Waipuna
Halswell-Hornby-Riccarton Community Board
SUPPLEMENTARY AGENDA

Notice of Meeting:

An ordinary meeting of the Waipuna/Halswell-Hornby-Riccarton Community Board will be held on:

Date:	**Tuesday 3 March 2020**
Time:	**4pm**
Venue:	**Horoeka Room, Rārākau: Riccarton Centre, 199 Clarence Street, Christchurch**

Membership

Chairperson	Mike Mora
Deputy Chairperson	Andrei Moore
Members	Helen Broughton
	Jimmy Chen
	Catherine Chu
	Gamal Fouda
	Anne Galloway
	Debbie Mora
	Mark Peters

28 February 2020

Matthew Pratt
Manager Community Governance, Halswell-Hornby-Riccarton
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Note: The reports contained within this agenda are for consideration and should not be construed as Council policy unless and until adopted. If you require further information relating to any reports, please contact the person named on the report.

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Part A **Matters Requiring a Council Decision**
Part B **Reports for Information**
Part C **Decisions Under Delegation**

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10. Resolution to Include Supplementary Reports

1. Background

1.1 Approval is sought to submit the following report to the Halswell-Hornby-Riccarton Community Board meeting on 03 March 2020:

11. Ilam Road/Middleton Road/Riccarton Road Intersection - Safety Improvements

1.2 The reason, in terms of section 46A(7) of the Local Government Official Information and Meetings Act 1987, why the report was not included on the main agenda is that it was not available at the time the agenda was prepared.

1.3 It is appropriate that the Halswell-Hornby-Riccarton Community Board receive the report at the current meeting.

2. Recommendation

2.1 That the report be received and considered at the Halswell-Hornby-Riccarton Community Board meeting on 03 March 2020.

11. Ilam Road/Middleton Road/Riccarton Road Intersection - Safety Improvements

Item 11

11. Ilam Road/Middleton Road/Riccarton Road Intersection - Safety Improvements

Reference / Te Tohutoro: 20/213062

Report of / Te Pou Matua: Adrian Thein, Project Manager
William Homewood, Traffic Engineer
Philippa Upton, Engagement

General Manager / Pouwhakarae: David Adamson, General Manager City Services

1. Executive Summary / Te Whakarāpopoto Matua

1.1 The purpose of this report is to bring the Ilam Road/Middleton Road/Riccarton Road Intersection - Safety Improvements report which is currently laying on the table (from 4 February 2020) back to the Community Board for consideration.

1.2 The report and officer recommendations have not changed.

2. Officer Recommendations / Ngā Tūtohu

That the Council and the Waipuna/Halswell-Hornby-Riccarton Community Board:

1. Note for the purposes of the following resolutions:

   1. An intersection is defined by the position of kerbs on each intersecting roadway; and,

   2. The resolution is to take effect from the commencement of physical road works associated with the project as detailed in the agenda staff report; and,

   3. If the resolution states "Note 1 applies", any distance specified in the resolution relates to the kerb line location referenced as exists on the road immediately prior to the Community Board meeting of 4 February 2020; and,

   4. If the resolution states "Note 2 applies", any distance specified in the resolution relates to the approved kerb line location on the road resulting from the resolution, as approved.

   Part A

2. That the Waipuna/Halswell-Hornby-Riccarton Community Board endorse Option 1C for the Ilam Road/Middleton Road/Riccarton Road - Safety Improvements project and recommend to the Council that the project be approved, along with the following traffic control resolutions:

3. Approve all traffic controls, except for the speed limit, at the intersection of Riccarton Road with Middleton Road and Ilam Road, be revoked. Note 1 applies.

4. Approve that the intersection of Riccarton Road with Ilam Road be controlled by traffic signals, in accordance with section 6.2 of the Land Transport Traffic Control Devices Rule 2004, as detailed in Attachment A of the agenda staff report.

5. Approve that a special vehicle lane for the use of west bound buses and cycles only, be established on the south side of Riccarton Road, commencing at its intersection with Middleton Road, and extending in a westerly direction for a distance of 60 metres as detailed in Attachment A of the agenda staff report. This special vehicle lane is to apply at all times. This special vehicle lane is authorised under clause 18 of the Christchurch City Council Traffic and Parking Bylaw 2017, and is therefore to be added to the Register of Roads or Traffic Lanes Restricted to Specific Classes of Vehicles.

6. Approve that a special vehicle lane for the use of westbound cycles only, be established on the south side of Riccarton Road, commencing at a point 90 metres east of its intersection with Middleton Road, and extending in an easterly direction for a distance of 65 metres as detailed in Attachment A of the agenda staff report. This special vehicle lane is to apply at all times. This special vehicle lane is authorised under clause 18 of the Christchurch City Council Traffic and Parking Bylaw 2017, and is therefore to be added to the Register of Roads or Traffic Lanes Restricted to Specific Classes of Vehicles.

7. Approve that a special vehicle lane for the use of eastbound buses and cycles only, be established on the north side of Riccarton Road, commencing at a point 58 metres west of its intersection with Ilam Road, and extending in a westerly direction for a distance of 41 metres as detailed in Attachment A of the agenda staff report. This special vehicle lane is to apply at all times. This special vehicle lane is authorised under clause 18 of the Christchurch City Council Traffic and Parking Bylaw 2017, and is therefore to be added to the Register of Roads or Traffic Lanes Restricted to Specific Classes of Vehicles.

8. Approve that a special vehicle lane for the use of eastbound buses and cycles only, be established on the north side of Riccarton Road, commencing at its intersection with Ilam Road, and extending in an easterly direction for a distance of 54 metres as detailed in Attachment A of the agenda staff report. This special vehicle lane is to apply at all times. This special vehicle lane is authorised under clause 18 of the Christchurch City Council Traffic and Parking Bylaw 2017, and is therefore to be added to the Register of Roads or Traffic Lanes Restricted to Specific Classes of Vehicles.

9. Approve that a special vehicle lane for the use of southbound cycles only, be established on the east side of Ilam Road, commencing at its intersection with Riccarton Road, and extending in a northerly direction for a distance of 27.5 metres as detailed in Attachment A of the agenda staff report. This special vehicle lane is authorised under clause 18 of the Christchurch City Council Traffic and Parking Bylaw 2017, and is therefore to be added to the Register of Roads or Traffic Lanes Restricted to Specific Classes of Vehicles.

10. Approve that a special vehicle lane for the use of northbound cycles only, be established on the west side of Ilam Road, commencing at its intersection with Riccarton Road, and extending in a northerly direction for a distance of 27.5 metres as detailed in Attachment A of the agenda staff report. This special vehicle lane is authorised under clause 18 of the Christchurch City Council Traffic and Parking Bylaw 2017, and is therefore to be added to the Register of Roads or Traffic Lanes Restricted to Specific Classes of Vehicles.

11. Approve that the pathway on the east side of Middleton Road, commencing at its intersection with Riccarton Road and extending in a southerly direction for a distance of 52 metres, be resolved as a bi-directional shared pedestrian/bicycle pathway. This shared path is authorised under clause 18 of the Christchurch City Council Traffic and Parking Bylaw 2017, and is therefore to be added to the Register of Roads or Traffic Lanes Restricted to Specific Classes of Vehicles.

12. Approve that the pathway on the west side of Middleton Road, commencing at a point 52 metres south of its intersection with Riccarton Road and extending in a southerly direction for a distance of 16.5 metres, be resolved as a bi-directional shared pedestrian/bicycle pathway. This shared path is authorised under clause 18 of the Christchurch City Council Traffic and Parking Bylaw 2017, and is therefore to be added to the Register of Roads or Traffic Lanes Restricted to Specific Classes of Vehicles.

Part C

That the Waipuna/Halswell-Hornby-Riccarton Community Board resolve to:

13. Approve all traffic controls, except for the speed limit, at the intersection of Field Terrace with Riccarton Road, be revoked. Note 1 applies.
14. Approve that all traffic controls, except the speed limit, on Riccarton Road, commencing at its intersection with Ilam Road and extending in an easterly direction for a distance of 156 metres, be revoked. Note 1 applies.
15. Approve that all traffic controls, except the speed limit, on Riccarton Road, commencing at its intersection with Middleton Road and extending in a westerly direction for a distance of 75.5 metres, be revoked. Note 1 applies.
16. Approve that all traffic controls, except the speed limit, on Ilam Road, commencing at its intersection with Riccarton Road and extending in a northerly direction for a distance of 27.5 metres, be revoked. Note 1 applies.
17. Approve that all traffic controls, except the speed limit, on Middleton Road, commencing at its intersection with Riccarton Road and extending in a southerly direction for a distance of 81.5 metres, be revoked. Note 1 applies.
18. Approve the lane markings, kerb alignments and road surfacing, on Riccarton Road commencing at its intersection with Ilam Road and extending in an easterly direction for a distance of 156 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.
19. Approve the lane markings, kerb alignments, traffic islands and road surfacing, on Riccarton Road commencing at its intersection with Middleton Road and extending in a westerly direction for a distance of 75.5 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.
20. Approve the lane markings, kerb alignments, traffic islands and road surfacing on Ilam Road commencing at its intersection with Riccarton Road and extending in a northerly direction for a distance of 27.5 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.
21. Approve the lane markings, kerb alignments, traffic islands and road surfacing, on Middleton Road commencing at its intersection with Riccarton Road and extending in a southerly direction for a distance of 81.5 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.
22. Approve the lane markings, kerb alignments, traffic islands and road surfacing, on Field Terrace commencing at its intersection with Riccarton Road and extending in a southerly direction for a distance of 20 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.
23. Approve the lane markings, kerb alignments and road surfacing at the intersection of Riccarton Road with Ilam Road, as detailed in Attachment A of the agenda staff report.
24. Approve the lane markings, kerb alignments, traffic islands and road surfacing at the intersection of Riccarton Road with Middleton Road, as detailed in Attachment A of the agenda staff report. Note 2 applies.
25. Approve the lane markings, kerb alignments, traffic islands and road surfacing at the intersection of Riccarton Road with Field Terrace, as detailed in Attachment A of the agenda staff report. Note 2 applies.
26. Approve that the Riccarton Road eastern approach, to its intersection with Ilam Road, kerb side lane be restricted to left turn only into Middleton Road, except for buses and cycles, as detailed in Attachment A of the agenda staff report.

27. Approve that the Riccarton Road western approach, to its intersection with Ilam Road, kerb side lane be restricted to left turn only into Ilam Road, except for buses and cycles, as detailed in Attachment A of the agenda staff report.

28. Approve that a Give Way control be placed against Middleton Road at its intersection with Riccarton Road, as detailed in Attachment A of the agenda staff report.

29. Approve that the right turn be restricted from Middleton Road at its intersection with Riccarton Road, as detailed in Attachment A of the agenda staff report.

30. Approve that the U turn be restricted from Riccarton Road west approach at its intersection with Ilam Road, as detailed in Attachment A of the agenda staff report.

31. Approve that a Give Way control be placed against Field Terrace at its intersection with Riccarton Road, as detailed in Attachment A of the agenda staff report.

32. Approve that the right turn be restricted from Field Terrace at its intersection with Riccarton Road, as detailed in Attachment A of the agenda staff report.

33. Approve that the right turn be restricted from Riccarton Road west approach at its intersection with Field Terrace, as detailed in Attachment A of the agenda staff report.

34. Approve that all existing parking and stopping restrictions on the north side of Riccarton Road, commencing its intersection with Ilam Road and extending in an easterly direction for a distance of 126 metres, be revoked. Note 1 applies.

35. Approve that all existing parking and stopping restrictions on the south side of Riccarton Road, commencing its intersection with Middleton Road and extending in an easterly direction for a distance of 156 metres, be revoked. Note 1 applies.

36. Approve that all existing parking and stopping restrictions on the north side of Riccarton Road, commencing its intersection with Ilam Road and extending in a westerly direction for a distance of 99 metres, be revoked. Note 1 applies.

37. Approve that all existing parking and stopping restrictions on the south side of Riccarton Road, commencing its intersection with Middleton Road and extending in a westerly direction for a distance of 75.5 metres, be revoked. Note 1 applies.

38. Approve that all existing parking and stopping restrictions on the east side of Ilam Road, commencing its intersection with Riccarton Road and extending in a northerly direction for a distance of 27.5 metres, be revoked. Note 1 applies.

39. Approve that all existing parking and stopping restrictions on the west side of Ilam Road, commencing its intersection with Riccarton Road and extending in a northerly direction for a distance of 27.5 metres, be revoked. Note 1 applies.

40. Approve that all existing parking and stopping restrictions on the east side of Middleton Road, commencing its intersection with Riccarton Road and extending in a southerly direction for a distance of 81.5 metres, be revoked. Note 1 applies.

41. Approve that all existing parking and stopping restrictions on the east side of Field Terrace, commencing its intersection with Riccarton Road and extending in a southerly direction for a distance of 15 metres, be revoked. Note 1 applies.

42. Approve that all existing parking and stopping restrictions on the west side of Field Terrace, commencing its intersection with Riccarton Road and extending in a southerly direction for a distance of 15 metres, be revoked. Note 1 applies.

43. Approve that the stopping of vehicles be prohibited at any time on the north side of Riccarton Road, commencing at the intersection with Ilam Road and extending in an easterly direction

for a distance of 40 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

44. Approve that a Bus Stop be created on the north side of Riccarton Road commencing at a point 40 metres east of its intersection with Ilam Road and extending in an easterly direction for a distance of 14.5 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

45. Approve that the stopping of vehicles be prohibited at any time on the north side of Riccarton Road, commencing at the intersection with Ilam Road and extending in a westerly direction for a distance of 99 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

46. Approve that the stopping of vehicles be prohibited at any time on the south side of Riccarton Road, commencing at the intersection with Middleton Road and extending in a westerly direction for a distance of 60 metres, as detailed on Attachment A of the agenda staff report. Note 2 applies.

47. Approve that a Bus Stop be created on the south side of Riccarton Road commencing at a point 60 metres west of its intersection with Middleton Road and extending in a westerly direction for a distance of 14.5 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

48. Approve that the stopping of vehicles be prohibited at any time on the south side of Riccarton Road, commencing at the intersection with Middleton Road and extending in a easterly direction for a distance of 156 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

49. Approve that the stopping of vehicles be prohibited at any time on the east side of Ilam Road, commencing at the intersection with Riccarton Road and extending in a northerly direction for a distance of 27.5 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

50. Approve that the stopping of vehicles be prohibited at any time on the west side of Ilam Road, commencing at the intersection with Riccarton Road and extending in a northerly direction for a distance of 27.5 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

51. Approve that the stopping of vehicles be prohibited at any time on the east side of Middleton Road, commencing at the intersection with Riccarton Road and extending in a southerly direction for a distance of 60 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

52. Approve that the stopping of vehicles be prohibited at any time on the west side of Middleton Road, commencing at the intersection with Riccarton Road and extending in a southerly direction for a distance of 22 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

53. Approve that the stopping of vehicles be prohibited at any time on the west side of Middleton Road, commencing at a point 36.5 metres south of its intersection with Riccarton Road and extending in a southerly direction for a distance of 45 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

54. Approve that the stopping of vehicles be prohibited at any time on the west side of Field Terrace, commencing at its intersection with Riccarton Road and extending in a southerly direction for a distance of 15 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

55. Approve that the stopping of vehicles be prohibited at any time on the east side of Field Terrace, commencing at its intersection with Riccarton Road and extending in a southerly direction for a distance of 15 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

56. Approve that all road markings on Riccarton Road, commencing at its intersection with Clyde Road and extending in a westerly direction for a distance of 191.5 metres, be revoked.

57. Approve that all road markings on Riccarton Road, commencing at its intersection with Clyde Road and extending in an easterly direction for a distance of 82 metres, be revoked.

58. Approve that all existing parking and stopping restrictions on the south side of Riccarton Road, commencing its intersection with Euston Street and extending in an easterly direction for a distance of 12 metres, be revoked.

59. Approve that all existing parking and stopping restrictions on the north side of Riccarton Road, commencing its intersection with Clyde Road and extending in a westerly direction for a distance of 191.5 metres, be revoked.

60. Approve the lane markings and road surfacing, on Riccarton Road commencing at its intersection with Clyde Road and extending in a westerly direction for a distance of 191.5 metres, as detailed in Attachment A of the agenda staff report.

61. Approve the lane markings and road surfacing, on Riccarton Road commencing at its intersection with Clyde Road and extending in an easterly direction for a distance of 82 metres, as detailed in Attachment A of the agenda staff report.

62. Approve that the stopping of vehicles be prohibited at any time on the south side of Riccarton Road, commencing at the intersection with Euston Street and extending in an easterly direction for a distance of 12 metres, as detailed in Attachment A of the agenda staff report.

63. Approve that the stopping of vehicles be prohibited at any time on the north side of Riccarton Road, commencing at the intersection with Clyde Road and extending in a westerly direction for a distance of 165.5 metres, as detailed in Attachment A of the agenda staff report.

64. Approve that a bus parking area be created on the north side of Riccarton Road commencing at a point 165.5 metres east of its intersection with Clyde Road and extending in a westerly direction for a distance of 14 metres, as detailed in Attachment A of the agenda staff report.

65. Approve that the stopping of vehicles be prohibited at any time on the north side of Riccarton Road, commencing at a point 179.5 west of its intersection with Clyde Road and extending in a westerly direction for a distance of 12 metres, as detailed in Attachment A of the agenda staff report.

66. Approve that all road markings on Riccarton Road, commencing at its intersection with Waimairi Road and extending in an easterly direction for a distance of 113 metres, be revoked.

67. Approve the lane markings on Riccarton Road commencing at its intersection with Waimairi Road and extending in a westerly direction for a distance of 113 metres, as detailed in Attachment A of the agenda staff report.

3. Reason for Report Recommendations / Ngā Take mō te Whakatau

3.1 **Preferred Option: Option 1C**

3.1.1 As described in the original report (refer **Attachment B**), the preferred Option 1C addressed the existing safety issues, including:

- Improve safety for all road users.
- Provides a safe Major Cycle Route connection between Middleton Road and Ilam Road.
- The design allows for future passenger transport corridor improvements on Riccarton Road, particularly for Stage 2 of the Bus Priority which links the PT corridor from Deans Avenue to the Hornby Hub.
- Improves travel times for general traffic.

