

Reconfiguration of traffic signals layout at Redworth Junction, Totnes

Report of the Head of Planning, Transportation and Environment

Please note that the following recommendations are subject to consideration and determination by the Committee before taking effect.

Recommendation: It is recommended that:

- (a) this Committee supports, in principle, the proposal to reconfigure the existing traffic signal layout at Redworth Junction in Totnes as proposed in this report; and**
- (b) Cabinet be asked to approve the detailed design of the scheme for construction.**

1. Summary

The proposal is to alter the layout of the traffic signals at Redworth Junction in Totnes to provide a fully signalised crossing of the Western Bypass arm of the junction. The reasons for the proposal are:

- To provide a safe, controlled crossing point for pedestrians at the junction.
- To refurbish a junction which has failed in electrical safety terms and requires urgent replacement.

2. Background/Introduction

'Totnes on the Move' is a local community group, guided by a Community Board, which has been set up to encourage sustainable travel in Totnes and surrounding areas through identifying projects and initiatives.

Public workshops in March 2012 identified that the difficulty in crossing Redworth junction presented a barrier between the town and the site of the King Edward VI Community College (KEVICC), particularly for pupils of the school. The 'Totnes on the Move' Roadshow on the 28 April 2012, which was attended by over 400 people, presented concepts for improving the junction, which attracted considerable public support and additional public feedback. That feedback has now been incorporated in the scheme presented here.

In the current junction arrangement, there are no formal (signal controlled) crossing facilities for pedestrians. The A381 Western Bypass has over 80 pedestrians crossing this road in the peak periods showing a clear desire line. The proposed change to the junction would introduce a controlled crossing facility on the Western Bypass and Ashburton Road arms of the junction.

The signals at Redworth are in critical need of replacement. The maintenance contractor has failed the junction in relation to electrical safety and therefore works are required urgently. This provides an excellent opportunity to refurbish the junction and include provision for pedestrians whilst replacing the dated infrastructure.

Providing a safe, controlled crossing will improve conditions for pedestrians at the junction, providing the facilities supported by the community. The development of the scheme is a

positive reflection of the close working relationship that is developing between the local community and the County Council.

3. Proposal

The proposal is shown in the attached drawing. A larger copy of the drawing will be made available at the HATOC meeting.

The proposal is to provide fully signal controlled facilities for pedestrians on the Western Bypass and Ashburton Road arms of the junction. This would enable pedestrians from Totnes and Bridgetown to cross to KEVICC from either side of Station Road. The current layout has no pedestrian signal control facilities and the left turn out of the Western Bypass is only controlled by a give way line.

Surveys have shown that the pedestrian movements are highest on the Western Bypass arm of the junction, with at least 80 pedestrians crossing during a peak hour period.

The addition of pedestrian facilities will not cause a reduction in capacity as the main constraint during peak periods is the exit blocking from Station Road. Any short term queuing will be offset by the benefit to vulnerable users.

The Committee are asked to support the proposed reconfiguration of the junction, in principle. Detailed design will then be progressed, with the final scheme and cost taken to Cabinet for approval.

4. Consultations/Representations/Technical Data

The issue of the safety of pedestrians at this junction has been raised in a number of consultation events with the community, most notably at the Roadshow on 28 April 2012 and during Car Free Day on 20 September 2012.

The proposal has been shared with the Totnes on the Move Community Board. The discussion centred on looking for other options; a request was made for a raised table at the junction and additional facilities for cyclists. All these options have been previously considered therefore due to the pressing need to replace the junction and provide a dedicated facility for pedestrians the scheme as shown is recommended for approvable and more detailed design.

5. Financial Considerations

The signals are in urgent need of replacement due to be replaced in October 2013 and the cost of the scheme could be offset against the cost of replacing the signals.

Funding is available through the Signal Maintenance Programme, Local Transport Plan Integrated Block, Local Sustainable Transport Fund and section 106 contributions.

An accurate cost of the scheme will be obtained through detailed design. Due to the level of service apparatus in the location and the requirement to upgrade the existing signals, it is intended for the detailed design to be approved by Cabinet as costs may exceed the HATOC limit.

6. Sustainability Considerations

The scheme is proposed as part of a wider campaign to promote walking in Totnes. This proposal in particular will provide a safer and easier walking route between the town and KEVICC, improving the connectivity between school and the area it serves.

In addition, land adjacent and to the west of the junction is allocated for development as detailed in the adopted Development Plan. This provides further support for provision of signalised crossing facilities at the junction.

7. Carbon Impact Considerations

An increase in pedestrian journeys will lead to less need to use motor vehicles on local journeys in and around Totnes. This should be seen within the greater context of promoting Totnes as a town where more sustainable transport options are used.

8. Equality Considerations

An Equality Impact and Needs Assessment will be produced and available at the HATOC meeting.

9. Legal Considerations

The works proposed are within the existing highway network and therefore require no land acquisition.

10. Risk Management Considerations

The scheme is subject to normal engineering risks and a contingency has been applied to the works estimate. Detailed design will include a quantified risk assessment and a revision to the works estimate if required.

11. Public Health Impact

By encouraging walking as a more viable mode of transport this scheme will improve the health of the local population.

12. Discussion

The signals require urgent replacement and this presents an ideal opportunity to carry out the work at a lower overall cost to the County Council.

There is a commitment to improve sustainable travel infrastructure in Totnes. Redworth Junction is seen as a barrier to movement by pedestrians. The improvements put forward will improve facilities and provide a dedicated crossing point across the road with the highest pedestrian movement.

13. Options/Alternatives

A number of options have been considered for the junction throughout an extensive consultation period. Amongst the options, alternatives which have been considered are a roundabout configuration, and a compact signalised junction. Whilst both provide some advantages, the disadvantages have meant the options have not been pursued.

Roundabout

- Pedestrian crossing points would be displaced a minimum of 20 metres from the junction to adhere to current government guidance. Practically, this is unlikely to be used by the majority of pedestrians.
- Land take would be required to provide a roundabout large enough to cater for the traffic flows at the junction.
- The junction required would result in narrow footways which arguably work against the aim to improve pedestrian facilities at the junction.
- The cost of installing a roundabout would be much higher due to the carriageway construction and service diversions required, although would result in reduced maintenance costs over time.

Compact Junction

- The junction layout would have a detrimental impact on traffic flow through the junction.
- The scheme would not be as cost effective as the alternative traffic signal design, requiring additional carriageway/footway reconstruction and resurfacing.

The proposed traffic signal layout has been taken forward as a compromise of capacity and improved pedestrian facilities.

14. Reason for Recommendation/Conclusion

The recommendations have arisen from well attended consultation events in the local community. The scheme has been developed through a community led process and seeks to address local concerns about the safety of pedestrians, particularly schoolchildren, crossing the junction. The urgent requirement to replace the signal infrastructure at the junction provides the ideal opportunity to refresh the junction and provide dedicated crossing facilities.

Funding is available through contributions from a number of sources – the Signal Maintenance Programme, the Local Transport Plan, the Local Sustainable Transport Fund and from section 106 contributions.

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Local Government Act 1972: List of Background Papers

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Background Paper

Date

File Ref.

Nil

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Design Proposal Redworth Junction

