

6. FENDALTON MALL SAFETY REVIEW

General Manager responsible:	General Manager City Environment, DDI 941-8656
Officer responsible:	Transport and Greenspace Manager
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PURPOSE OF REPORT

1. The purpose of this report is to inform the Board of the outcomes and recommendations of a Traffic Management study concerning vehicle pedestrian and cycle conflicts within the vicinity of the Fendalton Mall's exit and entry, and to seek approval for proposed safety improvements to the exit and entry.

EXECUTIVE SUMMARY

2. The Christchurch City Council:
 - (a) Has received a number of calls from the public concerning the safe operation of the entrance and exit from the Fendalton Mall car park into Memorial Avenue. These concerns are predominantly based on incidents where cyclists and pedestrians have experienced conflict with vehicles entering the car park and from drivers who have taken evasive action to avoid collisions with vehicles exiting the car park.
 - (b) A safety evaluation of the site has identified hazards created by conflicts between motor vehicles, cyclists and pedestrians in Memorial Avenue between the Fendalton Mall entrance and Otara Street. The safety solutions outlined in this report will remove a number of conflicts and safety for all road users.
 - (c) Most problems highlighted have been addressed. However, given the need to maintain a four-lane roadway and flush median on the Memorial Avenue approach to the traffic signals at the Fendalton Road/Clyde Road intersection, it is not practical to introduce a cycle lane between Clyde Road and the revised Mall entrance. Instead, the removal of a section of dual lane on the left turn approach to the car park and left turn bay will lesson the conflict between through traffic and cyclists. Coloured cycle lane markings should be marked on the southern approach to, and north from, the existing bus stop.
 - (d) When Memorial Avenue between Fendalton Road and Otara Street is widened to four lanes in the future, many of the problems relating to merging traffic and right turns will be addressed. Given that carriageway widening is unlikely to occur within the next 10 years it is recommended that the work identified be implemented as soon as practicable.
3. The cost of the works involved with the proposed safety improvements is \$52,000, to implement the plan (**attached**).

FINANCIAL IMPLICATIONS

4. An estimated cost for this works is \$52,000 with funding to come from the Safety Improvement Works Budget.

Do the Recommendations of this Report Align with 2006-16 LTCCP budgets?

5. As per paragraph 4.

LEGAL CONSIDERATIONS

6. There are no legal constraints anticipated.

Have you considered the legal implications of the issue under consideration?

7. As per paragraph 6.

ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

8. Aligns with the Streets and Transport activities by contributing to the Council's Community Outcomes: Safety by providing a safe transport system, Community by providing easy access to facilities.

Do the recommendations of this report support a level of service or project in the 2006-16 LTCCP?

9. This contributes to improve the level of service for safety.

ALIGNMENT WITH STRATEGIES

10. Parking strategy (see section 8.1 (7) "Review all existing pedestrian areas and upgrade if necessary to best practice standards" Christchurch Road Safety Strategy. Supports all 5 Goals Section 5.

Do the recommendations align with the Council's strategies?

11. As per paragraph 10.

CONSULTATION FULFILMENT

12. Preliminary consultation has been carried out with local land owners. Full consultation is required, following the Fendalton/Waimairi Board's approval of the project.

STAFF RECOMMENDATION

It is recommended that the Board approve the plan **attached** with the following features:

- (a) Left Turn Bay into Mall.
- (b) Coloured Cycle Lane features.
- (c) Realignment of the Flush Median incorporating Right Turn Bays.
- (d) Reduction of Dual Lanes from Fendalton Road.
- (e) Visibility improvements at Mall exit.
- (f) Give Way Control at Mall exit.

BACKGROUND (THE ISSUES)