4. Alternative Options Considered / Ētahi atu Kōwhiringa

4.1 Details of the six other options investigated are as outlined in the original staff report (refer section 5), and in summary are.

4.1.1 **Option 1**: As shown in Attachment E of the original report. Option 1 restricts Middleton Road to left in left out, with Riccarton Road and Ilam Road then forming a T intersection. Bus priority is provided in either direction on Riccarton Road with dedicated lanes. The Major Cycle Route is provided for through a signalised crossing with a shared path on Middleton Road and mono directional separated cycle facilities on Ilam Road.

4.1.2 **Option 1c (preferred)**: As shown in Attachment A. This option includes all the works in Option 1. In addition to the Option 1 proposal, Field Terrace is restricted to left in left out at Riccarton Road with the use of an island on Field Terrace. At the Clyde Road/Riccarton Road/ Wharenui Road intersection, a new right hand turn lane is provided into Wharenui Road. The existing right turn bay into Waimairi Road from Riccarton Road has been extended to 48 metres from the existing 30 metres. Three of the four carparks are retained outside 233 Riccarton Road.

4.1.3 **Option 2**: As shown in Attachment F of the original report. This option is primarily the same as Option 1, however only allows a left turn out of Middleton Road, not a left turn into the street.

4.1.4 **Option 3**: As shown in Attachment G of the original report. This option is similar to Option 2, the main differences being that the cycle facility on Ilam Road is a bi-directional separated cycle facility, and a left turn slip lane is provided out of Ilam Road.

4.1.5 **Option 4**: As shown in Attachment H of the original report. This option is similar to Option 3 however does not include the left turn slip lane out of Ilam Road.

4.1.6 **Option 5**: The intersection layout is the same as for Option 4, however it provides a split phase for Ilam Road and Middleton Road, with a separated cycle facility being provided on both roads.

4.1.7 The following options were considered but ruled out:

4.1.8 **Do-nothing:** The do-nothing option maintains the existing intersection with no changes as part of this scheme, however this does not enable safe connections for the Nor'West Arc Major Cycleway users. As previously noted, the Nor'West Arc Major Cycleway has been consulted on and approved and is due for construction in late 2020. This option does not address the existing safety concerns.

5. Detail / Te Whakamahuki

5.1 At its meeting on 4 February 2020, the Waipuna/Halswell-Hornby-Riccarton Community Board considered a report on 'Ilam Road/Middleton Road/Riccarton Road Intersection - Safety Improvements.'

5.2 At that meeting, the Board resolved:

5.3 **Community Board Resolved as the Substantive Motion HHRB/2020/00007**

The Waipuna/Halswell-Hornby-Riccarton Community Board resolved to:

Lay the report regarding Ilam Road/Middleton Road/Riccarton Road Intersection - Safety Improvements on the table until there has been an additional Board Briefing.

5.4 The Community Board subsequently received a further briefing on the Ilam Road/Middleton Road/Riccarton Road Intersection - Safety Improvements project on 25 February 2020.

5.5 The information contained in the report has not changed and the original report is contained as Attachment B.

6. Policy Framework Implications / Ngā Hīraunga ā- Kaupapa here

Strategic Alignment /Te Rautaki Tīaroaro

6.1 This report supports the Council's Long Term Plan (2018 - 2028):

6.1.1 Activity: Traffic Safety and Efficiency

- Level of Service: 10.0.6.1 Reduce the number of casualties on the road network. - <=124 (reduce by 5 or more per year)

Policy Consistency / Te Whai Kaupapa here

6.2 The decision is consistent with the Council's Plans and Policies.

Impact on Mana Whenua / Ngā Whai Take Mana Whenua

6.3 The decision does not involve a significant decision in relation to ancestral land or a body of water or other elements of intrinsic value, therefore this decision does not specifically impact Mana Whenua, their culture and traditions.

Climate Change Impact Considerations / Ngā Whai Whakaaro mā te Āhuarangi

6.4 The details are covered in Section 10 of the original staff report (refer Attachment B).

Accessibility Considerations / Ngā Whai Whakaaro mā te Hunga Hauā

6.5 The details are covered in Section 10 of the original staff report (refer Attachment B).

7. Resource Implications / Ngā Hīraunga Rauemi

Capex/Opex / Ngā Utu Whakahaere

7.1 The details are covered in Section 10 of the original staff report (refer Attachment B).

8. Legal Implications / Ngā Hīraunga ā-Ture

Statutory power to undertake proposals in the report / Te Manatū Whakahaere Kaupapa

8.1 The details are covered in Section 7 of the original staff report (refer Attachment B).

Other Legal Implications / Ētahi atu Hīraunga-ā-Ture

8.1 There is no legal context, issue or implication relevant to this decision.

9. Risk Management Implications / Ngā Hīraunga Tūraru

9.1 The details are covered in Section 8 and **Attachment C** of the original staff report (refer Attachment B).

Attachments / Ngā Tāpirihanga

No.	Title	Page
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Confirmation of Statutory Compliance / Te Whakatūturutanga ā-Ture

Compliance with Statutory Decision-making Requirements (ss 76 - 81 Local Government Act 2002).
(a) This report contains:
  (i) sufficient information about all reasonably practicable options identified and assessed in terms of their advantages and disadvantages; and
  (ii) adequate consideration of the views and preferences of affected and interested persons bearing in mind any proposed or previous community engagement.
(b) The information reflects the level of significance of the matters covered by the report, as determined in accordance with the Council's significance and engagement policy.

Signatories / Ngā Kaiwaitohu

Authors	Adrian Thein - Project Manager Sharon O'Neill - Team Leader Project Management Transport
Approved By	Lynette Ellis - Manager Planning and Delivery Transport Richard Osborne - Head of Transport David Adamson - General Manager City Services

Christchurch City Council

Christchurch City Council

Hansons Riccarton Waimari

Preferred Option 1C
Post Consultation Plan

Attachment A
Sheet 1 of 3

Original Plan Size: A3

ISSUE. 1 05/12/2018
TP350101 MJR CP502021

Christchurch City Council

Christchurch City Council

Ilam Middleton Riccarton

Preferred Option 1C
Post Consultation Plan

Attachment A
Sheet 2 of 3

Original Plan Size: A3
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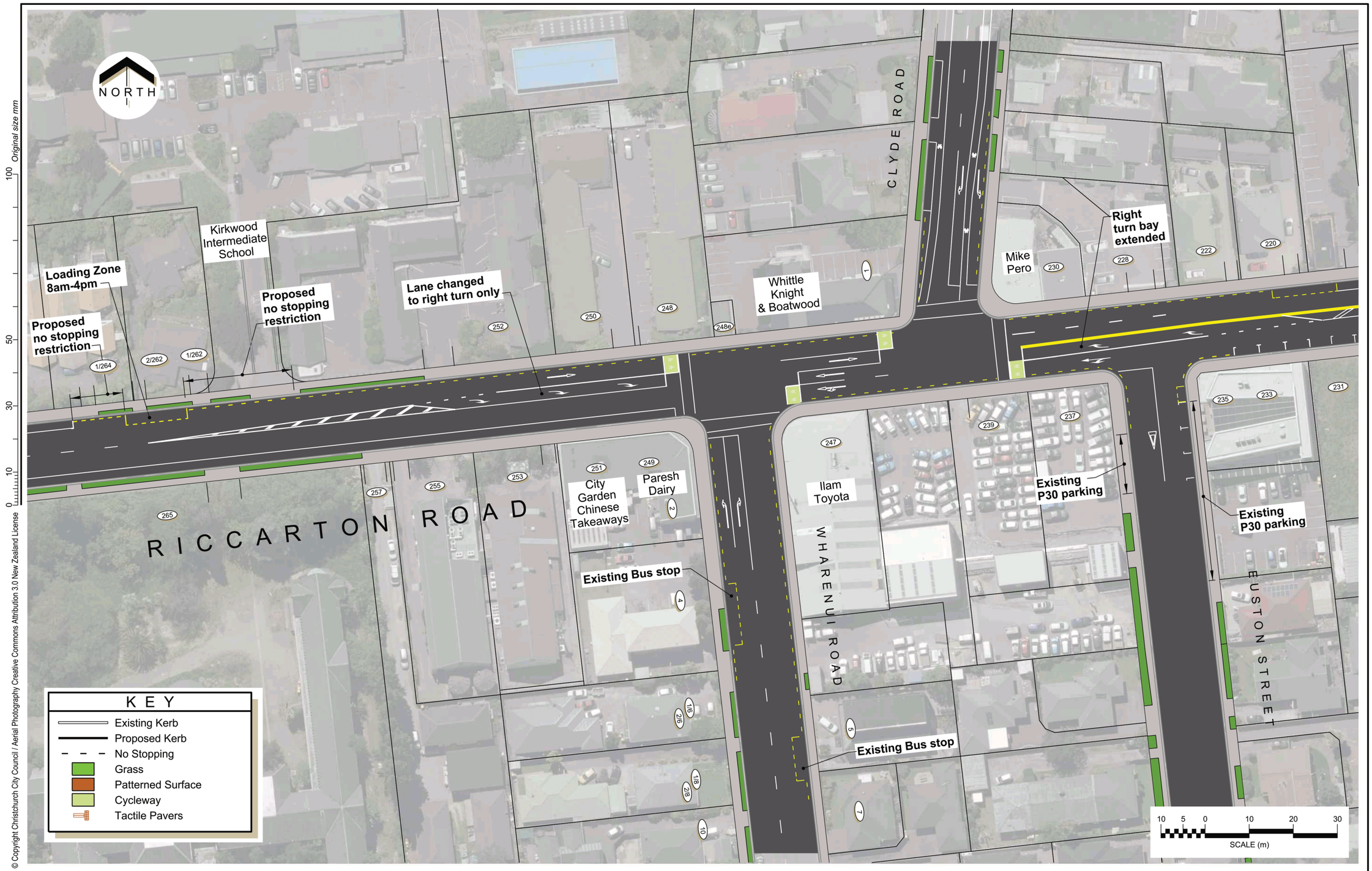


Christchurch City Council

Clyde Riccarton Wharenui
Preferred Option 1C
Post Consultation Plan

Attachment A
Sheet 3 of 3

Original Plan Size: A3
ISSUE. 1 31/01/2019
TP350101 MJR CP502021

8. Ilam Road/Middleton Road/Riccarton Road Intersection - Safety Improvements

Reference / Te Tohutoro: 19/1483937

Presenter(s) / Te kaipāhō: Adrian Thein – Project Manager
William Homewood – Traffic Engineer
Philippa Upton – Engagement Advisor

1. Purpose of Report / Te Pūtake Pūrongo

1.1 To request that the Waipuna/Halswell-Hornby-Riccarton Community Board endorse the preferred design (Option 1C) for the Ilam Road/Middleton Road/Riccarton Road Intersection - Safety Improvement project, approve the associated traffic control resolutions for the preferred design, and further that the Board recommend to the Council that it approve the project and associated traffic control resolutions.

2. Executive Summary / Te Whakarāpopoto Matua

2.1 This intersection has an identified safety issue and has been assessed using the safe systems approach and is ranked the seventh most dangerous intersection in Christchurch.

2.2 Options to provide the required safety improvements at this intersection are limited due to the offset layout of Middleton Road and Ilam Road, and also due to space restrictions due to the surrounding commercial and residential properties at this intersection.

2.3 Maintaining network efficiency for public transport along Riccarton Road it being noted that Riccarton Road Stage 1 Bus Priority Stage 1 (between Deans Avenue and Matipo Street) is currently in construction and due for completion in mid-2020.

2.4 This intersection connects the approved Nor'West Arc Major Cycleway project which is currently proposed to commence construction in 2020, the external funding from the NZ Transport Agency is however currently being confirmed.

2.5 The preferred option maintains overall capacity on the network, some vehicle trips will be redistributed due to the closing of the right turn movements in and out of Middleton Road. Small scale improvements at other intersections are proposed as part of this project to cater for the redistribution of vehicles.

2.6 The proposal provides a safe connection for the approved Nor'West Arc Major Cycle Route which runs along Middleton Road and Ilam Road.

3. Staff Recommendations / Ngā Tūtohu

For the purposes of the following resolutions:

(1) An intersection is defined by the position of kerbs on each intersecting roadway; and,

(2) The resolution is to take effect from the commencement of physical road works associated with the project as detailed in the agenda staff report; and,

(3) If the resolution states "Note 1 applies", any distance specified in the resolution relates the kerb line location referenced as exists on the road immediately prior to the Community Board meeting of 4 February 2020; and,

(4) If the resolution states "Note 2 applies", any distance specified in the resolution relates the approved kerb line location on the road resulting from the resolution, as approved.

Part A

That the Waipuna/Halswell-Hornby-Riccarton Community Board endorse Option 1C for the Ilam Road/Middleton Road/Riccarton Road - Safety Improvements project and recommend to the Council that the project be approved, along with the following traffic control resolutions:

1. Approve all traffic controls, except for the speed limit, at the intersection of Riccarton Road with Middleton Road and Ilam Road, be revoked. Note 1 applies.
2. Approve that the intersection of Riccarton Road with Ilam Road be controlled by traffic signals, in accordance with section 6.2 of the Land Transport Traffic Control Devices Rule 2004, as detailed in Attachment A of the agenda staff report.
3. Approve that a special vehicle lane for the use of west bound buses and cycles only, be established on the south side of Riccarton Road, commencing at its intersection with Middleton Road, and extending in a westerly direction for a distance of 60 metres as detailed in Attachment A of the agenda staff report. This special vehicle lane is to apply at all times. This special vehicle lane is authorised under clause 18 of the Christchurch City Council Traffic and Parking Bylaw 2017, and is therefore to be added to the Register of Roads or Traffic Lanes Restricted to Specific Classes of Vehicles.
4. Approve that a special vehicle lane for the use of westbound cycles only, be established on the south side of Riccarton Road, commencing at a point 90 metres east of its intersection with Middleton Road, and extending in an easterly direction for a distance of 65 metres as detailed in Attachment A of the agenda staff report. This special vehicle lane is to apply at all times. This special vehicle lane is authorised under clause 18 of the Christchurch City Council Traffic and Parking Bylaw 2017, and is therefore to be added to the Register of Roads or Traffic Lanes Restricted to Specific Classes of Vehicles.
5. Approve that a special vehicle lane for the use of eastbound buses and cycles only, be established on the north side of Riccarton Road, commencing at a point 58 metres west of its intersection with Ilam Road, and extending in a westerly direction for a distance of 41 metres as detailed in Attachment A of the agenda staff report. This special vehicle lane is to apply at all times. This special vehicle lane is authorised under clause 18 of the Christchurch City Council Traffic and Parking Bylaw 2017, and is therefore to be added to the Register of Roads or Traffic Lanes Restricted to Specific Classes of Vehicles.
6. Approve that a special vehicle lane for the use of eastbound buses and cycles only, be established on the north side of Riccarton Road, commencing at its intersection with Ilam Road, and extending in an easterly direction for a distance of 54 metres as detailed in Attachment A of the agenda staff report. This special vehicle lane is to apply at all times. This special vehicle lane is authorised under clause 18 of the Christchurch City Council Traffic and Parking Bylaw 2017, and is therefore to be added to the Register of Roads or Traffic Lanes Restricted to Specific Classes of Vehicles.
7. Approve that a special vehicle lane for the use of southbound cycles only, be established on the east side of Ilam Road, commencing at its intersection with Riccarton Road, and extending in a northerly direction for a distance of 27.5 metres as detailed in Attachment A of the agenda staff report. This special vehicle lane is authorised under clause 18 of the Christchurch City Council Traffic and Parking Bylaw 2017, and is therefore to be added to the Register of Roads or Traffic Lanes Restricted to Specific Classes of Vehicles.
8. Approve that a special vehicle lane for the use of northbound cycles only, be established on the west side of Ilam Road, commencing at its intersection with Riccarton Road, and

extending in a northerly direction for a distance of 27.5 metres as detailed in Attachment A of the agenda staff report. This special vehicle lane is authorised under clause 18 of the Christchurch City Council Traffic and Parking Bylaw 2017, and is therefore to be added to the Register of Roads or Traffic Lanes Restricted to Specific Classes of Vehicles.

9. Approve that the pathway on the east side of Middleton Road, commencing at its intersection with Riccarton Road and extending in a southerly direction for a distance of 52 metres, be resolved as a bi-directional shared pedestrian/bicycle pathway This shared path is authorised under clause 18 of the Christchurch City Council Traffic and Parking Bylaw 2017, and is therefore to be added to the Register of Roads or Traffic Lanes Restricted to Specific Classes of Vehicles.

10. Approve that the pathway on the west side of Middleton Road, commencing at a point 52 metres south of its intersection with Riccarton Road and extending in a southerly direction for a distance of 16.5 metres, be resolved as a bi-directional shared pedestrian/bicycle pathway. This shared path is authorised under clause 18 of the Christchurch City Council Traffic and Parking Bylaw 2017, and is therefore to be added to the Register of Roads or Traffic Lanes Restricted to Specific Classes of Vehicles.

Part C

That the Waipuna/Halswell-Hornby-Riccarton Community Board resolve to:

11. Approve all traffic controls, except for the speed limit, at the intersection of Field Terrace with Riccarton Road, be revoked. Note 1 applies.

12. Approve that all traffic controls, except the speed limit, on Riccarton Road, commencing at its intersection with Ilam Road and extending in an easterly direction for a distance of 156 metres, be revoked. Note 1 applies.

13. Approve that all traffic controls, except the speed limit, on Riccarton Road, commencing at its intersection with Middleton Road and extending in a westerly direction for a distance of 75.5 metres, be revoked. Note 1 applies.

14. Approve that all traffic controls, except the speed limit, on Ilam Road, commencing at its intersection with Riccarton Road and extending in a northerly direction for a distance of 27.5 metres, be revoked. Note 1 applies.

