

5. RICCARTON HIGH SCHOOL CYCLE BUBBLE PROJECT - PHASE 2 (MAIN SOUTH ROAD SIGNALISED CROSSING)



General Manager responsible:	General Manager, City Environment, DDI 941-8608
Officer responsible:	Unit Manager, Transport and Greenspace
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PURPOSE OF REPORT

1. The purpose of this report is to request that the Riccarton/Wigram Transport and Greenspace Committee recommends that the Board recommend to the Council to approve the proposed plan for the Riccarton High School Cycle Bubble Project - Phase 2, providing the installation of a signalised pedestrian crossing facility on the Main South Road as shown in **Attachment 2**.

EXECUTIVE SUMMARY

2. The Riccarton High School Cycle Bubble Project is part of the Christchurch City Council's road safety programme for cyclists. A travel survey was carried out with the students and staff of Riccarton High School in late May 2007. There were 679 responses received (72 percent response rate), and the main area of concern identified was along the route from Corfe Street to English Street across Yaldhurst Road, Colman Avenue to Main South Road and the existing school pedestrian crossing on Main South Road. Phase 1 addressed the concerns along the route from Corfe Street to Main South Road. Phase 2 proposes to address the concern of the existing school pedestrian crossing on Main South Road.
3. Main South Road outside Riccarton High School is an arterial road with a 14 metre wide carriageway carrying an average of 14,500 vehicles per day and a posted speed limit of 50 kilometres per hour (km/hr). Near the school entrance on Main South Road there is an existing zebra pedestrian crossing located to the south of Colman Avenue. Due to the give way rules where a motorist must yield to a pedestrian at a zebra crossing, traffic queues are forming along Main South Road at the start and finish of each school day. These traffic queues extend south-west to the Sockburn roundabout and to English Street to the north-east. By replacing the existing zebra crossing with pedestrian signals the traffic on Main South Road will be stopped only when the signal is red. Pedestrians crossing at the signalised crossing will wait until their phase is active. Students will be grouped rather than being able to cross at will, which will improve traffic efficiency and safety. Approximately 20 kerb side car parking spaces will be lost due to the signals approach lanes.
4. Based on the identified areas of concern from the survey, the objectives for this stage of the project were set as follows:
 - (a) To remove the existing zebra crossing and replace with a signalised crossing/junction;
 - (b) To maintain or improve safety for all road users;
 - (c) To ensure the project is designed and implemented so that it complements the Bus Priority measures currently being schemed and designed;
 - (d) To complete the project within the allocated budget;
 - (e) To complete construction within the 2008/2009 financial year;
 - (f) To minimise the whole of life costs.

FINANCIAL IMPLICATIONS

5. Funding for this project was initially provided in the 2006-16 LTCCP Streets and Transport – Improved Levels of Service, and has been carried forward to enable construction in the 2009/10 financial year. The Riccarton High School Cycle Bubble Project - Phase 2 has a budget of \$345,350 and will be constructed in the 2009/10 financial year.
6. Application will be made for New Zealand Transport Agency (NZTA) co-funding for the components of this project that qualify.

7. Based on current estimates, there is sufficient budget allocated to implement this project, which is programmed for construction in the 2009/10 financial year.
8. The recommendations of this report align with 2009-19 LTCCP and are covered by existing unit budgets.

LEGAL CONSIDERATIONS

9. There are no property issues associated with this project. There are no notable or heritage trees, or heritage or historic buildings, places or objects shown in the City Plan affected by this project. No resource consents are required for the work proposed.
10. There appear to be no legal implications for this project. The Land Transport Rules provide for the installation of parking restrictions. The Council needs to approve the installation of the proposed signalised pedestrian crossing and associated parking restriction because the proposal has an impact on traffic flow on an arterial road.

ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

11. This project aligns with the Transport and Greenspace Unit's Asset Management Plan, and the Safe Routes to School project of the Capital Works Programme, pages 243 to 247 of the 2009-19 LTCCP.
12. The recommendations of this report support this project in the 2009-19 LTCCP as stated above.

ALIGNMENT WITH STRATEGIES

13. This project is consistent with and aligns with key Council strategies including the Cycling Strategy, Pedestrian Strategy, Road Safety Strategy and Parking Strategy.