13. The Christchurch City Council (CCC) has received a number of Requests for Service (RFS) from the public concerning conflicts and near hit events in the vicinity of the Fendalton Mall entrance and exit on Memorial Avenue. The complainants for the RFS's consider that the present road layout is unsafe. In particular they have concern for motorists turning into, and out of the Mall car park and the safety of the road users (including cyclists) along Memorial Avenue.
14. The entrance to the Fendalton Mall car park is located approximately 200 metres north of the traffic signal controlled junction of Fendalton Road/Clyde Road/Memorial Avenue. Memorial Avenue is an arterial route that connects the northern suburbs of Ilam, Avonhead and Burnside with the City Centre.
15. This section of Memorial Avenue, between Fendalton Road and Otara Street, has been identified as the last section of the Avenue to be developed into a four-lane, median divided road.
16. A review of the current 10 year Capital Works programme indicates that this project has not been identified as a priority. It is also understood that Memorial Avenue has been identified as a cycle route that will be developed as part of the greater Christchurch City Cycle Strategy.
17. Vehicles exiting westbound from the Memorial Avenue/Fendalton Road/Clyde Road traffic signal controlled intersection merge with other traffic in the vicinity of Fendalton mall. As drivers are merging, other drivers are undertaking either a departure movement into the car park, or are endeavouring to re-enter the traffic stream having exited from the Mall car park. These movements create conflicts at the entry and exit points to the car park.
18. Conflicts also occur at the end of the merge at Otara Street including right turners from Memorial Avenue queuing in the through lane rather than from the flush median to carry out this manoeuvre.
19. Further conflict is created by buses that use the bus stop. Buses parked in the stop block the left hand (kerb side) lane. This also restricts visibility to the right for traffic exiting from the car park.
20. Vehicles exiting from the car park do so through defined left turn and right turn lanes. Drivers queuing across the footpath often encroach into the through lane to gain visibility in front of a vehicle queued in the parallel lane alongside.
21. The following observations were made from visits to the site and from viewing an eight hour video:
 - (a) Entrance to the car park is gained within the merge zone exiting from the Memorial Avenue/Fendalton Road/Clyde Road traffic signal controlled intersection. The merge zone extends through to the Otara Street intersection. Due to the angle of approach, drivers are able to make a high speed exit off Memorial Avenue into the Mall car park conflicting with cycle movements and pedestrians on the footpath.
 - (b) Cyclists are required to share the left lane with through traffic and buses in the merge conflict zone. Cyclists have been observed riding on the footpath in the vicinity of the Mall car park entrance and exit in an attempt to avoid conflicting with traffic in the through lanes.
 - (c) Roadside planting exists in the vicinity of the entrance and exit to the Mall car park affecting visibility. The Mall exit is defined with a left turn and a right turn lane often resulting in vehicles queuing across the footpath.
 - (d) Drivers turning right out of the Mall exit and from Otara Street rarely use the flush median before merging with traffic approaching from the left.
 - (e) Drivers turning right from Memorial Avenue into Otara Street invariably position their vehicles in the through lane rather than from the flush median.

THE OBJECTIVES

22. The objectives are to:

- (a) Improve the left turn from Memorial Avenue into the car park so that vehicles depart from the traffic lane at a location where drivers exiting the car park are able to identify available gaps in the approaching traffic.
- (b) Reduce the conflict between cyclists using the kerbside lane and drivers turning left into the Mall entrance.
- (c) Reduce the conflict between pedestrians and cyclists travelling north along Memorial Avenue in the vicinity of the Mall entrance and exit.
- (d) Reduce the conflict between buses (at the bus stop) and other road users in the kerbside lane.
- (e) Improve the visibility of approaching traffic for vehicles exiting the Mall car park.
- (f) Reduce the current Practice of drivers creeping forward into the through lane to execute turns out of the Mall car park into Memorial Avenue.
- (g) Reduce the conflict between merging traffic in Memorial Avenue and vehicles exiting the Mall car park.
- (h) Encourage drivers to use the flush median to turn right off Memorial Avenue into Otara Street, and the Mall car park.

THE OPTIONS

23. Fendalton Mall Entrance.

- (a) Construct a left turn bay in the location of the existing grass verge and trees to assist the 1411 vehicles that enter from this direction during a 12 ½ hour period.
- (b) Remove or relocate existing trees to allow for the construction of the left turn bay ensuring that driver sight lines are maintained.
- (c) Redefine the footpath across the Mall entrance.
- (d) Construct a right turn bay within the Flush Median. This facility will provide for the 562 vehicles that right turn in over a 12 ½ hour period.

24. Fendalton Mall Exit.

- (a) Remove and/or trim all boundary vegetation that impedes the drivers view of approaching traffic.
- (b) Consider relocating a street tree to improve visibility for drivers exiting the car park.
- (c) Install coloured cycle lane markings prior to and from the existing bus stop through the exit from the card park to raise drivers awareness of the presence of cyclists.
- (d) Install an RG-6 "Give Way" sign adjacent to the limit line at the property boundary.

25. Otara Street Intersection.

- (a) Install coloured cycle lane markings through the intersection to raise driver's awareness of the presence of cyclists.
- (b) Mark right turn lanes and break the flush median in Memorial Avenue on the approaches to the Otara Street intersection.
- (c) Investigate lengthening the existing broken yellow 'No Stopping' line in Memorial Avenue north of the intersection to improve visibility.

26. Memorial Avenue Merge Zone.
- (a) Reduce the length of the dual lane discharge for north bound vehicles from the traffic signals at the Fendalton Road/Memorial Avenue intersection.
 - (b) The 220 metres long dual lane discharge from the traffic signals should be reduced in length to 100 metres and terminate adjacent to the service entrance into the Mall.
 - (c) Define the merge zone between the end of the dual lane discharge and the Otara Street intersection through the application of new road markings.

THE PREFERRED OPTION

27. It is recommended that the scheme is implemented in its entirety with the following elements.
- (a) Construct a left turn bay at the entrance to the Mall car park.
 - (b) Install a coloured cycle lane 1.8 metres wide along the south-western side of Memorial Avenue on the southern approach to, and north, from the existing bus stop.
 - (c) Realign the flush median and incorporate 2.5 metres wide right turn bays at Otara Street and the Mall entrance.
 - (d) Terminate the dual lane discharge on Memorial Avenue from Fendalton Road prior to the proposed left turn bay into the Mall car park.
 - (e) Improve the visibility for vehicles exiting from the Mall car park by removing the adjacent vegetation.
 - (f) Install a 'Give Way' sign at the exit from the Fendalton Mall car park.