15. Approve that all traffic controls, except the speed limit, on Middleton Road, commencing at its intersection with Riccarton Road and extending in a southerly direction for a distance of 81.5 metres, be revoked. Note 1 applies.

16. Approve the lane markings, kerb alignments and road surfacing, on Riccarton Road commencing at its intersection with Ilam Road and extending in an easterly direction for a distance of 156 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

17. Approve the lane markings, kerb alignments, traffic islands and road surfacing, on Riccarton Road commencing at its intersection with Middleton Road and extending in a westerly direction for a distance of 75.5 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

18. Approve the lane markings, kerb alignments, traffic islands and road surfacing on Ilam Road commencing at its intersection with Riccarton Road and extending in a northerly direction for a distance of 27.5 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

19. Approve the lane markings, kerb alignments, traffic islands and road surfacing, on Middleton Road commencing at its intersection with Riccarton Road and extending in a southerly

direction for a distance of 81.5 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

20. Approve the lane markings, kerb alignments, traffic islands and road surfacing, on Field Terrace commencing at its intersection with Riccarton Road and extending in a southerly direction for a distance of 20 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

21. Approve the lane markings, kerb alignments and road surfacing at the intersection of Riccarton Road with Ilam Road, as detailed in Attachment A of the agenda staff report.

22. Approve the lane markings, kerb alignments, traffic islands and road surfacing at the intersection of Riccarton Road with Middleton Road, as detailed in Attachment A of the agenda staff report. Note 2 applies.

23. Approve the lane markings, kerb alignments, traffic islands and road surfacing at the intersection of Riccarton Road with Field Terrace, as detailed in Attachment A of the agenda staff report. Note 2 applies.

24. Approve that the Riccarton Road eastern approach, to its intersection with Ilam Road, kerb side lane be restricted to left turn only into Middleton Road, except for buses and cycles, as detailed in Attachment A of the agenda staff report.

25. Approve that the Riccarton Road western approach, to its intersection with Ilam Road, kerb side lane be restricted to left turn only into Ilam Road, except for buses and cycles, as detailed in Attachment A of the agenda staff report.

26. Approve that a Give Way control be placed against Middleton Road at its intersection with Riccarton Road, as detailed in Attachment A of the agenda staff report.

27. Approve that the right turn be restricted from Middleton Road at its intersection with Riccarton Road, as detailed in Attachment A of the agenda staff report.

28. Approve that the U turn be restricted from Riccarton Road west approach at its intersection with Ilam Road, as detailed in Attachment A of the agenda staff report.

29. Approve that a Give Way control be placed against Field Terrace at its intersection with Riccarton Road, as detailed in Attachment A of the agenda staff report.

30. Approve that the right turn be restricted from Field Terrace at its intersection with Riccarton Road, as detailed in Attachment A of the agenda staff report.

31. Approve that the right turn be restricted from Riccarton Road west approach at its intersection with Field Terrace, as detailed in Attachment A of the agenda staff report.

32. Approve that all existing parking and stopping restrictions on the north side of Riccarton Road, commencing its intersection with Ilam Road and extending in an easterly direction for a distance of 126 metres, be revoked. Note 1 applies.

33. Approve that all existing parking and stopping restrictions on the south side of Riccarton Road, commencing its intersection with Middleton Road and extending in an easterly direction for a distance of 156 metres, be revoked. Note 1 applies.

34. Approve that all existing parking and stopping restrictions on the north side of Riccarton Road, commencing its intersection with Ilam Road and extending in a westerly direction for a distance of 99 metres, be revoked. Note 1 applies.

35. Approve that all existing parking and stopping restrictions on the south side of Riccarton Road, commencing its intersection with Middleton Road and extending in a westerly direction for a distance of 75.5 metres, be revoked. Note 1 applies.

36. Approve that all existing parking and stopping restrictions on the east side of Ilam Road, commencing its intersection with Riccarton Road and extending in a northerly direction for a distance of 27.5 metres, be revoked. Note 1 applies.

37. Approve that all existing parking and stopping restrictions on the west side of Ilam Road, commencing its intersection with Riccarton Road and extending in a northerly direction for a distance of 27.5 metres, be revoked. Note 1 applies.

38. Approve that all existing parking and stopping restrictions on the east side of Middleton Road, commencing its intersection with Riccarton Road and extending in a southerly direction for a distance of 81.5 metres, be revoked. Note 1 applies.

39. Approve that all existing parking and stopping restrictions on the east side of Field Terrace, commencing its intersection with Riccarton Road and extending in a southerly direction for a distance of 15 metres, be revoked. Note 1 applies.

40. Approve that all existing parking and stopping restrictions on the west side of Field Terrace, commencing its intersection with Riccarton Road and extending in a southerly direction for a distance of 15 metres, be revoked. Note 1 applies.

41. Approve that the stopping of vehicles be prohibited at any time on the north side of Riccarton Road, commencing at the intersection with Ilam Road and extending in an easterly direction for a distance of 40 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

42. Approve that a Bus Stop be created on the north side of Riccarton Road commencing at a point 40 metres east of its intersection with Ilam Road and extending in an easterly direction for a distance of 14.5 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

43. Approve that the stopping of vehicles be prohibited at any time on the north side of Riccarton Road, commencing at the intersection with Ilam Road and extending in a westerly direction for a distance of 99 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

44. Approve that the stopping of vehicles be prohibited at any time on the south side of Riccarton Road, commencing at the intersection with Middleton Road and extending in a westerly direction for a distance of 60 metres, as detailed on Attachment A of the agenda staff report. Note 2 applies.

45. Approve that a Bus Stop be created on the south side of Riccarton Road commencing at a point 60 metres west of its intersection with Middleton Road and extending in a westerly direction for a distance of 14.5 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

46. Approve that the stopping of vehicles be prohibited at any time on the south side of Riccarton Road, commencing at the intersection with Middleton Road and extending in a easterly direction for a distance of 156 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

47. Approve that the stopping of vehicles be prohibited at any time on the east side of Ilam Road, commencing at the intersection with Riccarton Road and extending in a northerly direction for a distance of 27.5 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

48. Approve that the stopping of vehicles be prohibited at any time on the west side of Ilam Road, commencing at the intersection with Riccarton Road and extending in a northerly direction for

a distance of 27.5 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

49. Approve that the stopping of vehicles be prohibited at any time on the east side of Middleton Road, commencing at the intersection with Riccarton Road and extending in a southerly direction for a distance of 60 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

50. Approve that the stopping of vehicles be prohibited at any time on the west side of Middleton Road, commencing at the intersection with Riccarton Road and extending in a southerly direction for a distance of 22 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

51. Approve that the stopping of vehicles be prohibited at any time on the west side of Middleton Road, commencing at a point 36.5 metres south of its intersection with Riccarton Road and extending in a southerly direction for a distance of 45 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

52. Approve that the stopping of vehicles be prohibited at any time on the west side of Field Terrace, commencing at its intersection with Riccarton Road and extending in a southerly direction for a distance of 15 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

53. Approve that the stopping of vehicles be prohibited at any time on the east side of Field Terrace, commencing at its intersection with Riccarton Road and extending in a southerly direction for a distance of 15 metres, as detailed in Attachment A of the agenda staff report. Note 2 applies.

54. Approve that all road markings on Riccarton Road, commencing at its intersection with Clyde Road and extending in a westerly direction for a distance of 191.5 metres, be revoked.

55. Approve that all road markings on Riccarton Road, commencing at its intersection with Clyde Road and extending in an easterly direction for a distance of 82 metres, be revoked.

56. Approve that all existing parking and stopping restrictions on the south side of Riccarton Road, commencing its intersection with Euston Street and extending in an easterly direction for a distance of 12 metres, be revoked.

57. Approve that all existing parking and stopping restrictions on the north side of Riccarton Road, commencing its intersection with Clyde Road and extending in a westerly direction for a distance of 191.5 metres, be revoked.

58. Approve the lane markings and road surfacing, on Riccarton Road commencing at its intersection with Clyde Road and extending in a westerly direction for a distance of 191.5 metres, as detailed in Attachment A of the agenda staff report.

59. Approve the lane markings and road surfacing, on Riccarton Road commencing at its intersection with Clyde Road and extending in an easterly direction for a distance of 82 metres, as detailed in Attachment A of the agenda staff report.

60. Approve that the stopping of vehicles be prohibited at any time on the south side of Riccarton Road, commencing at the intersection with Euston Street and extending in an easterly direction for a distance of 12 metres, as detailed in Attachment A of the agenda staff report.

61. Approve that the stopping of vehicles be prohibited at any time on the north side of Riccarton Road, commencing at the intersection with Clyde Road and extending in a westerly direction for a distance of 165.5 metres, as detailed in Attachment A of the agenda staff report.

62. Approve that a bus parking area be created on the north side of Riccarton Road commencing at a point 165.5 metres east of its intersection with Clyde Road and extending in a westerly direction for a distance of 14 metres, as detailed in Attachment A of the agenda staff report.

63. Approve that the stopping of vehicles be prohibited at any time on the north side of Riccarton Road, commencing at a point 179.5 west of its intersection with Clyde Road and extending in a westerly direction for a distance of 12 metres, as detailed in Attachment A of the agenda staff report.

64. Approve that all road markings on Riccarton Road, commencing at its intersection with Waimairi Road and extending in an easterly direction for a distance of 113 metres, be revoked.

65. Approve the lane markings on Riccarton Road commencing at its intersection with Waimairi Road and extending in a westerly direction for a distance of 113 metres, as detailed in Attachment A of the agenda staff report.

4. Context/Background / Te Horopaki

Issue or Opportunity / Ngā take, Ngā Whaihua rānei

4.1 This intersection is made up of three roads. Riccarton Road, which is a minor arterial road, is aligned east to west. Ilam Road and Middleton Road, which are the northern and southern approaches respectively, are both designated as collector roads in the Christchurch Transport Strategic Plan.

4.2 The project needs to provide for possible future bus priority measures along Riccarton Road and the Nor'West Arc Major Cycleway Route, both of which travel through this intersection. Bus Priority measures on this section of Riccarton Road are currently not funded in the Long Term Plan. The Nor'West Arc Major Cycleway Route project uses Ilam Road and Middleton Road and contributes funding to this project to meet its objectives. The cycleway project is approved and ready to tender once NZ Transport Agency (NZTA) funding has been confirmed.

4.3 This intersection is ranked 7th out of all Christchurch high risk intersections. The predominant crash types are rear end crashes and right hand against crashes from Riccarton Road into Ilam Road or vice versa.

4.4 The project objectives are to:

4.4.1 Reduce the number of fatal and serious injuries at the Ilam/Middleton/Riccarton Roads intersection.

4.4.2 Reduce the number of crashes involving pedestrians or cyclists at the Ilam/Middleton/ Riccarton Roads intersection.

4.4.3 Maintain network efficiency for public transport along Riccarton Road.

4.4.4 Integrate with the future bus priority project.

4.4.5 Integrate with the Nor'West Arc Major Cycle Route project.

Strategic Alignment / Te Rautaki Tīaroaro

4.5 This report supports the Council's Long Term Plan (2018 - 2028):

4.5.1 Activity: Traffic Safety and Efficiency

- Level of Service: 10.0.6.1 Reduce the number of casualties on the road network. - <=124 (reduce by 5 or more per year)

Decision Making Authority / Te Mana Whakatau

4.6 The decision making authority for this report sits with the Community Board and the Council.

Previous Decisions / Ngā Whakatau o mua

4.7 A seminar was held with the Community Board on 13 November 2018 prior to consultation, to advise the Board of the proposal.

4.8 A seminar on the proposed designs and post consultation feedback was presented to the Community Board on 26 June 2019.

Assessment of Significance and Engagement / Te Aromatawai Whakahirahira

4.9 The decision in this report is of medium significance in relation to the Christchurch City Council's Significance and Engagement Policy.

4.10 The level of significance was determined by the number of people affected and/or with an interest, the impact on those people affected (access, route changes), project interdependencies (bus priority, Major Cycle Route requirements), and associated Council reputational cost/risk.

5. Options Analysis / Ngā Kōwhiringa Tātari

Options Considered / Ngā Kōwhiringa Whaiwhakaaro

5.1 The following reasonably practicable options were considered and are assessed in this report. (To be noted Option 1a and 1b options were signal phasing sub options and were excluded due to their impact on network efficiency):

- ***Option 1***: As shown in **Appendix E**. Option 1 restricts Middleton Road to left in left out, with Riccarton Road and Ilam Road then forming a T intersection. Bus priority is provided in either direction on Riccarton Road with dedicated lanes. The Major Cycle Route is provided for through a signalised crossing with a shared path on Middleton Road and mono directional separated cycle facilities on Ilam Road.
- ***Option 1c (preferred):*** As shown in **Appendix A**. This option includes all the works in Option 1. In addition to the Option 1 proposal Field Terrace is restricted to left in left out at Riccarton Road with the use of an island on Field Terrace. At Clyde Road/Riccarton Road/ Wharenui Road intersection a new right hand turn lane is provided into Wharenui Road. The existing right turn bay into Waimairi Road from Riccarton Road has been extended to 48 metres from the existing 30 metres. Three of the four carparks are retained outside 233 Riccarton Road.
- ***Option 2:*** As shown in **Appendix F**. This option is primarily the same as Option 1, however only allows a left turn out of Middleton Road, not a left turn into the street.
- ***Option 3***: As shown in **Appendix G**. This option is similar to Option 2, the main differences being that the cycle facility on Ilam Road is a bi directional separated cycle facility, and a left turn slip lane is provided out of Ilam Road.
- ***Option 4:*** As shown in **Appendix H**. This option is the similar to Option 3 however does not include the left turn slip lane out of Ilam Road.
- ***Option 5:*** The intersection layout is the same as for Option 4 however it provides a split phase for Ilam Road and Middleton Road, with a separated cycle facility being provided on both roads.

5.2 The following options were considered but ruled out:

- ***Do-nothing:*** The do nothing option maintains the existing intersection with no changes as part of this scheme, however this does not enable safe connections for the Nor'West Arc Major Cycleway users. As previously noted the Nor'West Arc Major Cycleway has been consulted on and approved and is due for construction in late 2020. This option does not address the existing safety concerns.

Options Descriptions / Ngā Kōwhiringa

5.3 **Preferred Option: Option 1C**

5.3.1 **Option Description:** Restricts the use of Middleton Road at the intersection by changing access/egress to left in left out, and changing Ilam Road and Middleton Road to a 'T' intersection.

- Middleton Road has been restricted to left in left out. This is self-enforcing with islands on Riccarton Road and within the Middleton Road approach.
- The pinch points in the footpath, where Middleton Road intersects with Riccarton Road have been removed as Middleton Road has been narrowed.
- The left turn slip lane has been removed from Ilam Road into Riccarton Road. The removal of this slip lane improves pedestrian safety and removes the pinch point on the footpath where Ilam Road and Riccarton Road intersect.
- For westbound buses the bus lane will operate as a through lane for cyclists and buses but a left turn lane for vehicles wanting to turn left into Middleton Road after the intersection. This lane will be signed 'left lane left turn only except buses and cyclists'.
- For eastbound buses the left turn lane has been designed to allow the through buses to use it as well, allowing them to jump the queue. This lane will be signed 'left lane left turn only except buses and cyclists'
- A cycle crossing has been provided connecting a shared path facility on Middleton Road to a mono-directional separated facility on Ilam Road.
- A cycle crossing has been included on Middleton Road to provide a safe crossing facility for cyclists, who need to cross Middleton Road.
- A pedestrian refuge has been added on Middleton Road to replace the signalised crossing which is removed as a result of Middleton Road no longer being part of the main intersection.
- The scheme includes the following features at the intersection of Field Terrace/ Riccarton Road:

  Field Terrace is restricted to left in left out at Riccarton Road with the use of an island on Field Terrace. This is shown in Appendix P of the Scheme Assessment Report.
- The scheme includes the following features at the intersection of Clyde Road/ Riccarton Road/Wharenui Road:

  The eastern approach right turn lane for Riccarton Road into Clyde Road, has been extended from the existing 15 metres to 55 metres. This has resulted in the removal of two parking spaces on the south side of Riccarton Road.

  The western approach has been changed from what is currently a through lane and shared through and right turn lane to a through lane and a dedicated right turn lane. There has also been an additional 44 metres of no stopping restrictions

provided on the western approach lane, which has resulted in four parking spaces being removed. This allows right turners to queue in their own lane, something which already effectively happens as through vehicles do not tend to queue behind the right turning vehicles.

- The scheme includes the following features at the intersection of Hansons Lane/ Riccarton Road/Waimairi Road.
- The right turn bay into Waimairi Road from Riccarton Road has been extended to 48 metres from the existing 30 metres.

5.3.2 **Option Advantages**

- Improve safety for all road users.
- Provides a safe Major Cycle Route connection between Middleton Road and Ilam Road.
- The design allows for future passenger transport corridor improvements on Riccarton Road, particularly for Stage 2 of the Bus Priority which links the PT corridor from Deans Avenue to the Hornby Hub.
- Improves travel times for general traffic.

5.3.3 **Option Disadvantages**

- Restricts access to Middleton Road and Field Terrace, requiring local traffic to take a longer route.
- Minor delay to passenger transport, until the bus priority stage two project is completed.
- Requires the removal of 10 carparks including:

  One space removed from outside 306 Riccarton Road, to the west of Ilam Road.

  Four parking spaces removed outside 293 and 291 Riccarton Road, east of Field Terrace.

  One space removed from outside 235 Riccarton Road, outside the Clyde Building (Clyde/Riccarton/Wharenui intersection).

  Four spaces removed from outside 262–264 Riccarton Road however have been replaced with a loading zone to accommodate school buses for Kirkwood Intermediate School (Clyde/Riccarton/Wharenui intersection).

  Changes to parking locations on Middleton Road, however no change to the total parking numbers when compared to the approved Nor'West Arc MCR.

Analysis Criteria / Ngā Paearu Wetekina

5.4 These options have been considered against the objectives of the project in **Appendix D** and is summarised in Table 9. To allow the options to be compared, each of the options has been ranked based on how well they contribute to meeting the objectives. This ranking mechanism is explained in Table 8 below.