CONSULTATION FULFILMENT

14. A seminar was held with the Riccarton/Wigram Community Board on 17 April 2009, to advise the Board of the proposed consultation plan. The Community Board requested the first consultation plan to be revised to maintain existing access to Colman Avenue.
15. A seminar was held with the Riccarton/Wigram Community Board on 4 August 2009, prior to the revised consultation plan (**Attachment 1**) being distributed to the community and stakeholders for feedback. The Community Board supported the new plan. Community consultation was undertaken in August/September 2009 on this concept plan.
16. Approximately 700 consultation leaflets were distributed to stakeholder groups, residents and landowners in the community. Fifty four responses were received, of which 52 (96 percent) were generally in support of the project, one (2 percent) did not support the project, and one (2 percent) did not specify a preference.
17. The key issues raised related to:
 - (a) The loss of on-street parking on Main South Road;
 - (b) The number of pedestrian crossings along this section of Main South Road;
 - (c) Motorists not seeing cyclists using the cycle lanes;
 - (d) A request for yellow cross hatching at intersections that traffic is likely to queue across;
 - (e) A request for a pedestrian tunnel with security cameras.
18. As a result of the feedback received, the preferred option for the Riccarton High School Cycle Bubble Project - Phase 2 comprises the features outlined in paragraphs 28 to 30, and is shown in the plan for the Council approval, refer **Attachment 2**. It should be noted that cycle lanes already exist on Main South Road at the location of this project.

STAFF RECOMMENDATION

It is recommended that the Riccarton/Wigram Transport and Greenspace Committee recommends that the Board recommend to the Council that:

- (a) The proposed Riccarton High School Cycle Bubble Project - Phase 2 be approved as shown in **Attachment 2**.
- (b) Approve the following parking restrictions:

Remove existing no stopping:

- (i) That the existing stopping of vehicles at any time be removed on the north-west side of Main South Road commencing at its intersection with Colman Avenue and extending 25 metres in a south-westerly direction.
- (ii) That the existing stopping of vehicles at any time be removed on the north-west side of Main South Road commencing at a point 47 metres south-west of its intersection with Colman Avenue and extending 18 metres in a south-westerly direction.
- (iii) That the existing stopping of vehicles at any time be removed on the south-east side of Main South Road commencing at its intersection with Colman Avenue and extending 23 metres in a south-westerly direction.
- (iv) That the existing stopping of vehicles at any time be removed on the south-east side of Main South Road commencing at a point 45 metres south-west of its intersection with Colman Avenue and extending 58 metres in a south-westerly direction.
- (v) That the existing stopping of vehicles at any time be removed on the north-west side of Main South Road commencing at its intersection with Colman Avenue and extending 14 metres in a north-easterly direction.
- (vi) That the existing stopping of vehicles at any time be removed on the south-east side of Main South Road commencing at its intersection with Colman Avenue and extending four metres in a north-easterly direction.

Remove existing zebra pedestrian crossing:

- (vii) That the zebra pedestrian crossing on Main South Road located at a point 15 metres south-west from Colman Avenue be removed.

Install new signalised pedestrian crossing:

- (viii) That a pedestrian crossing, controlled by traffic signals be installed on Main South Road located at a point 15 metres south-west from Colman Avenue.

New no stopping:

- (ix) That the stopping of vehicles be prohibited at any time on the north-west side of Main South Road commencing at its intersection with Colman Avenue and extending 15 metres in a south-westerly direction.
- (x) That the stopping of vehicles be prohibited at any time on the north-west side of Main South Road commencing at a point 20 metres south-west of its intersection with Colman Avenue and extending 45 metres in a south-westerly direction.
- (xi) That the stopping of vehicles be prohibited at any time on the south-east side of Main South Road commencing at its intersection with Colman Avenue and extending 15 metres in a south-westerly direction.
- (xii) That the stopping of vehicles be prohibited at any time on the south-east side of Main South Road commencing at a point 20 metres south-west of its intersection with Colman Avenue and extending 83 metres in a south-westerly direction.

- (xiii) That the stopping of vehicles be prohibited at any time on the north-west side of Main South Road commencing at its intersection with Colman Avenue and extending 35 metres in a north-easterly direction.
- (xv) That the stopping of vehicles be prohibited at any time on the south-east side of Main South Road commencing at its intersection with Colman Avenue and extending 58 metres in a north-easterly direction.

BACKGROUND (THE ISSUES)

- 20. Along Main South Road there are two primary schools – Riccarton Primary to the north and Our Lady of Victories to the south. There are also two other high schools in the area – Villa Maria College is further east along Yaldhurst Road (with entrances off Brodie and Peer Streets) and St Thomas of Canterbury College (on Middlepark Road). The existing pedestrian crossing at the entrance to Riccarton High School is also an access point to the Upper Riccarton Community Library. There are other community organisations in the area that also use this facility. As Main South Road is part of the bus priority route from Hornby Mall to the Exchange, these needs were considered in this proposal.
- 21. The proposed signalised pedestrian crossing 12 metres south of Riccarton High School's Main South Road entrance has been referred to the Bus Priority project team to provide an integrated solution. This proposal is consistent with any bus priority measures that may be proposed along Main South Road.
- 22. The Land Transport Safety Crash Analysis System shows there have been five crashes recorded for the five year period between 2004 and 2008. Of the five crashes recorded there are none that relate directly to pedestrian/vehicle conflicts crossing on the zebra crossing. The majority (four) of the crashes were related to inattention of the driver failing to notice a vehicle slowing and resulting in a nose to tail crash. The remaining crash, a loss of control crash was alcohol related. All five crashes are recorded as non-injury.
- 23. Traffic modelling has been undertaken using the model being prepared for the Riccarton Bus Priority project. The modelling shows that existing queue lengths on Main South Road will be substantially reduced by installing traffic signals at this location.

