

STAFF REPORT

TO: Chairman and Members, Engineering Services Committee

FROM: Steve Elkington, Asset Engineer Roads

REFERENCE: RD3731 & RD3651

DATE: 17 November 2008

SUBJECT: **TALBOT STREET/ SALISBURY ROAD INTERSECTION UPGRADE**

1 PURPOSE

To seek approval from the Engineering Services Committee to proceed with the proposed upgrading of the intersection of Talbot Street and Salisbury Road with traffic lights.

2 BACKGROUND

In October this year a report was presented to the Committee regarding the upgrade of the intersection of Talbot Street and Salisbury Road. The proposal was based on installing traffic signals.

The recommendation and hence resolution passed was:

THAT the Engineering Services Committee approve the funding for the Talbot Street-Salisbury Road intersection upgrade as an NZTA subsidised road construction project with an estimated budget total of \$650,000.

However, at this meeting a final decision on installing traffic signals had not been made. Some residents believe a roundabout would be more appropriate.

3 COMMENT

Consultation

A public meeting was held on Tuesday 3rd September in the Council chambers for affected residents and businesses as well as general public to view and discuss the proposal to install traffic signals. In addition to the public meeting several one-on-one meetings with affected parties and emergency services were also held. Generally most people were happy with the installation of traffic signals with a few local issues raised. The issues raised by affected parties were taken into account and minor modifications in the design of the intersection have been incorporated. Council's consultant MWH has consulted directly with those residents affected and resolved their issues.

In summary the issues were:

| Issue | Resolution |
|---|---|
| Length of time for pedestrian phase | Agreed to increase time of phase |
| Noise pollution at night of audible signal when awaiting pedestrian phase | Agreed to have audible signal turned off at night |
| Proposed splitter Island will restrict turning into property accesses | Agreed to redesign without splitter island and instead install a mast arm with signal mounted on the end. (arm will over-hang traffic lane) |
| Safety of property access egress where these are within the intersection | Agreed to install individual sensor loops for each of the three accessways to provide separate signal phase |
| Loss of near-by parking | Lost parking will not be replaced as safety audit recommends against this. Affected land owner has accepted this. |
| Land purchase for corner snipe | Land owner has verbally agreed to this |
| Opening up of Linden Court | Linden Court will remain a no exit cul-de-sac |
| Lime Trees to be removed at the end of Linden Court | Agreed to plant at least one replacement tree |

Ring Route

The Richmond ring route system will essentially create a two-way circular traffic route around Richmond Town Centre to better manage traffic flows and create a safer and more pleasant roading system. Council has adopted this ring route concept and the first stage of the work is currently underway with the upgrade and installation of three sets of traffic signals at the intersections of SH6 and McGlashen Avenue, SH6 and Oxford Street, and SH6 and Queen Street.

A report has been completed by MWH in recent times which modelled the change in traffic behaviour on TDC roads along the ring route under expected growth conditions to identify where delays will occur. A presentation by MWH was also given to Council on the findings of the report. The outcome of this report recommended ongoing monitoring of a number of intersections as well as the upgrade in the next few years of the existing roundabout at Salisbury Road, Queen Street and Oxford Street with traffic signals. This roundabout is at its capacity at peak times causing long delays and which if signalised will improve traffic flows.

Why Traffic Signals?

Traffic signals are the preferred solution to this intersection upgrade as opposed to a roundabout and this is the reason that the design and consultation on this project has focussed on the signal option.

Roundabouts are an ideal means of managing traffic where there are similar volumes on all legs. Where there is a significant imbalance in traffic volume between the legs such as Salisbury Road which carries approximately 14,000 vehicles per day versus Talbot Street of approximately 5,500 vehicles per day then the through traffic on Salisbury Road will unnecessarily be delayed leading to a high accumulation of vehicle operating and travel time costs.

Presently on Salisbury Road at the intersection with Talbot Street there are no impediments to free-flowing traffic other than queuing at peak times due to the roundabout at Queen Street and Salisbury Road being near capacity. Traffic signals will manage traffic flow more efficiently through monitoring traffic gaps and queues thereby minimising delays. The delay in turning right out of Talbot Street during the pm peak has been predicted to increase from one minute to five minutes once the State Highway signals are installed unless the intersection is upgraded.

If a roundabout was the solution for the Talbot Street and Salisbury Road intersection then this would need to be of significant size thereby requiring considerable land around the intersection to be purchased hence increasing the overall cost of the upgrade.

A significant consideration is the difficulty that pedestrians, cyclists, and mobility scooters have in negotiating roundabouts safely. The proximity of the intersection to the surrounding schools and aged populations makes the provision of high standard crossings imperative to ensure the vulnerable road user safety. On the attached proposed layout plan of the intersection you will note that cycle facilities are being provided. There will also be pedestrian phases for crossing both Salisbury Road and Talbot Street.

4 RECOMMENDATION

THAT the Engineering Services Committee approve for tendering the Talbot Street/Salisbury Road Intersection Upgrade with traffic lights.

Steve Elkington
Asset Engineer Roads