Table 8: Option Assessment Key

✓✓	Strongly contributes to the desired objectives
✓	Contributes to the desired objective
-	Neutral
x	Detracts from the desired objective
xx	Strongly detracts from the desired objective

Table 9: Options Assessment Matrix Summary

Objective	Do Nothing	Option 1	Option 1c Preferred Option	Option 2	Option 4	Option 5
Reduce the number of fatal and serious injuries at the Ilam/ Middleton/Riccarton intersection. (The three main crash types have been considered below)						
Right Turn against – Riccarton to Ilam	X	✓✓	✓✓	✓✓	✓✓	x
Right Turn against – Ilam to Riccarton	X	✓✓	✓✓	✓✓	✓✓	✓
Rear end	X	-	-	-	-	x
Reduce the number of crashes involving pedestrians or cyclists at the Ilam/Middleton/Riccarton intersection						
Pedestrians	X	✓	✓	✓	✓	x
Cyclists	X	✓✓	✓✓	-	-	✓✓
Maintain network efficiency for public transport along Riccarton Road.	✓	✓	✓✓	xx	xx	xx
Integrate with the future bus priority project	x	✓✓	✓✓	✓✓	✓✓	x
Integrate with the MCR	x	✓✓	✓✓	✓✓	✓✓	✓✓

Options Considerations / Te Whaiwhakaarotanga

5.5 **Capacity issues**

5.5.1 Field Terrace closure – the initial modelling report identified that the additional vehicles trying to 'rat run' through Field Terrace would cause a problem both for Field Terrace residents and with vehicles queuing on Riccarton Road waiting to turn right. The queuing associated with this movement resulted in additional delays to Riccarton Road traffic, as it would overlap with the queue of vehicles waiting to turn right into Ilam Road.

5.5.2 Right turn phase included – the modelling also showed that when a right turn phase into Ilam Road was introduced at the intersection with Riccarton Road, this improved overall travel times on the Riccarton Road route as it relieves congestion issues at other signalised intersections where right turning vehicles block the through lane. The restrictions on movements at Middleton Road results in traffic diverting through surrounding intersections. The inclusion of the right turn phase attracts some of them back to this intersection, although on a different approach.

6. Community Views and Preferences / Ngā mariu ā-Hāpori

Consultation process

6.1 Pre-consultation meetings were held with representatives from the University of Canterbury and Ilam, Kirkwood and Middleton Grange Schools, resulting in project team response to specific questions. Police and emergency services were sent the plans for early input. There were no requested changes, and the Police, Fire and Emergency New Zealand and St Johns Ambulance responded with their approval.

6.2 Have Your Say consultation on the Council web site was open for community comment from 13 February to 11 March 2019. Approximately 1,400 booklets were hand delivered to the project area and surrounding streets, and approximately 600 posted to owners and stakeholders including libraries and service centres along with an extensive email list.

6.3 Members of the project team delivered booklets to key affected businesses at the start of consultation, responding during this period to questions and concerns including site meetings in response to specific concerns.

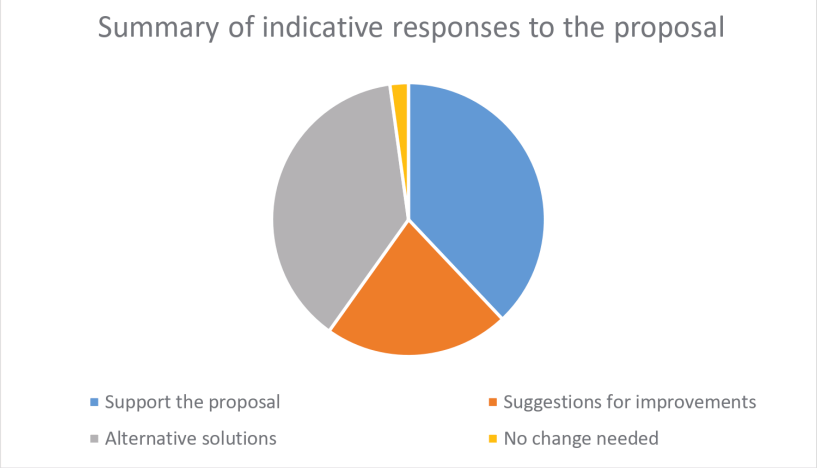
6.4 Two drop-in information meetings, including staff presentations and question and answer sessions, were attended by a total of more than 30 people.

6.5 There was a high level of engagement on social media targeting the Riccarton community about this proposal with 115 Facebook likes, 128 comments and 20 shares. Generally, people agreed that something needs to be done to make the intersection safer and nobody suggested it should be left as is. Of the few who had suggestions for alternatives, banning right turns enabling retention of the through route from Middleton to Ilam was the most popular. There were 1,169 views of the Newsline article on the website.

Overview of feedback

6.6 A binary support/yes no response was not requested or specifically provided for the in the consultation feedback form. Although the feedback gave clear themes and levels of support, analysis and interpretation is indicative only.

6.7 One hundred and thirty-seven individuals or groups provided written comment and 52 indicated support for the proposal. Over half of the remaining eighty-two providing comments or suggestions gave alternative solutions, while the rest put forward comments or suggestions to improve the proposal. Three do not think any change is needed at the intersection.



Support for the proposal

6.8 Key support comments reinforced the need for safety for all Ilam/Middleton/Riccarton intersection users – including those walking and on bikes (29 submitters). The Canterbury District Health Board and Generation Zero gave strong support to prioritising safe cycling, walking and public transport including the use of road space such as berms. Six submitters questioned the fairness of prioritising cycles over other road users especially drivers including whether the Nor'West Arc Major Cycle Route is viable, while seven specifically indicated support for the cycleway.

6.9 The Kirkwood Intermediate School Principal supports the proposal as a safety improvement, requesting a change to the proposed parking removal immediately to the west of the school to allow for bus parking at relevant times. Positive comments were received from Ilam School parents supporting the safety improvements for pedestrians and cyclists at the intersection.

There was some support for those travelling to local schools, the university or other institutions for the safety improvements brought by the proposal for these people, especially cyclists and pedestrians.

Key concerns

6.10 Access to local and wider destinations to the north. Ninety-three submitters questioned what would happen to north-bound vehicle traffic that currently travels up Middleton Road into Ilam Road to get to schools, the university, and other destinations.

6.11 About two thirds of over 30 references to the university and local schools and other institutions noted concerns about access to these locations and lack of viable routes for these commuters and students.

6.12 ***Viability of alternative routes – wider network***. A number of questions were raised about the viability of alternative routes including Hansons/Waimairi and Wharenui/Clyde, and how this would affect access for locals as well as the wider community and those travelling to wider destinations.

6.13 ***Increased localised traffic congestion.*** There was particular concern from 25 submitters about how traffic including those travelling from Bush Inn and unable to turn right into Middleton Road will divert to clog local streets such as Auburn Avenue, Suva Street and Field Terrace and nine had specific concerns over loss of access for locals. Middleton Grange School had questions about how Suva Street would be affected given the new cycle lane.

6.14 ***Increased wider congestion.*** Thirty-six noted that they expect wider congestion and 'log jam' issues in Riccarton Road and intersections especially Wharenui/Clyde and to a lesser extent Hansons/Waimairi.

Alternative suggestions from submitters

6.15 ***Alternative solutions for Ilam/Middleton/Riccarton intersection.*** Twenty-nine suggestions for alternative overall solutions for the Ilam/Middleton/Riccarton intersection included solving the problem by banning the right turns to keep the through movement, and resetting the traffic lights to split the phases. Seven submitters suggested acquiring land to straighten the road, and eight asked for assurance that there would be a right turn arrow from Ilam into Riccarton.

6.16 ***Retain the right turn into Middleton.*** Thirty four comments were made about the effects this could have on local congestion and 13 specifically opposed this change.

6.17 ***Alternative solutions for Clyde/Riccarton/Wharenui.*** There were several suggestions to change the through and left turn lanes located between the Clyde Road and Wharenui Road approaches to left turn only, to allow a north–south movement.

Other suggestions and concerns

6.18 ***Field Terrace access concerns – right turn bans.*** At least 10 submitters were concerned about the removal of the right turns in and out of the street at the Field Terrace/Riccarton Road intersection.

6.19 ***Concern that traffic will divert through Field Terrace.*** There was also some concern that the changes to the Ilam/Middleton/Riccarton/Field Terrace intersection might encourage more through traffic for those wanting to go north along Ilam Road. This could cause left turning traffic from Field Terrace to build up on Riccarton Road waiting for a right turn into Ilam Road.

6.20 ***Cycle and pedestrian suggestions.*** During the consultation phase a number of informal and several written comments were made questioning the viability of the location of, and priority given to the Major Cycle Route, while six raised concerns about how the layout and route would actually improve the situation for pedestrians and cyclists.

6.21 ***Parking concerns.*** In addition to Kirkwood Intermediate's comments above, another submitter was concerned about the effects on their residential property from parking removal in Riccarton Road near Kirkwood Intermediate School.

6.22 Others with parking loss concerns were the building owner and three business owners in opposition to the proposed removal of four parks outside the Clyde Building on the corner of Euston Street and Riccarton Road, and two residents concerned about parking changes in their section of Middleton Road.

Project team response to key issues and alternative suggestions raised during consultation

6.23 Full submissions (names only) can be viewed in **Attachment B**.

6.24 ***Access to and viability of alternative routes.*** Traffic modelling shows most vehicles that would have previously travelled north via Ilam Road will move to adjacent roads, the majority choosing Wharenui/Clyde or Waimairi/Hansons. Residents along or near Middleton Road or its side roads will have limited options to divert. The routes will depend on the destination, but with no change to how they get to the city centre. (See table below showing current and projected 2031 post intersection improvements for morning and afternoon peaks)

6.25 Residents living along Middleton Road or on one of the side roads will have limited options to divert. Preferable routes will depend on the destination or origin of the journey. Here are some examples:

- For vehicles travelling to city centre, residents could use Lochee Road and Wharenui Road to turn right onto Riccarton Road, or they could use Blenheim Road. There is no change for vehicles returning from the city centre.
- For vehicles travelling northbound, residents could use either Lochee Road and then the Wharenui Road–Clyde Road corridor, or Suva Street and then the Hansons Lane–Waimairi Road corridor. Returning from the north results in no change, as vehicles can still travel south on Ilam Road through to Middleton Road.
- For vehicles travelling to the west, residents can continue to left turn out of Middleton Road on to Riccarton Road. Returning from the west they could use Hansons Lane and Suva Street.

6.26 ***Increased traffic congestion.*** To support the proposed Ilam/Middleton/Riccarton Roads intersection improvements, additional changes to the road layout at other intersections are expected to bring an overall reduction in travel time for general traffic on both Riccarton Road and the wider network.

6.27 The proposed design also includes changes to the following intersections:

- Field Terrace/Riccarton Road
- Hansons Lane/Riccarton Road/Waimairi Road
- Clyde Road/Riccarton Road/Wharenui Road

6.28 There will be an increase in traffic using the Clyde Road/Riccarton Road/Wharenui Road intersection as part of this proposal. While the overall level of service at this intersection is not expected to change in the morning peak or during the day, there will be slightly higher volumes in the afternoon peak traffic flow.

6.29 A comparison of the existing situation with the proposed option for both current and projected morning (am) and afternoon (pm) peak vehicle numbers is shown in the table below. The expected increase in vehicle numbers is shown in red and the expected decrease in vehicle numbers is shown in green.

Streets included in the traffic modelling		AM Peak			PM Peak		
		Existing vehicles	Option vehicles	Change	Existing vehicles	Option vehicles	Change
Current	Auburn Avenue	5	5	0	10	15	5
	Balgay Street	290	350	60	130	140	10
	Clyde Road	910	950	40	1070	1130	60
	Field Terrace	40	110	70	50	150	100
	Hansons Lane	860	960	100	930	960	30
	Ilam Road	770	630	-140	940	830	-110
	Kirkwood Avenue	90	80	-10	80	80	0
	Lochee Road	150	140	-10	270	360	90
	Middleton Road	750	520	-230	910	750	-160
	Newham Terrace	30	20	-10	20	20	0
	Suva Street (Hansons/ Curletts)	140	160	20	170	180	10
	Suva Street (Hansons/ Middleton)	170	190	20	240	200	-40
	Waimairi Road	730	750	20	830	840	10
	Wharenui Road	450	550	100	520	660	140

Streets included in the traffic modelling		AM Peak			PM Peak		
		Existing vehicles	Option vehicles	Change	Existing vehicles	Option vehicles	Change
2031	Auburn Avenue	5	5	0	15	15	0
	Balgay Street	140	160	20	150	160	10
	Clyde Road	1120	1090	-30	1210	1160	-50
	Field Terrace	40	80	40	50	120	70
	Hansons Lane	770	870	100	980	910	-70
	Ilam Road	750	700	-50	980	830	-150
	Kirkwood Avenue	60	60	0	70	70	0
	Lochee Road	150	140	-10	420	310	-110
	Middleton Road	660	350	-310	990	630	-360
	Newham Terrace	20	10	-10	20	20	0
	Suva Street (Hansons/ Curletts)	130	130	0	180	170	-10
	Suva Street (Hansons/ Middleton)	110	120	10	300	210	-90
	Waimairi Road	680	700	20	750	770	20
	Wharenui Road	460	630	170	580	790	210

Alternative solutions for Ilam/Middleton/Riccarton intersection:

6.30 **Ban right turn movements out of Ilam and Middleton Roads and keep the through movement.** This is not a viable option because:

6.30.1 Buses need to turn right and it is difficult to restrict the right turn to buses only.

6.30.2 The right turn without a physical restriction could be frequently ignored, and therefore create an unsafe situation.

6.30.3 Including a north/south movement would reduce the time that can be allowed for:

- A right turn phase into Ilam Road from Riccarton Road, which improves safety.
- A cycle crossing which is needed for the Major Cycle Route and cannot run at the same time as the Ilam–Middleton phase.

6.31 Overall, the proposed staff solution to retain the right turn allows a significant improvement in Ilam Middleton Riccarton intersection safety. There will be minimal loss of green signal time for Riccarton Road - the main traffic flow consideration at this location.

6.32 **Split phasing of the traffic lights.** The proposal to operate Ilam Road and Middleton Road separately is not workable. It is important to note that the through traffic movement from these approaches cannot run at the same time as the cycle movements. This is because there is not enough road space for both cycles and vehicles, and there would be a high risk of conflict.

6.33 Five phases would be needed to address the safety concerns:

1. Riccarton Road westbound approach, and a protected right turn into Ilam Road
2. Riccarton Road
3. Ilam Road
4. Middleton Road
5. Cycles

6.34 This is an inefficient signal phasing cycle with more red time than is ideal, but the key concern is the affect this would have on signal co-ordination along Riccarton Road. With the phasing above, the Council would not be able to keep the light phasing cycle at the Ilam/ Middleton/Riccarton intersection to approximately 74 seconds signals which is the timing needed for vehicles on Riccarton Road to get green lights along the corridor.

6.35 **Right turning arrows.** As with the split phasing option outlined above, the issue is signal co-ordination and the need to add two new phases (right turning arrows and cycle crossing), which would prevent us from achieving the desired level of co-ordination.

6.36 **Line markings.** The proposal aims to improve safety at the intersection for all road users. Line marking could be used for improved guidance through the intersection, but this would not prevent the types of crashes that are typical here. It would also leave an unprotected section in the Nor'West Arc Major Cycleway, which requires a cycle crossing in this location.

6.37 **Reduced speed.** Limiting speed would reduce both the severity and the likelihood of a crash, but the changes put forward in this proposal are designed for a more overarching and comprehensive approach to crash reduction by improving the road environment and allowing for the Major Cycle Route.

6.38 **Retain the right turn from Riccarton Road into Middleton Road.** Retaining the right turn into Middleton Road would require Middleton Road to be part of the signalised intersection. It is too close to Ilam Road to not be part of the signals if the right turn is there. This would have a detrimental impact on network efficiency and would essentially require either split phasing, which as outlined previously will not work with the signal co-ordination, or into providing right turning arrows, which will provide the same issues.

6.39 **Alternative suggestions for Clyde/Riccarton/Wharenui.** Suggestions to change the through and left turn lanes located between the Clyde Road and Wharenui Road approaches to left turn only, to allow a north–south movement are beyond the scope of this project. However, modelling will be done to consider the benefits of this suggestion, along with an independent safety review. This information will be passed on to the network planning team for consideration as a future project, and to the bus priority team for consideration as part of the Bus Priority Stage Two project.

Project team response to other issues and concerns

6.40 **Retain the right turn out of Field Terrace.** The right turn out of Field Terrace into Riccarton Road has not been included because it would make it easier for vehicles to right turn in from Riccarton Road, against the proposed turning ban. It would also encourage people to use Field Terrace as an alternative route to get to Riccarton Road from Middleton Road.

6.41 **Retain the right turn into Field Terrace.** Retaining the right turn into Field Terrace was considered during the options assessment. Unfortunately allowing vehicles to queue to turn into Field Terrace would result in this turning movement blocking access to the right turn lane from Riccarton Road to Ilam Road. This would reduce the efficiency of traffic flow in the network.

6.42 **Increased traffic through Field Terrace and congestion from left-turners into Riccarton Road heading right up Ilam Road.** Traffic modelling shows that there will be an increase in traffic on Field Terrace, particularly in the p.m. peak. However this modelling also shows that the impact on the traffic flow on Riccarton Road is minimal and there remains a net benefit to travel times on Riccarton Road for general traffic. The efficiency of the network, and the impact of this movement, will be monitored and if remedial action is required this can be programmed.

6.43 **Cycle and pedestrian concerns/suggestions.** The Nor'West Arc Major Cycle Route has already been consulted on and approved. A substantial section of the cycleway on Ilam Road is existing and relocation to another road corridor is beyond the scope of this project. The proposal will improve pedestrian safety at the intersection by reducing the crossing distance, altering the signal phasing and removing the slip lanes.