THE OBJECTIVES

- 24. The project's Terms of Reference requested the following objectives to be fulfilled:
 - (a) Remove the existing zebra crossing and replace with a signalised crossing/junction;
 - (b) Complete the project within the allocated budget (\$345,350);
 - (c) Complete the construction within the 2008/09 financial year;
 - (d) Minimise the whole of life costs;
 - (e) Maintain or improve safety for all road users;
 - (f) Ensure the project is designed and implemented so that it complements the Bus Priority measures currently being schemed and designed.

THE OPTIONS

- 25. There were three options considered for comparison for this project:
 - (a) Option One - Do Nothing;
 - (b) Option Two – Ban the right hand turn out of Colman Avenue;
 - (c) Option Three – Retain the existing Colman Avenue intersection as it is and provide a signalised crossing as close to the existing zebra pedestrian crossing position as possible.

OPTION 1

26. Option One includes retaining the existing zebra pedestrian crossing in its current location. No extras ie. kerb build outs, landscaping, etc are proposed. The roadway will remain at its current width of 14 metres kerb to kerb. The footpaths and kerb side parking will remain as is currently as will all signage and the Give Way control on Colman Avenue. An analysis of the existing street lighting would need to be undertaken and improvements made, where necessary. Option One has not been selected as the preferred option as it does not meet all of the project's aims and objectives. Cyclists are not catered for with this option, and there is no improvement to travel times, with crossing times remaining the same.

OPTION 2

27. Option Two involves replacing the existing zebra crossing with a signalised intersection at the entrance to Riccarton High School. Incorporated in the signals will be a signalised pedestrian crossing across Main South Road and Colman Avenue. Right turn traffic movements from Main South Road into Colman Avenue are maintained; however, right turning movements out of Colman Avenue are banned to protect the users of the pedestrian crossing. Colman Avenue is a local road and it is documented that signals installed on such roads attract short cutting through these roads. By banning right turns out of Colman Avenue this activity is mitigated. Option Two was not selected as the preferred option.

OPTION 3 (THE PREFERRED OPTION)

28. The proposal involves replacing the existing zebra crossing located immediately south-west of Riccarton High School with a signalised pedestrian crossing. This will be installed five metres to the south-west of the existing zebra crossing, as shown in **Attachment 2**. The Colman Avenue intersection and the entrance to Riccarton High School will remain as is. The existing Main South Road road reserve is 25.0 metres to 30.0 metres wide, with the road's width, kerb to kerb being 14.0 metres. The proposed layout will increase the width of the roadway (kerb to kerb) to 14.4 metres. The existing kerb build outs will be removed. This is being carried out to future proof the signalised crossing installation to accommodate any possible future bus priority measures for Main South Road. Barrier fencing will be installed to discourage pedestrians and cyclists from jay walking, a hazardous practice. The existing driveway to the property owned by General Cables adjacent to the entrance to Riccarton High School will be relocated. Agreement has been reached with General Cables to relocate the driveway to the west side of the property and away from the entrance to Riccarton High School.

THE PREFERRED OPTION

29. As a result of the positive support received during consultation, only minor changes were made to the consultation plan presented in the newsletter distributed in August 2010. The changes made are as follows:
- (a) Removal of the No Stopping lines shown on the Consultation Plan (**Attachment 1**) outside 74 and 78 Main South Road;
 - (b) Removal of the footpath shown on the eastern side of Bowman Place;
 - (c) Ensure the tactile pavers are designed to ensure they are where the pedestrian must stand on them to activate them, and ensure that they are doubled across parallel to the road.
30. The key features of the preferred option are:
- (a) Replacing the existing zebra crossing located immediately south-west of Riccarton High School with a signalised pedestrian crossing;
 - (b) The Colman Avenue intersection and the entrance to Riccarton High School will remain as they are;
 - (c) The existing kerb build outs will be removed;
 - (d) Barrier fencing will be installed to channel pedestrians and cyclists to the crossing facility;

- (e) The existing driveway to the property adjacent to the entrance to Riccarton High School will be relocated to the west side of the property to avoid the need for vehicles to access the property at the limit line of the signalised crossing.
- 31. The preferred option meets the project objectives by providing a signalised pedestrian crossing for cyclists and pedestrians, and enhancing pedestrian usage across the Main South Road just south of Colman Avenue in close proximity to the Main South Road entrance of Riccarton High School and the Upper Riccarton Public Library.