remedial scheme was designed to provide more protection for vulnerable road users, and since the implementation of the scheme only one personal injury accident has been recorded (this involved a cyclist heading across the roundabout being struck by a car emerging from a side road). The measures included improved street lighting, anti-skid surfacing on the approaches to the zebra crossings on the approach roads and the introduction of a small roundabout.
- 1.3 The roundabout has tightened vehicle-turning movements through the junction, and the use of 'Trief' kerbs has added to this, as vehicles appear to shy away from the central kerblines. This has reduced speeds through the junction, giving two-wheeler users more time and space to negotiate the roundabout safely.
- 1.4 The chevron blocks and bollards provide a clear indication to oncoming drivers of the presence of the roundabout.
- 1.5 The County Council has a statutory responsibility under the Road Traffic Act 1988 (amended by the Road Traffic Act 1991) to prepare and implement a programme of measures designed to promote road safety.
- 1.6 When the scheme was implemented by NHDC in May/June 1999 a number of representations had been received regarding the environmental impact of the roundabout's visual appearance, ranging from the blue/yellow 'keep left' bollards to the chevron block layer of the construction. The Hitchin Forum and the Hitchin Historical Society believe that it does not enhance the character of the buildings in the conservation area. Concern has also been expressed that there had been little consultation with residents in the area.
- 1.7 Whilst there is usually a public consultation process for traffic management schemes, this is not usual practice where options for the design of an accident remedial scheme are limited. In this case a number of points had been raised and discussed with the Conservation Officer at North Hertfordshire District Council, and these had been addressed within the design.
- 1.8 A meeting of the North Hertfordshire Highways Partnership Panel requested that the design be reviewed to provide a safe and effective alternative, and a report be presented to the Panel, with costings, to include the following:
  - i) to retain the height of the kerbing;
  - ii) to look at viable alternatives to the chevron layer of the roundabout (eg paving or planting schemes);
  - iii) to revert to the traditional keep left signs instead of using plastic bollards;

- iv) to reduce the lighting of the signs without compromising safety;
- v) to maintain consistency of the colouring of the street furniture around the junction.

1.9 Mouchel prepared the report which concluded that:

- i) the colour of the street furniture could be changed;
- ii) the bollards could be replaced by signs;
- iii) the chevron block layer is a fundamental design aspect that permits the junction to be more conspicuous to approaching drivers who might, because of the vertical alignment of the carriageway, not be aware of the roundabout junction ahead. They are a standard traffic sign, widely used in the county at roundabouts with an accident history and at locations where high levels of driver awareness of the roundabout are required. They have also been introduced in conservation areas elsewhere in the County e.g. St Peters Street, St Albans;
- iv) as the scheme is reducing the number and severity of personal injury accidents, Hertfordshire Constabulary do not support the proposals to remove the chevron blocks;
- v) to reduce the level of street lighting could have a detrimental effect on the safety of the roundabout as two accidents had previously occurred in dark conditions;
- vi) a traffic-light controlled junction was considered as an alternative design to the roundabout in the original investigation. The cost was estimated to be in the region of £80,000, but the major concern was that it would result in long queues of traffic being generated at three of the four arms of the junction.

1.10 The modifications to the chevron layer requested by the NHHP are considered to be detrimental to the safety element of the scheme.

1.11 Agreement to modify the chevron layer against advice raises additional issues about the design of accident remedial schemes:

1.11.1 The effect might be to increase the probability of injury accidents occurring at the junction, and possibly permit litigation against the Highway Authority from third parties, including the Health and Safety Executive under the Construction and Management Design Regulations 1994

1.11.2 It could set a precedent of only permitting Accident Remedial schemes to be implemented if they are visually unobtrusive and have little environmental impact. Accident remedial measures often need to be highly visible in order to be effective.

## **2. The Human Rights Act**

2.1 This Act came into force on 2 October 2000 and applies to any decision taken by this Committee after that time. It brings much of the European Convention on Human Rights into UK law and introduces an obligation on public authorities to act consistently with such rights. Article 8 provides that everyone has the right to respect for his private and family life, home and correspondence. The courts have held that the preservation of the environment falls within the scope of this right.

- 2.2 This is a qualified rather than absolute right . In this instance the County Council as Highway Authority has a duty to act in the interests of public safety. The decision of the Committee must demonstrate that it has weighed the need for public safety against individuals rights under Article 8.
- 2.3 Given the accident history at Walsworth Cross Roads this report concludes that the need to retain the chevron markings for safety reasons outweighs the concern that the chevron markings are unsightly within this location.

### **3. Financial Implications**

- 3.1 To replace the roundabout with a traffic controlled junction would cost in excess of £80,000.
- 3.2 To replace the bollards with traffic signs (see Appendix) would cost approximately £1,700. Changing the colour of the street furniture would cost about £1,000.
- 3.3 To remove the chevrons and replace with planting would result in a works cost of around £1,000. However, if accidents increased at the junction, litigative claims could result. (DETR Highways Economic Note 1998 gives the average cost for prevention of accidents at £62,100 per accident.)

### **4. Conclusion**

- 4.1 Members are asked to consider whether or not the chevron blocks included in the design of the Walsworth Road roundabout should be removed.

#### Background material used by the author in compiling this report

Report to Cases Briefing on 5 October 2000  
North Hertfordshire Highways Partnership documentation  
Report from Mouchel Consulting