6.44 **Clyde Building.** Following requests to retain the four parking outside the Clyde Building, changes have been made to the plan layout allowing space to retain three of these car parking spaces.

6.45 **Bus parking outside Kirkwood Intermediate School.** This has been addressed through a time-restricted loading zone, which is long enough for a bus to park, between 8am and 4pm only. The space will not be available for parking outside these times, as it would interfere with queuing at the intersection.

6.46 **Parking outside residence near Kirkwood.** Unfortunately it is not possible to provide parking in this location, as there needs to be enough space for vehicles to queue for the signalised intersection.

6.47 **Parking outside two residences on Middleton Road.** This proposal does not change the number of parking spaces available in this section of Middleton Road from those previously approved, although not yet constructed, as part of the Nor'West Arc Major Cycle Route. However the locations of the parking spaces have changed, as explained below.

6.48 The approved Nor'West Arc Major Cycle Route did not include any parking spaces on the west side of Middleton Road, north of number 6 Middleton Road, but four spaces are included on the eastern side north of the access to number 7 Middleton Road.

6.49 These four spaces on the west side are removed as part of this proposal, which instead includes four parking spaces in new locations; two on the west side of Middleton Road north of number 6 Middleton Road, and two on the east side south of number 7 Middleton Road.

Proposed changes to the plan

6.50 After considering all the feedback and responding to key issues as above, the changes made to the plan for consultation resulting in the plan for approval are:

- Three of the four car parks proposed to be removed outside the Clyde Building (233 and 235 Riccarton Road) will be re-instated.
- Part time parking for buses will be provided outside Kirkwood Intermediate School.

Information to submitters

6.51 The Community Board has been sent a copy of the full submissions. Submitters have been sent a link to full submissions (names only), a summary of consultation, and how to request to speak to the elected members about their feedback when the Board considers the report.

7. Legal Implications / Ngā Hīraunga ā-Ture

7.1 There is no legal context, issue or implication relevant to these decisions.

8. Risks / Ngā tūraru

8.1 Options 1, 2, 3, 4 and 5 have various limitations as to the traffic flow and do not effectively manage the safety issues including:

8.1.1 Safety issues for the Nor'West Arc MCR and pedestrian users to safety connect from Ilam and Middleton Roads.

8.1.2 Not addressing the previously recorded vehicles crashes at the intersection.

8.1.3 Not addressing the three recorded pedestrian crashes and one minor injury car versus cyclist crash.

8.1.4 Benefits of reducing bus travel times are not realised.

8.1.5 NZTA funding for this project is part of the NZTA application for the Nor'West Arc project, this funding is yet to be confirmed.

8.1.6 Details of the risk as outlined in **Appendix C**.

9. Next Steps / Ngā mahinga ā-muri

9.1 If the Council's approval is obtained, the design team will proceed with detailed design and tender for the works, with an anticipated start to construction in late 2020.

10. Options Matrix / Te Poukapa

Issue Specific Criteria								
Criteria		**Do nothing**	**Option 1**	**Option 1C (Preferred)**	**Option 2**	**Option 3**	**Option 4**	**Option 5**
Financial Implications	**Cost to Implement**	$0	$1,301,212	$1,323,092	$1,276,861	$1,522,301	$1,285,791	$1,276,836
	Maintenance/Ongoing	$3,727 This will need to be provided for in the planning of future Long Term Plans.	$7,752 This will need to be provided for in the planning of future Long Term Plans.	$7,743 This will need to be provided for in the planning of future Long Term Plans.	$8,739 This will need to be provided for in the planning of future Long Term Plans.	$9,506 This will need to be provided for in the planning of future Long Term Plans.	$9,187 This will need to be provided for in the planning of future Long Term Plans.	$9,164 This will need to be provided for in the planning of future Long Term Plans.
	Funding Source	Not applicable	LTP 2018/2028-CPMS 17144 Intersection Safety: Ilam/Middleton/ Riccarton (7), budget of $1,298,614	LTP 2018/2028-CPMS 17144 Intersection Safety: Ilam/ Middleton/Riccarton (7), budget of $1,298,614. This preferred option will receive NZTA funding (verbally approved), as it part of the MCR North West Arc connection. Balance shortfall (between estimates and budget) of $25k will be provided for under CPMS 23103 - MCR Nor'West Arc - Section 2 - Annex Road/Wigram Road to University	LTP 2018/2028 CPMS 17144 Intersection Safety: Ilam/ Middleton/ Riccarton (7), budget of $1,298,614	LTP 2018/2028 CPMS 17144 Intersection Safety: Ilam/Middleton/ Riccarton (7), budget of $1,298,614. Balance shortfall of $223k cannot be accommodated within the MCR North West Arc project and additional funding would need to be found within the programme or savings within the transport portfolio	LTP 2018/2028 CPMS 17144 Intersection Safety: Ilam/ Middleton/ Riccarton (7), budget of $1,298,614	LTP 2018/2028 CPMS 17144 Intersection Safety: Ilam/ Middleton/ Riccarton (7), budget of $1,298,614
	Impact on Rates	0.01% reduction in 2021 if remaining capital budget is cancelled.	Nil as both Capex and Opex are covered by current budgets.	Per Option 1	Per Option 1	Nil assuming current budgets within the Transport programme are made available.	Per Option 1	Per Option 1
Criteria 1 - Climate Change Impacts		This option does not provide any reduction in vehicle emissions as it does not provide any transportation alternatives.	This option has limited emission reduction as it does not fully realise cycle, pedestrian and bus priority features at this intersection.	Improving and providing new cycleway infrastructure reduces emissions from vehicles. Bus priority also provides efficient alternative means of transport to vehicles.	This option has limited emission reduction as it does not fully realise cycle, pedestrian and bus priority features at this intersection.	This option has limited emission reduction as it does not fully realise cycle, pedestrian and bus priority features at this intersection.	This option has limited emission reduction as it does not fully realise cycle, pedestrian and bus priority features at this intersection.	This option has limited emission reduction as it does not fully realise cycle, pedestrian and bus priority features at this intersection.
Criteria 2 - Accessibility Impacts		This option does not provide any new pedestrian or cycle improvement and does not address the current safety issues.	This option has limited improvement to the existing pedestrian and cycleway infrastructure.	The new and improved signalised crossing will provide safer access for pedestrians and cyclists to cross the busy intersection.	This option has limited improvements to the existing pedestrian and cycleway infrastructure	This option has limited improvements to the existing pedestrian and cycleway infrastructure than the preferred option.	This option has limited improvements to the existing pedestrian and cycleway infrastructure	This option has limited improvements to the existing pedestrian and cycleway infrastructure than

				than the preferred option.		than the preferred option.	the preferred option.
Criteria 3 - Health and Safety Impacts	This option does not address any of the existing safety issues for cyclists, pedestrian and vehicles.	This option has limited health and safety improvements, as it has reduced benefits as compared to the preferred option.	The preferred option improves accessibility for the mobility impaired, for pedestrians, cyclist and reduces the current vehicles crashes. The reconstruction of the cycle and pedestrian crossing points will provider safer and controlled access.	This option has limited health and safety improvements, as it has reduced benefits as compared to the preferred option.	This option has limited health and safety improvements, as it has reduced benefits as compared to the preferred option.	This option has limited health and safety improvements, as it has reduced benefits as compared to the preferred option.	This option has limited health and safety improvements, as it has reduced benefits as compared to the preferred option.
Criteria 4 - Future Generation Impacts	This option does not provides long term choices regarding commuting options for the public either cycling, walking or public transport.	This option has limited benefits as the full safety features is not realised as compared to the preferred option 1c.	This option provides long term choices regarding commuting options for the public either cycling, walking or public transport.	This option has limited benefits as the full safety features is not realised as compared to the preferred option 1c.	This option has limited benefits as the full safety features is not realised as compared to the preferred option 1c.	This option has limited benefits as the full safety features is not realised as compared to the preferred option 1c.	This option has limited benefits as the full safety features is not realised as compared to the preferred option 1c.

Statutory Criteria							
Criteria	**Do nothing**	**Option 1**	**Option 1C**	**Option 2**	**Option 3**	**Option 4**	**Option 5**
Impact on Mana Whenua	This option does not involve a significant decision in relation to ancestral land or a body of water of other elements of intrinsic value.	This option does not involve a significant decision in relation to ancestral land or a body of water of other elements of intrinsic value.	This option does not involve a significant decision in relation to ancestral land or a body of water of other elements of intrinsic value.	This option does not involve a significant decision in relation to ancestral land or a body of water of other elements of intrinsic value.	This option does not involve a significant decision in relation to ancestral land or a body of water of other elements of intrinsic value.	This option does not involve a significant decision in relation to ancestral land or a body of water of other elements of intrinsic value.	This option does not involve a significant decision in relation to ancestral land or a body of water of other elements of intrinsic value.
Alignment to Council Plans and Policies	This option is not consistent with Council's Plans and Policies and does not align with Level of Service: 10.0.6.1 Reduce the number of casualties on the road network. - <=124 (reduce by 5 or more per year).	This option is partially consistent with Council's Plans and Policies, as it does not provide the full range benefits as compared to the preferred option and does not fully align with Level of Service: 10.0.6.1 Reduce the number of casualties on the road network. - <=124 (reduce by 5 or more per year).	This option is consistent with Council's Plans and Policies and aligns with Level of Service: 10.0.6.1 Reduce the number of casualties on the road network. - <=124 (reduce by 5 or more per year).	This option is not consistent with Council's Plans and Policies and does not align with Level of Service: 10.0.6.1 Reduce the number of casualties on the road network. - <=124 (reduce by 5 or more per year).	This option is not consistent with Council's Plans and Policies and does not align with Level of Service: 10.0.6.1 Reduce the number of casualties on the road network. - <=124 (reduce by 5 or more per year).	This option is not consistent with Council's Plans and Policies and does not align with Level of Service: 10.0.6.1 Reduce the number of casualties on the road network. - <=124 (reduce by 5 or more per year).	This option is not consistent with Council's Plans and Policies and does not align with Level of Service: 10.0.6.1 Reduce the number of casualties on the road network. - <=124 (reduce by 5 or more per year).

Attachments / Ngā Tāpirihanga

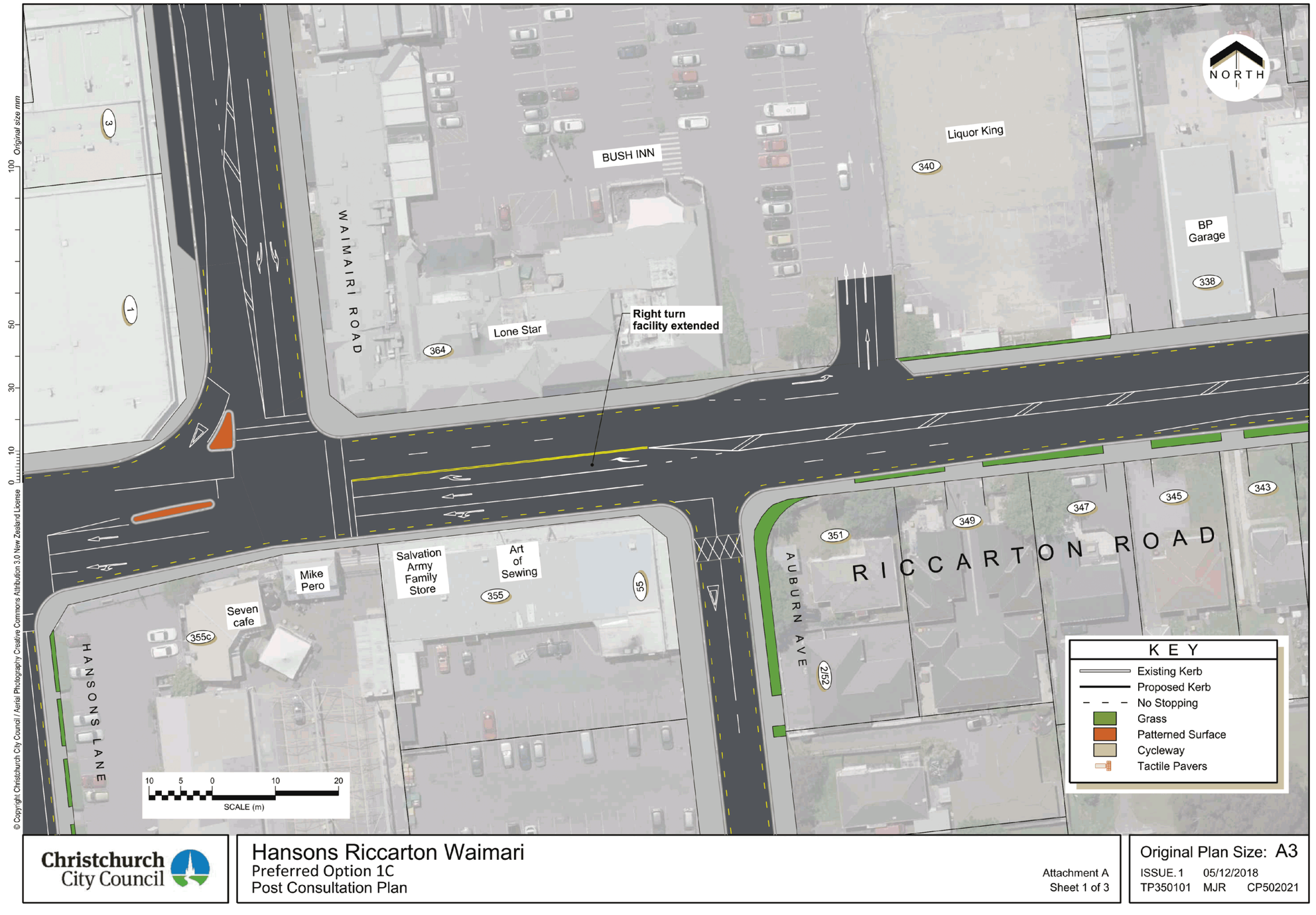
No.	Title	Page
A ⇩	Ilam/Middleton/Riccarton Project - Option1C (Preferred, Post Consultation)	64
B ⇩	Ilam/Middleton/Riccarton Project - Full Submissions	67
C ⇩	Ilam/Middleton/Riccarton Project - Scheme Assessment Report	122
D ⇩	Options Assessment Matrix	194
E ⇩	Ilam/Middleton/Riccarton Project - Option 1	195
F ⇩	Ilam/Middleton/Riccarton Project - Option 2	196
G ⇩	Ilam/Middleton/Riccarton Project - Option 3	197
H ⇩	Ilam/Middleton/Riccarton Project - Option 4	198

Confirmation of Statutory Compliance / Te Whakatūturutanga ā-Ture

Compliance with Statutory Decision-making Requirements (ss 76 - 81 Local Government Act 2002).
(a) This report contains:
  (i) sufficient information about all reasonably practicable options identified and assessed in terms of their advantages and disadvantages; and
  (ii) adequate consideration of the views and preferences of affected and interested persons bearing in mind any proposed or previous community engagement.
(b) The information reflects the level of significance of the matters covered by the report, as determined in accordance with the Council's significance and engagement policy.

Signatories / Ngā Kaiwaitohu

Authors	Adrian Thein - Project Manager Philippa Upton - Engagement Advisor William Homewood - Senior Traffic Engineer Sharon O'Neill - Team Leader Project Management Transport
Approved By	Lynette Ellis - Manager Planning and Delivery Transport Peter Langbein - Finance Business Partner Richard Osborne - Head of Transport David Adamson - General Manager City Services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WAIMAIRI ROAD
BUSH INN
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BP Garage
Lone Star
Right turn facility extended
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Salvation Army Family Store
Art of Sewing
Mike Pero
Seven cafe
355
355c
55
HANSONS LANE
AUBURN AVE
RICCARTON ROAD
351
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KEY
Existing Kerb
Proposed Kerb
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Grass
Patterned Surface
Cycleway
Tactile Pavers
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SCALE (m)
Original size mm 100 50 30 10 0
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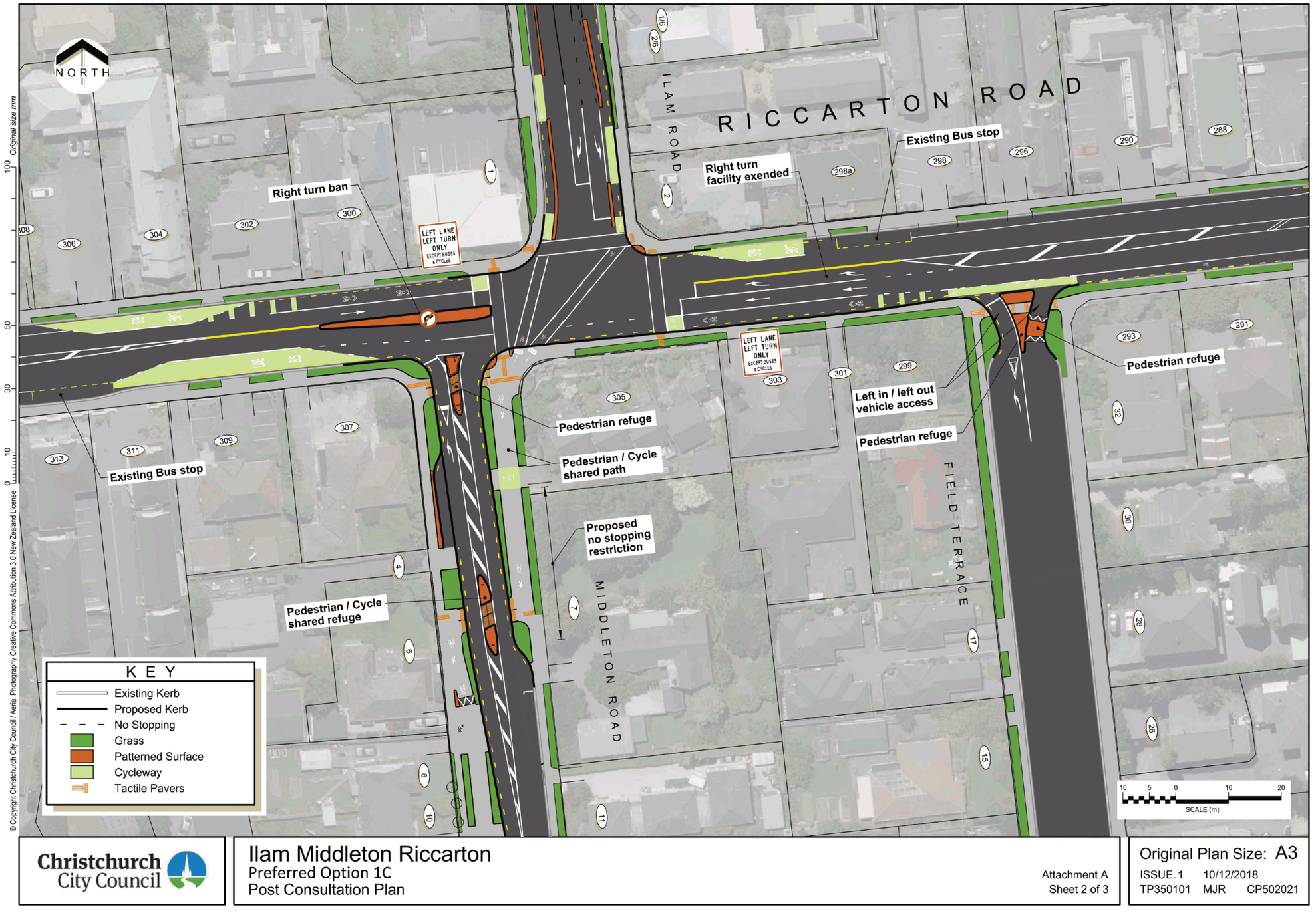
Christchurch City Council
Hansons Riccarton Waimari
Preferred Option 1C
Post Consultation Plan
Attachment A
Sheet 1 of 3
Original Plan Size: A3
ISSUE. 1 05/12/2018
TP350101 MJR CP502021

