

11. GLOUCESTER STREET/LINWOOD AVENUE TRAFFIC SIGNALS

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The purpose of this report is to outline the problems and actions to be taken to improve traffic management at the Gloucester Street/Linwood Avenue intersection.

BACKGROUND

The Council recently installed traffic signals at the Gloucester Street/Linwood Avenue intersection. The traffic signals replaced a roundabout that had a number of safety deficiencies and did not cater at all well for pedestrians and cycle movements through the intersection.

Since the installation of the signals a number of drivers have commented that the right turning movement from Gloucester Street west into Linwood Avenue can be hazardous if the view of approaching traffic from the north-east Gloucester Street approach to the intersection is blocked. Pedestrians have also indicated that Linwood Avenue traffic approaching the intersection from the south-east and using the left turn slip lane into Gloucester Street west is a problem due to the speed of the vehicles entering the slip lane.

POST CONSTRUCTION ROAD SAFETY AUDIT

A post construction road safety audit of the new traffic signals has been carried out. The audit team considered the way in which drivers are reacting to the new traffic signals. The team identified a number of safety hazards and suggested that all should be addressed in an effort to improve on the work that has already been carried out at this junction.

“Serious” hazard rankings were given to the following safety issues:

1. The stated right turn from Gloucester Street west into Linwood Avenue.
2. The Linwood Avenue south-east approach merge to the intersection where two lanes terminate immediately north of the Worcester Street intersection.
3. The inadequate length of the right turning bay in Gloucester Street west approaching the intersection where, during peak traffic in particular, queues extend from the intersection encouraging some drivers to travel on the wrong side of the roadway.
4. The random use of a left turn lane from the north-west Linwood Avenue approach to the intersection by drivers travelling along Linwood Avenue. Some drivers use the lane to continue south-east along Linwood Avenue.

The following matters were considered important and needed to be addressed by the Council:

5. The presence of a hazardous low kerb on the “splitter” island that acts as a refuge for pedestrians who often need to stop to give way to traffic using the left turn slip lane from Linwood Avenue into Gloucester Street West.
6. The speed of traffic using the left turn slip lane from Linwood Avenue into Gloucester Street west conflicting with pedestrian movements across the lane. The audit team suggested that consideration be given to the installation of a marked pedestrian crossing.

The audit team also had concerns about the following:

7. The lack of tactile pavers on kerb crossings where pedestrians stand.
8. The shortness of the lane marking tapers on the approaches to an exit from the northern Linwood Avenue approach to the intersection.
9. Difficulties had been encountered in providing adequate widths to the cycle lanes on some approaches to the intersection.
10. The extent of the broken yellow “no stopping” line along the south side of Gloucester Street west does not provide safe passage for cyclists when there is a car parked near the bus stop outside 581 Gloucester Street. The team recommends that the “broken yellow” line be extended to the bus stop.

The audit team also registered concerns about the poor surface finish on approaches to the intersection where traffic signal loops have been installed. Concerns were also noted about tree growth that may obscure the view of the traffic signals, the presence of an "out of date" advance directional sign on the south-east Linwood Avenue approach to the intersection and the level of street lighting on the minor arterial approaches to the intersection.

AUDIT ANALYSIS

The City Streets Unit has, together with City Solutions, agreed to address all aspects of the post construction road safety audit for the Gloucester Street/Linwood Avenue intersection. A "lead" right turn arrow has now been provided for Gloucester Street west traffic with appropriate changes to the lane markings on this approach. This was seen as the most urgent issue to address.

A number of options were considered for reducing the speed of traffic using the left turn slip lane from Linwood Avenue into Gloucester Street west. It is recommended that a raised platform be constructed within the slip lane to support a new "zebra" pedestrian crossing. Apart from some minor maintenance matters the other hazards identified by the safety audit team involve changes to laning and other road markings in Linwood Avenue between Gloucester Street and Hereford Street.

ROAD MARKING PLAN

Arrangements are being made to implement the attached road marking plan. The plan proposes to limit the flow of traffic between Gloucester Street and Hereford Street to one lane in each direction with improved right turn facilities at the Worcester Street intersection. Cycle lanes will be extended along Linwood Avenue to Hereford Street.

With the elimination of two lanes of traffic in favour of a single lane through this section of Linwood Avenue, pedestrians will find it easier to cross Linwood Avenue at the Worcester Street intersection. Pedestrian safety will also be enhanced if a proposed "zebra" pedestrian crossing is installed on a raised platform within the left turn slip lane from Linwood Avenue into Gloucester Street west.

CONCLUSION

A number of traffic management deficiencies have emerged since the installation of traffic signals at the Gloucester Street/Linwood Avenue intersection. Action has already been taken to remove a number of hazards that were identified during a post construction road safety audit of the new traffic signals. Proposals are in hand to address other issues raised in the audit and to alter road markings along Linwood Avenue between Gloucester Street and Hereford Street to improve safety and address hazards identified by the safety audit team.

The City Streets Unit intends to construct the extensions to the median island nosings at Worcester Street as part of this work. The Board and the Council have previously considered the problem of traffic continuing across Linwood Avenue from both Worcester Street east and Worcester Street west. A number of drivers regularly travel against the flow of traffic to execute this manoeuvre; the median island extensions and associated road markings will serve to all but eliminate this practice.

Staff

- Recommendation:**
1. That the information be received.
 2. That the Board support the traffic management proposals for the section of Linwood Avenue between Gloucester Street and Hereford Street.
 3. That a "zebra" pedestrian crossing be installed within the left turn slip lane from Linwood Avenue into Gloucester Street west. The pedestrian crossing will link with an existing pedestrian/splitter traffic island and the footpath on the south-west corner of the intersection outside No 136 Linwood Avenue.

Chairperson's

- Recommendation:** That the recommendations be adopted.