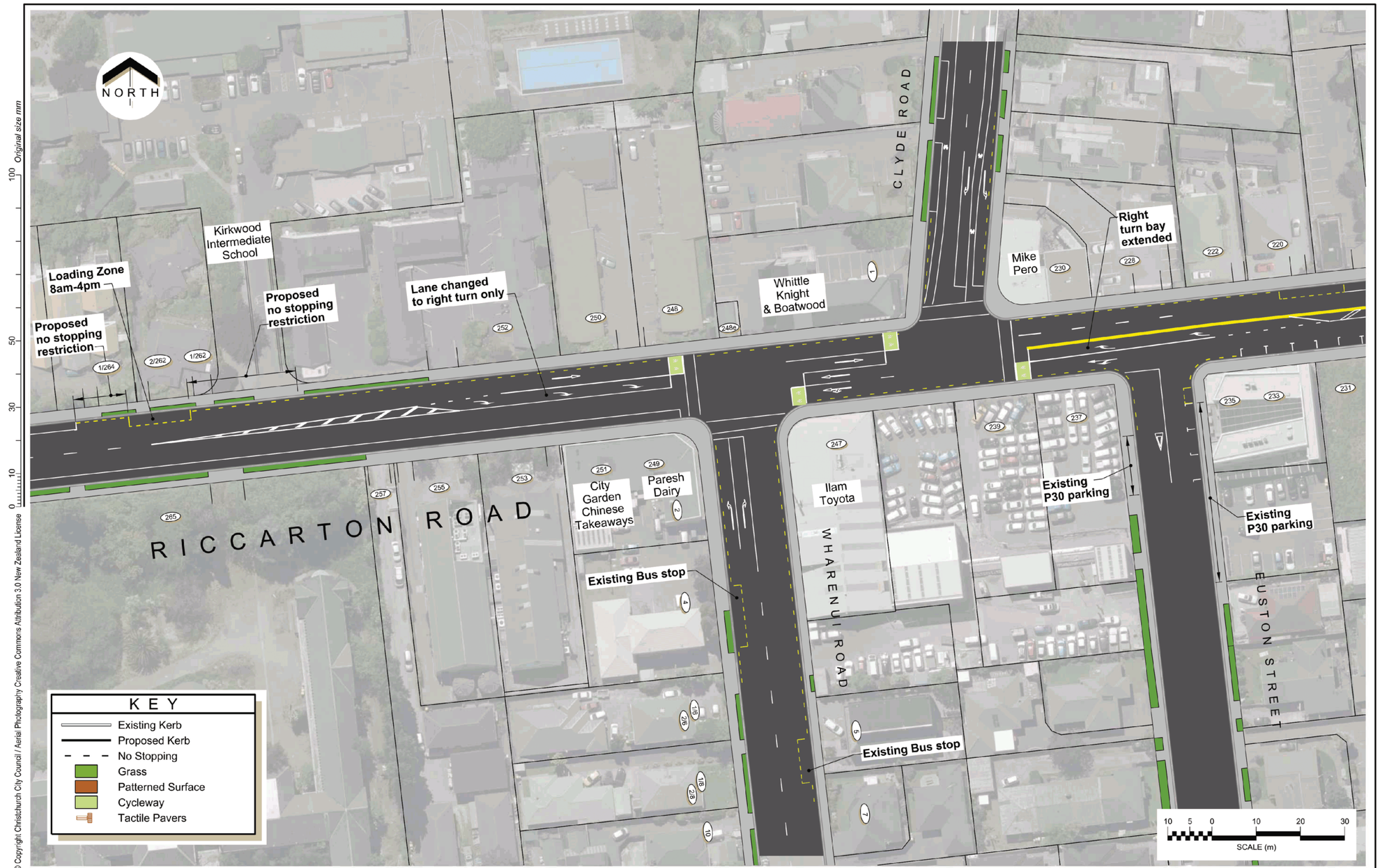


Christchurch City Council

Ilam Middleton Riccarton
Preferred Option 1C
Post Consultation Plan

Attachment A
Sheet 2 of 3

Original Plan Size: A3
ISSUE. 1 10/12/2018
TP350101 MJR CP502021



Christchurch City Council

Clyde Riccarton Wharenui
Preferred Option 1C
Post Consultation Plan

Attachment A
Sheet 3 of 3

Original Plan Size: A3
ISSUE. 1 31/01/2019
TP350101 MJR CP502021

Ilam Middleton Riccarton intersection full submissions names only

ID	Attachments	First name	Last name	Name of organisation (if applicable)	Submitter comments
23072	No			Spokes Canterbury	There is a lot to like here and Spokes is in support with some concerns. Spokes is mindful that Council does not have unlimited funds or public support and that road space is often limited. Cycle infrastructure already delivered has found usage in excess of predictions. The demand is clear as is the need to make infrastructure the best it can be from the start and with planning in support of expansion to meet ever increasing usage. Congested cycleways and long waits at intersections will put some off from cycling. Spokes has noted the disturbing trend to continue to focus more on the needs of buses and cars. This will continue to reinforce cycling as a marginal transport mode and is counter to Council's avowed desire to meet the needs of the interested but concerned and support for true multi modal choice. In addition to leaving people who would like to cycle poorly served it compromises the uptake of Council's MCR's and cycling infrastructure generally. It is well known that we cannot build our way out of car dependency. Moving people on to bicycles supports public health while lowering rates and transport costs generally. Spokes is concerned that two different teams have designed this intersection and the cycle-way independently and that the cycle-way was approved before this proposal for this intersection which has created a lost opportunity to debate the best integrated solution. Piecemeal planning is poor planning costing money and missing opportunities. **Hansons/Riccarton/Waimairi Intersection** Spokes recommends that this intersection also be reviewed for cycling safety as this is a popular destination for cyclists and has a significant parking problem that could be alleviated by encouraging more active transport. This intersection is useful for those on bikes heading into Avonhead. Better provisions for cycles to negotiate this offset intersection are needed. Not all people on bikes are headed to the University. This intersection also connects the South Express to this highly used shopping centre with its many restaurants and shops, including a popular bike shop. The changes to Middleton Road will move more traffic to Hansons Lane turning right to Waimairi Road or down Riccarton Road. **Middleton/Riccarton/Ilam Intersection** Most cyclists currently try to avoid this dangerous intersection with its high number of crossing/turning and rear end accidents. The solution provided is a substantial improvement on the Nor-West Arc proposal. Restricting traffic in Middleton Road to left turn only significantly increases safety for cyclists and cars by reducing conflict in the intersection. This is a good example of why you should not consult on an intersection separate to the cycleway. Spokes recommendations may well have been different if this has been done. There could have been a discussion on whether a two-way cycleway on the west side going north down Ilam Road to Ilam School would have been better, allowing a controlled left hand turn for cars and buses from Ilam Road at this intersection during the cycle phase if there were no pedestrians. The double cycle crossing lanes will work but there could have been just one that was shorter. On Middleton Road it would have been sensible to continue the cycle lane on the east going south until reaching the South Express crossing at Middleton Park (depending on the expected increase in traffic volumes on Lochee Road). This proposed crossing in Middleton Road is unacceptable for a major cycleway with cars having right of way. The crossing is too close to the intersection and should be replaced with a proper shared pedestrian/cycle crossing at least 4M wide, like that on Ilam Road going into the Ilam Fields with cars giving way. The widened shared pathway at the intersection is good. **Field Terrace/Riccarton Rd** This intersection could encourage drivers to attempt to use it to get to get across lanes of traffic to turn right into Ilam Road. It should have a stop sign rather than a give-way. The pedestrian refuge does not make sense where it is as it does not link with the actual crossing.

					With Middleton a part of a MCR it would be hoped that the shared path will be at least 4m width. A zebra crossing for pedestrians along with a separate crossing for people on bikes with give way signage facing motorized traffic is needed. Something like the slip lane at Deans Ave/Riccarton and along Ilam Road. A hook turn box or better will be needed to allow safe access for people on bikes turning right from Riccarton. **Wharenui/Riccarton/Clyde Intersection** Waimairi/Hansons and Wharenui/Clyde both need considerably more systemic changes to improve them. For example why do two through-lanes continue to be provided for traffic in each direction when they only feed a single lane; instantly those four lanes leave little room for any cycling space. This intersection needs advanced stop boxes on Wharenui and Clyde Roads (and Euston Street) and a way for cyclists to access them safely. This is a popular route for people on bikes as it minimizes travel on Riccarton. Also needed is cycle infrastructure on Riccarton so cyclists can easily access Wharenui/Clyde. People on bikes are keenly aware that things are tight in this offset intersection. As offered it presents a very real obstacle for the interested but concerned cyclists whom Council has targeted to support. Providing two through-lanes for traffic in each direction at these intersections when they only feed a single lane continues to prioritize car use. These four lanes leave little room for any cycling space when it is cycling and other active modes which will reduce congestion sustainably. Thank you for your efforts and for considering Spoke's long experience to assist in getting more people on bikes more often.
22612	Prof David L	Wiltshire			Being stuck for a long time yesterday evening on account of road works on the way home reminded me about the consulation exercise which I see now closed on 11 March. Unfortunately the consultation time frame coincided with one of the busiest times in the academic year: start of year, enrollments and grant applications due. So I missed the deadline As there are many busy people like me - who drive to work at the University of Canterbury from suburbs to the south of Blenheim Road - I would like to have my say anyway. At present in the morning if one is driving north with a choice of Wharenui Road or Middleton Rd, to get to Clyde Rd or Ilam Rd then at present Wharenui Rd is often horrendous because of the traffic light sequence. One has to turn right from Wharenui into Riccarton at the same time as the traffic light for turning left from Riccarton into Clyde Rd is red. This has the effect that only four or five cars can turn at a time and traffic backs up down Wharenui Rd for a long way during the peak of the morning drive to work. As a consequence Middleton Rd is currently a much better option. Your proposal will, however, remove the option of travelling north from Blenheim Rd to the University using Middleton Rd. The only options are going to be Field Terrace or Wharenui Rd. The traffic has to go somewhere. The situation at Wharenui/Riccarton Rd could become a real nightmare unless the traffic light sequence is changed. I would recommend that it is changed to have the left turning light from Riccarton to Clyde green at the same time as the right turning light from Wharenui to Clyde is green to allow north travelling traffic to get through without the bottle neck. The only other alternative would be to install lights at Field Terrace and do the same. However, the residents there might not want their street becoming a major thoroughfare in the way that Wharenui Rd already is.
22218	No	Martin	Reilly	Wamth.NZ Underfloor Heating	- We live a[redacted] - We own this home, and our family has lived here ever since it was built - We and the residents at [redacted]will be adversely affected by the cancellation of the three parking spaces in front of our homes - There is already pressure on these spaces by people visiting the Kirkwood Intermediate School - My partner and I feel this pressure will mean that the only viable alternative will often be for ourselves and visitors to park on the other side of the street. This will cause a dangerous situation of trying to cross this busy street or to walk all the way down to the corner and then return up the street to our home We suggest: - Shortening the extension to this lane - The right turn lane would work very well if no change in the length was made - To stop this lane extension at the School entrance would work fine in our view

22217	No			Oak Development Trust	This submission is from Oak Development Trust (ODT), the community ministries arm of Riccarton Baptist Church, [redacted]. ODT appreciates that because of the high density of traffic on Riccarton Rd, and the number of accidents at the intersection of Middleton/Ilam Roads with Riccarton Rd, measures are needed to address the varying concerns. We also appreciate that the City Council has a difficult task to try and address the concerns while maintaining optimal flow for motorists, cyclists and pedestrians. However, we are concerned that the proposed measures, while alleviating one set of problems, will create a new set. The principle problem is the fact that Middleton Rd is a major arterial road leading not only to the University of Canterbury, but also to several other sizeable institutions such as Ilam Rest Home, Ilam School and Kirkwood Intermediate. In addition, Ilam Rd is a major through route to Memorial Avenue. To prevent through traffic from Middleton Rd to Ilam Rd, as proposed in the current plan, will cause severe disruption and lead to a great deal of driver frustration. It has to be asked, what alternate route does the Council envisage that drivers will take to the university and schools when their way is blocked at Riccarton Rd? The most obvious choice will be for drivers to divert through Field Terrace, yet in private conversation Council officers have stated they do not expect many vehicles to choose this option. In our view, this is optimistic, and the likely consequence will in fact be much heavier traffic flows along Field Terrace. This in turn will lead to long queues on Riccarton Rd of cars wanting to turn right into Ilam Rd. Another alternative â€" in itself extremely dangerous â€" is that drivers will turn left from Middleton Rd, and then attempt a U-turn on Riccarton Rd, or a three-point turn using either a private driveway or some part of the Bush Inn Centre. This kind of behaviour is not uncommon in other parts of the city where long queues or other traffic blockages occur. If a major cause of accidents at the intersection is the result of drivers trying to turn right from Middleton Rd or Ilam Rd, a simpler solution that occurs to us is to simply put a red right turn arrow block on the Middleton Rd side of the lights, so that through traffic can still be maintained while preventing right turns, and a green right turn arrow from Ilam Rd. While this will delay traffic on Riccarton Rd for a few seconds, we believe this is preferable to the unlooked-for consequences that will occur if the current plans eventuate.
22155	No	Robin	Harrison		I like some of the features: Improving RT turn from Riccarton to Ilam Road (Green arrow), and stopping right turn from Middleton Road (confusing at present & dangerous). I am not so sure about the cyclist priority across Ilam Road - hopefully they will have to press a button, rather than by default - causing motorists to wait for non-existent cyclists (most frustrating!)
22070	No	Tristan Leslie & Dr Alison Watkins	None		We support the modifications to the Ilam Road / Middleton Road / Riccarton Road intersections proposed by the Council. We particularly support the modifications to the Ilam/Riccarton intersection to remove the blind corner and pedestrian island as we have personally experienced near misses at this location on multiple occasions. More generally, we believe that the improved pedestrian and cycle safety in this location will be an asset to the local community. We would like the council to consider the changed impacts of traffic flow caused by changing patterns of motorists approaching from the South and turning right onto Riccarton Road. This traffic will be diverted to the Clyde/Riccarton/Wharenui and Hansons/Riccarton/Waimairi intersections as identified in the discussion document. Not identified in the discussion document is the short length of lane available to traffic who have approached Riccarton Rd from the South and turned right on to it. The current timing of traffic lights means that these motorists almost inevitably meet a red light with very little space to wait (as traffic eastbound on Riccarton Rd is often already waiting), and each of these intersections is likely to carry an increased traffic load after the changes. It is not uncommon to see traffic squeezing in to wait unsafely in the middle of the intersection at the Wharenui/Riccarton intersection (just down from our house). These issues may well be exacerbated by the proposed changes.
22062	No	Susan	Steel		As a resident of Middleton Rd - I agree the intersection unsafe however to stop being able to cross Riccarton to Ilam Rd from Middleton Rd seems ridiculous. I will have to turn right onto Middleton Rd and then left onto Lochee Rd, down Wharenui Rd - Lochee Rd would certainly never have been designed to be a through road.

22061	No	N	Berry		1. I generally support the changes proposed to the Ilam Rd / Riccarton Rd / Middleton Road intersection. 2. I generally support the changes proposed to the Clyde road / Riccarton Rd / Wharenui Rd intersection. 3. Please clarify the permitted direction of travel in the extreme left lane of Riccarton Rd between the Wharenui and Clyde Rd intersections. 4. Please add in a right-hand turning bay off Riccarton Rd into the Bush Inn Shopping Centre. 5. Please give right-hand turning traffic off Riccarton Rd into Clyde / Ilam / Waimairi Roads a green arrow cycle at all times. 6. Consider making the extreme west-bound left lane of Riccarton Road at Wharenui Rd intersection a left-hand turn only, as parked vehicles outside shops at 249 - 251 Riccarton Rd make for merges which are often done dangerously
22058	No	Gina	Mintrom		After looking closely at the Ricc Rd/Middelton Rd plan & also a larger map, I am amazed the traffic planners would consider closing Middleton & Ilam Rds. This is a RESIDENTIAL area, where locals expect to be able to access local facilities with ease. I know the considerations are influenced by effects I know little about, but the restrictions on residents is appalling, e.g. Middleton Rd to supermarket - Countdown. The .... need to make a RH turn from the c/p into Hansons Lane which will have extra pressure from the west (I go west a lot) will be difficult, therefore, instead of traveling the shortest distance between 2 points, unless I dodge into Auburn Ave after a left turn will place pressure on that street. To travel north or to the airport or Jellie park will require dodging around Waimari Rd or Clyde Rd. Access to Middleton Grange or the Uni will require dodging around already busy intersections, All I can see is heavier fuel use, extra pollution & my carbon savings going pie in the sky. I am afraid I consider it an insult that cyclists will be given priority on the intersection, this is an infringement of my human rights as a driver, cyclists drive too. Surely re-phasing the lights can be managed like the Clyde, Riccn, Wharenui intersection.
21993	No	Gill	Knight		I have concerns regarding the change will create an extra loading on the intersections at Riccarton and Clyde Rds and the Waimairi Rd corner. These corners are busy now and this extra traffic will cause long delays at peak times. It would be better if the Middleton Road traffic was better-controlled as to flow and safety by traffic light arrows.

21987	No	Connie	Christensen		This intersection is in serious need of provision of safe cycle infrastructure, to allow the thousands of local primary/secondary school students, Canterbury University students, commuters and local residents to cycle safely across Riddarton rd (along Ilam/Middelton rd). This intersection will also form a crucial link across Riccarton rd when NorthWestArc Cycleway is finally build. The potential for cycling in all directions from/to this area is huge, so safe cycle infrastructure is vital to building future proof transport infrastructure to help fix the ever increasing problem of single-occupancy car transport.
21983	No	Rob	Lilley		I have looked at the new roading plan and I would like to see better consideration given to the residents of Field Tce. If we shop at the Bush In or Church Corner then we must take a roundabout way to get back to Field Tce. I would also like to see a left hand turning arrow on the corner of Clyde and Riccarton rd that is linked into the lights at Riccarton / Wharenui Rds so traffic can turn off Wharenui and do a left turn straight on to Clyde rd without stopping.
21982	No	Robert	Brown		I am opposed to the changes being proposed for Ilam and Middleton Road where you are not going to be able to make turn for these roads. If you are worried about traffic turning, why not add turning lights, that allow traffic to flow. people walking are few and far between at intersections, and cyclist well they are a foreign species on Riccarton road, much to what you the council may believe. The road is for traffic to move up and between Riccarton Road. Going from t the University you are trying to stop me heading to Bush Inn with your Proposal. I am dead against this. There are no side streets to action. Please reconsider your plan
21969	No	Gordon	Pringle		I wish to have my voice counted and heard of the changes to Ilam & Middleton road traffic flow. the Ilam / Middleton Road traffic Intersection need to have though traffic as it is at present , as any propsed changes only shifted the problem from this intersection to Hanson Lane the next one to travel to Blenheim road. It is already a busy so this will not ease the situation. Why can you not put traffic lights the have an arrow to turn right from Ilam road into Riccaraton road and the same from Middleton Road into Riccarton road , on a short phase to speed us the traffic flow. Cyclists and walkers can on the straight though traffic flow making them safer. Turning lights are needed at Wharenui road, and Hanson Lane as the bank up of cars wishing to turning traffic is a problem now and only going to get worse with the proposed changes. NO one has talked about the flow on effect at Hanson Lane and Wharenui Road of turning traffic to Blenheim road. Please consider the Traffic flow on Riccarton Road, the place where I live. Traffic banks up now, and I do not see this as a solution to moving traffic along.
21968	No	Robert	Pringle		I wish to have my voice counted and heard of the changes to Ilam & Middleton road traffic flow. the Ilam / Middleton Road traffic Intersection need to have though traffic as it is at present , as any proposed changes only shifted the problem from this intersection to Hanson Lane the next one to travel to Blenheim road. It is already a busy so this will not ease the situation. Why can you not put traffic lights the have an arrow to turn right from Ilam road into Riccaraton road and the same from Middleton Road into Riccarton road , on a short phase to speed us the traffic flow. Cyclists and walkers can on the straight though traffic flow making them safer. Turning lights are needed at Wharenui road, and Hanson Lane as the bank up of cars wishing to turning traffic is a problem now and only going to get worse with the proposed changes. NO one has talked about the flow on effect at Hanson Lane and Wharenui Road of turning traffic to Blenheim road. Please consider the Traffic flow on Riccarton Road, the place where I live. Traffic banks up now, and I do not see this as a solution to moving traffic along.
21961	No	Zeta	Pringle	Comfort Inn Riccarton	I would like to suggest ,that you could still allow traffic to turn right out of Middleton road with turning arrows on to Riccarton road,at the same time as turning arrows for those vehicles travelling down Ilam Road and wishing to turn right into Riccarton road, all on a single phase. Pedestrians to mover on lights Why this was not an option is bewildering. All Motels on Riccarton road, wish to see traffic keep moving, but doing away with the option to turn is only going to add more pressure to the already busy road. The number of accidents in real terms cannot be used to justify the need to change. Please consider our ideas, as we did not get any indication that this might be an option for the public meetings. It appeared it was The plan and that was a fate of complee. Already decided to how the traffic flow down Riccarton road.
21959	No			Accommodation Sector NZ, Christchurch Branch Chairman	As the chairman of Accommodation Sector in Hospitality, for over 100 Motels- a vast number on Riccarton Road,I would like to suggest , on their behalf, as at the Public meeting , that you allow traffic to turn right out of Middleton road with turning arrows on to Riccarton road,at the same time as turning arrows for those vehicles travelling down Ilam Road and wishing to turn right into Riccarton road, all on a separate single phase. Why this was not an option is bewildering. All Motels on Riccarton road, wish to see traffic keep moving, but doing away with the option to turn is only going to add more pressure to the already busy road. The number of accidents in real terms cannot be used to justify the need to change. Three in three years.
21904	No	Maraea	Calvert		I'm all for making this intersection safer. I'm concerned over the amount of extra traffic Auburn AVE would get, as it is we have cars, trucks, occasional bus and Middleton school increased traffic, since the right turning arrow was removed from riccarton rd on to Middleton. I've lived here for many years and it has increased.

21902	No	Vladimir	Mencl		I'm a frequent user of the Middleton/Riccarton/Ilam Road intersection - travelling in the northbound direction on our daily morning commute. Ilam Road is an important road, and there is significant traffic flow (which includes commuters to the University of Canterbury campus) - and large part of the flow is coming from Middleton Road. By breaking the north-south flow on this intersection, this traffic flow would be disrupted - and would very likely have spill-on effects on other intersections. From daily use of the intersection, I know right-turning vehicles do cause confusion and disruption to the flow and "something needs to be done about it" - but a much less invasive change would be to just disable the right turn (for vehicles coming both from Middleton Road and Ilam Road), but keep the north-south flow open. I also do use that intersection on bicycle and I do not see any issues with the current state as a cyclist - so my submission is to only disallow right turns from north and south on this intersection and otherwise keep the status quo. Many thanks in advance for considering this submission.
21898	No	Pamela Ann	Brathwaite		I have worked in this area for more than 40 years. Traffic between Ilam and Middleton Roads has always been heavy, but much more so since the earthquakes. I myself travel between Ilam and Middleton Roads to get to work at a large school which is only one of several in the area. It is true that this is a dangerous corner, so a new plan is needed, but rather than clogging Riccarton Road (to an alarming degree at peak times) by blocking through traffic, why not separately phase Ilam and Middleton Roads - for a slightly shorter phase if necessary - so that right- turning traffic does not endanger straight-through traffic, and does not block the intersection for all vehicles behind? Even in a shorter green-light phase, far more traffic could then get through safely. Having separate phases is unlikely to delay Riccarton Road traffic nearly as much as the many cars making left turns into Riccarton Road at peak times - they have to go somewhere! I often walk in this area, and see no need to widen footpaths for pedestrians. The idea for the left-turning lanes off Riccarton Road are fine.
21897	No	Fiona	Bennetts		1) I assume that drivers can still travel from Ilam Road to Middleton Road going south? 2) As a cyclist, I try to avoid cycling down Riccarton Road, unless necessary, as it is not well laid-out for cyclist visibility. Can more be done at this intersection to make it safer for cyclists using Riccarton Road? The shared left turn/bus/cycle lanes look dangerous. Most drivers and cyclists don't know how shared lanes work either, so more education is needed. 3) With the cycle crossings at the Riccarton/Ilam/Middleton intersection, will the activation be at the lights (forcing cyclists to stop and wait for the next phase of lights), or set back from the lights (so cyclists go in the same phase as other vehicles - albeit not at the same time). My biggest frustration with the new cycleways is the timing and activation of lights, which slows me down considerably as they are all different, and force me to be at the lights in order to get the lights to go. That's if I can trigger them in the first place - the sensor/activation strips are poorly placed and unreliable!! 3) Will there be a bus lane light (like in other places e.g. Victoria Street) to give buses a head start along Riccarton Road? How does that work with a shared lane? 4) In general, I think this is a good solution to this dangerous intersection, and I presume all the surveys of traffic movements at various times of the day indecated which roads to restrict. Please provide more details on this research, and the other options considered.
21893	No	Frank	Pugh		I am strongly opposed to some of the proposed changes to the Ilam/Middleton/Riccarton intersection. As a resident of Field terrace, the proposed changes will landlock Field terrace residents and make their properties harder to sell with a reduction of $ 50,000 to $100,000 in rateable value. I want field terrace access unaltered as it is currently suitable and workable. I want Middleton rd unaltered because it too works well. The east Riccarton rd traffic lights should be kept in their current position but adjusted to suit right turning traffic from Riccarton into Middleton. Each set of traffic lights for each road should have turn left, turn right and straight ahead and that will solve all the problems.

21891	No	Helen	Pugh		As a resident of Field Terrace, I am strongly opposed to the proposed Ilam/Middleton/Riccarton Intersection changes. Under the proposed changes traffic will be unable to turn right from Middleton Rd and then left into Ilam rd (which is the path that most traffic travelling down Middleton rd currently does), the traffic will turn right from Middleton into Field and then right into Ilam rd. Field terrace will become a very busy thoroughfare. (imagine the fun google maps will have giving you those directions). You only need to adjust the traffic light settings, so that traffic can turn safely right from Middleton into Riccarton rd and all your problems will be solved.
21885	No	James, Grace & Margot	Leitch		1. ILAM/MIDDLETON/RICCARTON Turning from Ricc. to Ilam rds is very difficult, so we use Middleton rd to avoid that turn. In this new layout there is no â€œgreen arrowâ€ explicitly indicated making turning from Ricc. to Ilam rds dangerous and difficult (this being an annoying feature all over the city resulting in one being forced to turn on yellow/red lights). 2. HANSONS/RICCARTON/WAIMAIRI Planning including Bush Inn Complex seems lacking. For example, blocking access from Middleton to Ilam Rd you will force traffic to left turn onto Ricc. rd creating additional pressure on Newnham Tce. This street is already reduced to one way due to inadequate staff parking in Bush Inn. Newnham Tce should have grass berms reduced or additional parking restrictions for non- residents. Why not force Bush Inn businesses to erect parking buildings? 3. GENERAL COMMENTS Narrowing the streets forces issues with trucks and emergency vehicles. Also, driver behavior: people speed up when the narrowed road is clear to avoid the situation where oncoming traffic is over the centre line. We used to bike all over the city but do not now because of the incompatibility of cars and bikes. A lack of clear situations at lights or cycle lanes just being a line on road (no protection) cars/trailers parked therein (e.g. Memorial Ave) or just petering outâ€¦ Don't feel current plans address many of these issues. And as for all the money wasted at the University cycle and pedestrian shambles â€“ sheer incompetence. Where is the overall strategy clear separation of pedestrian, (now scooters) bikes and larger 4 wheel vehicles over the city? We vote accordingly.
21884	Yes	Daphne	Robson		We have attached a pdf document of 5 pages with our submission. Thanks for asking and thanks for continuing to improve the cycling network.
21875	No			Generation Zero	Generation Zero agrees that the safety of these intersections needs to be improved for all road users (cars, bikes, buses, and pedestrians), especially the Ilam/Middleton/Riccarton Road intersection. Further, the proposed changes will also make travelling by bus more efficient and hopefully make taking the bus, instead of a car, more appealing. The changes will also improve the safety and efficiency of the NorWest Arc cycle route, making cycling easier. We commend the Council for proposing these changes that will help decrease Christchurch's carbon footprint in the years to come. Below is our feedback on individual sections of Riccarton Road. Ilam/Middleton/Riccarton and Field/Riccarton intersection We are extremely aware of the dangerous Ilam/Middleton/Riccarton Road intersection. It is difficult to navigate for cyclists, car drivers, and bus drivers, and as a result, it is highly unsafe for pedestrians, too. The awkward alignment of Ilam and Middleton Roads is one of the key problems with this intersection, and we support the Council's suggestion of removing Middleton Road from the intersection, leaving the Ilam/Riccarton Road T intersection. While this will be a difficult change for frequent car users to get accustomed to, Generation Zero believes that it is a worthwhile change that will benefit everyone in terms of safety and efficiency. It will hopefully make cycling or taking the bus along this route a more attractive option than driving a personal vehicle.

					Allowing only left in/left out car traffic to and from Middleton Road will mean that a commonly-used route for cars (Northbound on Middleton Road and Ilam Road) is significantly changed. However, it will not affect bus routes, and the addition of cycle lanes from Ilam Road to Middleton Road will mean that the only change for cyclists will be additional safety. This change is a forward-thinking proposal that highlights the importance of buses and cycleways in a thriving, zero-carbon city, moving away from a dependence on individual cars. As well as this, the widening of the footpath via the removal of the Ilam/Riccarton left-turn slip lane, and the narrowing of Middleton Road, will make the area more accessible and pleasant for pedestrians. It is not ideal for the west-bound bus/cycle lane (turning left into Middleton Road) to be shared with other vehicles and may cause confusion, as it is unlike any other system in the area. It may take some time for drivers to get used to this, but we believe that they will. The 'Left lane turn only' sign can be found in other locations in Christchurch, and hopefully drivers will grow accustomed to this as they become more widespread. The same sign on the east-bound left turn lane into Ilam Road will make the bus route much more efficient by skipping the traffic queue. This is a commendable proposal as efficient bus routes are appealing and may entice people into using buses instead of their personal cars. We also support other changes within this intersection, such as the pedestrian refuge islands on Riccarton Road and Middleton Road. This will reduce the amount of time a pedestrian needs to wait in order to cross the road and provide safe halfway points. Further, it should be easier for pedestrians to judge when it is safe to cross to and from the Middleton Road island, as traffic will only be coming from one lane. The same is true for the other Middleton Road island further south. It will make it safer and easier for both pedestrians and cyclists to cross, and will allow cyclists to continue on a safe and efficient purpose-built shared cycleway. For these positive reasons, we support the necessary removal of car parking spaces. As the 6 spaces will be reinstated further along the roads, there is no loss of carparking, and thus there is no further issue for car drivers. Because of the widespread changes proposed here, it is inevitable that traffic will attempt to circumvent the routes that they are designed to follow. Thus, it is good that the Council has proposed restricting Field Terrace traffic to left in/left out at Riccarton Road, which will hopefully prevent short-cutting by cars that would defeat the purpose of these bold changes. We support the construction of a pedestrian refuge island on Field Terrace as a way to make the area safer and more enjoyable for pedestrians, as well as the addition of a raised platform to limit the speed of vehicles. The changes are forward-thinking and we fully support the removal of 4 parking spaces at 291, 293 Riccarton Road in order to facilitate the new layout. Clyde Road / Riccarton Road / Wharenui Road Making the right turn lane from Riccarton Road into Clyde Road longer will make it easier for buses and cars to turn right; at the moment this is a stressful turn to make during rush hours, and many cars and buses will turn right on the orange light. Removing 4 carparks to facilitate this is a worthwhile sacrifice; there are more carparks around the corner on Euston Street, as well as behind the block of shops at 40/42 Euston St. Changing the western approach to be a through lane and a dedicated right turn lane will clear up a lot of confusion and prevent traffic build-up from vehicles travelling straight ahead but having to wait for those in front of them to turn right. Again, we see the removal of 3 carparks as necessary to help make this intersection more straight-forward, efficient, and safer. Hansons Lane / Riccarton Road / Waimairi Road Increasing the length of the turning bay is a sensible idea to help make traffic at this intersection more efficient.
21870	No	Elizabeth	Phua		My child attends Middleton Grange School so we use the Ilam/Middleton/Riccarton Intersection a lot and it can be very scary at times. You don't need to spend to much of our rate payers money to fix it. For me it is quick simple. Riccarton Road have Green lights to Go then have Red light to Stop have a bit longer then give Ilam Road a Green light and leave Middleton Road Red. Then give give Ilam Road Red & wait a little, then give Middleton Road Green, then turn to Red & give little longer and then back to Riccarton Road back to Green. Have sensors in the road to pick cars on Ilam & Middleton Roads so on low peak time of usage, their lights don't change if there are no cars there. To deal with crossing of the roads. If you are coming from Middleton Road to cross over Riccarton Road so you can walk down Ilam Road or you are coming up from Ilam Road to cross over Riccarton Road to Middleton you use the the crossing opposite the vets. This way people cross only when Middleton Road has Green light. Also can be used on the other crossing from Ilam to Middleton Road when Ilam Road is Green. The drivers turning left out of Ilam or Middleton Roads have Give Way so they have to give way ar all times to all cars and people. Put cameras up to catch the naughty drivers and fine them.. Better to take a bit longer at intersections and be safe. Hope this helps.

21865	No	Carol	Chin poy		The Ilam , Middleton , Riccarton Road interception is so confusing and dangerous . I drop my kids at Middleton and never leave via those roads as I can't see how you would safely be able to turn right from Middleton Rd onto Riccarton Rd
21861	No	Dianne	Downward		First of all I would like to say that no one attending the meeting on the 19 Feb. at the bridge club or any of the neighbours I had asked, had received any notice of the cycle route going through Middleton/Ilam/Riccarton Rd intersection and therefore had not been given a chance to make a submission on the proposed route. This is important as we were told at the meeting on the 19th of Feb. that this proposed cycleway dictated the proposed roading changes. This submission is made from my own thoughts and those of others in the neighbourhood who were unable to make a written submission themselves. Critique Under benefits to pedestrians: Improved safety and access â€" only improvement will be a larger footpath on one side of Ilam/Riccarton Rd. Removal of slip lane at Ilam and Riccarton does not make it easier to cross Ilam as the island makes a safe place for pedestrians to wait for the crossing lights. New crossing at Middleton rd will not make any difference as there is also a safe refuge or island as there is on Ilam rd. Field Terrace entrance to Riccarton Rd does NOT need a pedestrian refuge island. It is a total waste of money as it is narrow and seldom used. Shared cycle and pedestrian footpaths and crossings are NOT a benefit to pedestrians. Experience with the shared cycle /footpath around the Uni., in particular along Clyde rd. (which also has cycleways on the road itself â€" why both??) not all but many cyclists speed around the corners not caring if others are using the footpath. I have found walking my dog is especially dangerous as cyclist have come between myself and my dog at speed and only thing I could do was throw the lead towards my dog to prevent an accident. This is not only my experience but many at the meeting expressed similar experiences with cyclists speeding around corners of footpaths, (Clyde and Riccarton for example) without regard or thought given to the fact that pedestrians may be present, and that they have a cycleway on the road they should use. I realise this corner needs some work to make it safer for cyclists to use and don't mind them using the footpath on the corners IF they walked their bikes or at least rode at a walking pace. Again, this is not all cyclists but many are a hazard to pedestrians as well as lime scooters and some mobility scooters. (one person in particular on a mobility scooter goes at speed not caring if you are on the footpath.) There are no problems with the crossings for pedestrians at Middleton/Ilam/Riccarton Rd intersection. Problems for drivers Majority of divers along Ilam / Middleton Rd drive through this intersection in a North/South direction or as one continuous road. If these drivers can no longer use this road for their travels/commute or route home, it will put more pressure on Hansons Lane/ Waimari Rd and Clyde Rd/ Wharenui Rd. â€" both of which are also non-aligned and have problems with traffic backing up because of this. Both intersections are busy with commuters traveling to work/home, Shops, the University and schools in the area with only a few cars able to get through with each light. The resulting driver frustration has many times had too many cars trying to turn right and thus blocking Riccarton road through traffic until the traffic is able to turn left on Clyde Rd. or Wharanui. The traffic from Hanson's lane to Waimari has a slipway and this eases the situation a bit but Riccarton traffic can still be blocked by those turning onto Riccarton. If drivers can no longer use Middleton/Ilam Rd. in a N/S direction, all the side streets in the area will become more busy as drivers try to resolve this problem. *North drivers on Middleton Rd will be forced to turn left onto Riccarton Rd and then turn right onto Newnham Terrace, and right on Rudleigh Ave to then turn left on Ilam Rd and

					continue their journey. Newnham Terrace is a particularly narrow road with only room for one car at a time to pass through with cars parked on both sides of the street. This may deter some but many will opt for this as opposed to the increased time and frustration at the other two intersections. *Both Hansons Lane/ Waimari Rd and Clyde Rd/ Wharenui Rd intersections will become even more busy with traffic backing up even more, causing more driver frustration therefore more bad driving. *Increased use of side streets Lochee Rd, Peverel St, Suva St, as drivers find alternate ways to get home and get to destination. This is already popular and will become even more popular. I am not as familiar with the traffic flow of Suva St as I am with Lochee Rd, Peveral St which I see being used more and more frequently as the only alternative to Blenheim and Riccarton Rd. This would make the use of these streets hazardous to the new southern cycle way. I propose, after Suva street going through Middleton park and out the south walkway (at a reasonable speed) and onto Colligan, Aileen Pl, Janet St, Left onto Wharenui for short way and right onto Puna, Centennial Ave, and Elizabeth st. This will make a much safer route for cyclists as only residents and visitors use these streets. The distance traveled on Wharenui is much the same as with the route using Lochee and Peveral St. *Field Terrace entrance needs no work done to it. Drivers will only turn right onto Ricc. Rd from Field terrace in the early hours of the morning or late at night when there is no traffic on Ricc. Rd. At all other times the traffic will make it impossible to turn right so making it a left exit only, is a waste of money. Divers will also then be tempted to make illegal R turns or U-turns when there is no traffic to avoid a round about and time consuming way to go east with no R turns available at Middleton to Ricc. Having the left only exist (from Field Terrace) will not stop drivers, who can no longer drive from Middleton to Ilam Rd., turning L from Field terrace onto Riccarton Rd and then Turn R onto Ilam Rd. The only thing to stop this will be the volume of traffic, therefore they will only be able to do this in the off peak hours or when there is a suitable break in traffic. *There was also concern that drivers will turn right into Field Terrace from Ricc. Rd which would block traffic. At present only a few residents of Field Terrace do this sometimes not frequently. There is a flush median on Ricc Rd and use of this prevents blocking traffic. In the new layout, the flush median is reduced in size making way for a longer R T lane into Ilam Rd from Ricc. Rd. When there is a lot of traffic turning right onto Ilam rd this will naturally prevent cars being able to turn into Field Terrace. Also, there is no need to make cars turning right from Ricc Rd to Ilam, stop so far back from pedestrian crossing. The buses turning L from Ilam onto Ricc should have plenty of room to turn seeing as they do it already without the extra space. This will give more room for cars turning R onto Ilam from Ricc to queue up and more room for the flush median - which traffic will use as a queuing place when its busy. Having this option available to residents in off peak times will make life much easier for those living there and also for the many ratepayers living between Ricc and Blenheim Rds. who will end up using this when traffic is light. This will also ease some of the traffic from using Lochee Rd. as residents otherwise will have to turn R at Wharenui and travel back along Lochee to get home. OR R at Hansons Lane and along Suva St. OR L onto Ricc Rd from Clyde and onto Euston ST, R on Peveral, L on Wharenui and R onto Lochee ect ect. Solutions The Problems with Middleton/Ilam/Riccarton Rd is with right turning traffic because of the non-alignment of the roads. The residents proposed having a No R Turn from Middleton onto Ricc. and a R turn signal from Ilam onto Ricc. The representative said that that idea was no good because some would beak the rule and turn R anyway! Well some drive through red lights so we better get rid of all red lights because some will break the red light rule. This is not a sound argument but one made to fit the agenda. Most people abide by the rules or we wouldn't be safe to drive anywhere. The other obstacle to this solution to make this a safe intersection, we were told, is the cycle route that residents were NEVER consulted on, will take up too much space to make this an option. Solution: - Best option is cycleway should be moved to Clyde/Wharenui intersection where existing footpaths are wider and roads are wide.

					- Clyde Rd has existing cycle way that is well used and there is room to make it safer if needed by making a larger shared footpath/cycleway. Although I don't like mixing the two, many cyclists are using the footpath already and not using the exiting cycleway so if it is wider it will make it safer for both. - Wharenui is a wide street and able to accommodate a cycleway with ease. - At the intersection itself, bikes can have own signal - could be linked to pedestrian crossing and will have to share existing footpath for very short distance at walking speed before entering own space again or wider shared space. - Going N the bikes could cut through Whittle Knight & Boatwoods parking lot (with permission) to avoid the cramped corner. - Going S cyclists already use parking lot behind shops if they are traveling east along Ricc. Rd, this practice could be made safer with landowners permission. - Middleton/Ilam N bound traffic to have No R Turn and S bound to have R turn for Buses only or to have R turn with lines painted to show how to do this safely with through traffic or a place painted where cars are to wait until it is clear to go right. You will still have side streets like Hanrahan becoming more well used as cars will avoid R turns onto Ricc. as many don't feel comfortable doing this awkward turn. They already do this, it will simply be more cars doing this. - I feel this is the best solution to make Middleton/Ilam intersection safer for all without creating a massive problem for residents between Riccarton and Blenheim Rds to access their properties, making their streets unsafe due to increased traffic, and problems for commuters. - Forcing traffic onto side streets, and creating massive problems for all by having a major cycleway that needs so much space onto a street that may not get much useage, when alternative routes are available, is a gamble and a huge waste of ratepayers money. Second option: Redesign Middleton/Ricc/Ilam intersection to make room for through N/S traffic. *Get rid of the greenery/grass plantings on new footpath/cycleway will save some space, *get rid of proposed No R T island (keeping No R T signage/rule) on Ricc Rd to make straight through traffic possible, (also will make it possible to get out of the way when needed for emergency vehicles traveling along Ricc RD) and as stated, MOST drivers obey the rules or it would be completely unsafe to drive. *make eastern side and corner of Middleton Rd a little narrower and getting rid of island in Middleton Rd to make through traffic possible. *other changes needed Most important is that residents were Never consulted about this cycleway. You need to think about all the people living in the area and how it will affect them as well as all the commuters. Directing everyone to go to Wharenui/Clyde Rd or down Ricc to Waimari/Hansons Lane is not a solution when they are already congested and have unaligned roads or travel even further to already congested Curletts Rd in the west or Straven Rd in the east to travel in a N/S direction in this part of the city. The many residents living between Riccarton and Blenheim Rds from Hansons Lane to Matipo St. will be affected by this cycle way which is dictating the proposed road changes. They deserve better.
21859	No	Matt	Durrant	University of Canterbury	As a cyclist crossing Middleton Road is dangerous even when the traffic is relatively quiet. Having crossings for cyclists to easily be able to go straight ahead or turn right out of Middleton Road will be highly beneficial.

21788	No	Murray	Wood		1. Great to see something done. 2. For vehicles travelling north on Middleton wishing to head straight, there will be an initial tendency to shortcut through Field Tce and try to get across Riccarton to the right turn bay into Ilam Road. Perhaps this will act as a natural safety valve as drivers will be delayed in getting across Riccarton Road. 3. Has there been consideration of a central island to prevent right turn into Field from Riccarton? 4. Who has priority at the Middleton Ped/Cycle crossing? Appears to be cars from the image. Can there be 'Cyclists give way to cars' signage? 5. Will southbound cyclists on Ilam have priority signals to bike into the Middleton Road cycle lane? Otherwise they will conflict with left turners out of Ilam. 6. Has there been consideration to adjusting the phasing at Wharanui/Clyde to aid in 'straight through' traffic? ie vehicles turning right from Wharanui into Riccarton and then immediate left into Clyde. This would make this intersection more attractive. Similar question for Hansons/Waimairi, although Northbound traffic already benefits from the Give way into Waimairi. The left hand lanes on Riccarton could be left turn only to aid in this. Possibly adding yellow hatching at the intersection to stop Riccarton straight through traffic from blocking the intersection.
21786	No	Nicki	Aitken		I agree that the Ilam/ Middleton/Riccarton Rds intersection needs work, but I am disappointed that you will stop straight through traffic here. I think it makes sense to stop the right hand turns onto Riccarton Road but not straight through access. This is a popular busy route for so many of us who live and drive in the area. It is a direct route to the University and Ilam school. I just wonder if you could not simply add another traffic light phase to keep the traffice flow moving and safe. The rest of the changes seem logical.
21781	No	Catherine	Quigley		With no right turn into Middleton Road or Field Terrace from the west - residents of Field Terrace, Middleton Road and surrounding streets will attempt to turn down Auburn Ave, causing issues at the Waimari Road intersection and on the narrow Auburn Ave. I think a right hand arrow to turn right into Middleton Road would be less dangerous.
21764	No	Joy	Priest		A simple more cost effective way to help traffic at this intersection is to separate traffic flow by having three separate light sequences. A green light at Middleton Road and a red light at Ilam Road and Riccarton Road. Then a green light at Ilam Road and red at Middleton Road and Riccarton Road. This would improve greatly issues for turning traffic and would not be as expensive as the options being proposed.

21858	No	Mary	Chase		Please do not make the Ilam Middleton Riccarton intersection a T intersection as many cars, bikes and pedestrians travel to and from Middleton Grange, Ilam school andCanterbury University viathat route. I recommend putting in right-hand turn lanes and lights.
21823	Yes	Ayumi	Karino		I can see some benefits for pedestrians, but where are the benefits for drivers from Middlton Rd to Ilam Rd or to Reccarton Rd towards the city centre? You plan shows that every car from Middlton Rd to Riccarton Rd must turn left. Then the road between Hanson and Middlton need to have enough room but it did not. Even now it is a problem especially after school. Accidents occur because of that. Also there are Pedestrian/cycle shared path in your plan but I cannot see the benefit of this. Where is the asset of this fading path? For the intersection we need the centre line on Riccarton Rd to show where to wait for turning right like usual intersection. It is simple and much cheaper About T junction I think there should be yellow dashed line (see attached) So that a car turning right will not be blocking cars behind going straight
21812	No	Alistair & Brigit	Baker		In order to improve safety at the Ilam Rd, Middleton Rd intersection am in support of most of the proposed changes. [redacted]. On average i think there is a car accident at the Ilam Rd, Middleton Rd intersection about once per month. My wife Brigit has often walked our kids to Ilam school, and has had near misses from turning vehicles more than 5 times. However under the proposed changes I am still concerned about the convenience of vehicle access to the Field Tce area when approaching from church corner and when departing North towards Ilam school. I understand that a balance needs to be struck between vehicle access for Field Tce and Middleton Rd residents, while preventing Field Tce becoming a thourghfare. I would like to make the following suggestions to be considered; 1) Add yellow painted "no stopping" cross hatching on Riccarton Rd in front of the exit of Field Tce onto Riccarton Rd. This would allow traffic from Field Tce to cross the first through lane of Riccarton Rd and enter the Ilam Rd right turn lane, even when traffic is banked up at the intersection. 2) Reconsider allowing right turn access from Riccarton Rd into Field Tce. 3) Manage the thoroughfare traffic on Field Tce by means other than intersection turn restrictions, such as speed bumps on Field Tce. 4) Consider restricting parking on Auburn Ave to single side of road to easier traffic flow.

21667	No	Nick	Duke		Thanks for great ideas around the Ilam / Middleton / Riccarton intersection. We have been very concerned about loss of life for pedestrians. Thoughts: 1. There will be an increased traffic flow heading north on Field Terrace. Will it create an unintentional flow of cars turning right from Middleton Road into Field Terrace in order to get to Riccarton Road? It is already difficult to turn onto Riccarton Rd from Field Terrace as cars won't let people in and there is only a short distance to get into the right hand turning lane for Ilam Rd. 2. Re. The right hand turn facility on Riccarton Road (turning north onto Ilam Road) - it will do good to extend that lane - but the real need is a right hand turn arrow at the traffic lights. This is good opportunity to add it in. Reasons: a. increased flow of traffic post earthquakes b. the change of right hand turn rule in 2011(?) has restricted the number of cars able to turn right here each cycle. This means drivers push through on orange / red lights. c. it is a major access road to the University. 3. There will be increased traffic coming out of Middleton Grange School on Suva St that will turn right on Hansons lane to head North via Waimari Rd since they can't go up Ilam Rd from Middleton Rd. Right hand turning traffic already causes massive traffic jams around school arrival and departure. This intersection (Suva crossing Hansons) will need a traffic light to manage the increased flow. 4. If cars are coming from Blenheim Rd and need to get to Ilam Rd what is the most direct route you envisage them taking? Blenheim to Wharenui to Riccarton to Ilam? Or do you see them still turning up Middleton Rd but using the Field Terrace to Riccarton to Ilam Rd.
21628	No	Mrs Hilary	Cole		I think your improvements to Riccarton Road sound great but I would just like to take this opportunity to note something that has given me great stress for all the time I've lived here (nearly 15 years). I live at [redacted] and my problem is the buses that drop off & pick up students throughout the day. A lot of the time I can't back my car out of my small driveway because there's a bus blocking me. Sometime 2 buses will park, one on each side of my drive, and practically meet in the middle. A bus only needs to go further forward and park just a little over the much larger school driveway. After all it's the school that wants the buses, not me! Once a bus blocked my driveway while he went to the nearby dairy to buy his breakfast - another driver told me where he was. Could I suggest that a line be painted on the road to make them park further forward, and not over my drive or possibly a 'not parking' over my gateway. The school headmaster is sympathetic. This would make my life so much less stressful and I would be eternally grateful to the Council.

21627	Yes	Bronwyn	Larsen	Canterbury District Health Board	See attachment for full general comments 1- 6 7. The CDHB is generally supportive of changes to the Ilam/Middleton/ Riccarton Road intersection which, as crash statistics confirm, is currently not a safe road design for people who drive, walk, cycle or bus. 8. It is acknowledged that this area is extremely busy, due to a number of key activity centres being located in close proximity and space for various travel choices is at a premium. 9. Riccarton Road experiences a high rate of vehicle congestion during peak periods, which impacts upon crash risk, physical health and environmental outcomes. Exposure to emissions and associated risks to respiratory health are greatest for car drivers when sitting in congestion5, and congestion causes unnecessary vehicle emissions which impact negatively upon achieving urgent goals to mitigate climate change and other adverse environmental effects. The CDHB encourages Council to take this opportunity to reconfigure preferred transport choice down Riccarton Road from private vehicle use to modes which promote better health and environmental outcomes. Prioritising bus and pedestrian movement down Riccarton Road via dedicated bus lanes and footpaths would promote these ways to travel as the easiest, most convenient and healthiest option. Specific comments 11. The CDHB recommends that traffic continues to be strictly controlled via right turning arrows from Riccarton Road into Ilam, Clyde and Waimairi Roads. Red light cameras may also need to be considered at these intersection to ensure compliance. This combination will reduce crash risk, particularly for vehicles and cycles travelling straight through on Riccarton Road. Additionally, it is likely to ensure traffic flows better through these intersections, provided the duration of the turning arrows are sufficient, relieving potential build-up of traffic waiting to turn right. 12. The CDHB recommends that a full-time bus lane is considered down the length of Riccarton Road. Adequate lane space to implement this would of course be a factor, and trade-offs such as removal of all on-street parking and removal of verges (while ensuring that footpaths remain optimum width for accessibility) would need to be factored into such a consideration. However the benefits would be ensuring that maximum efficiency is achieved for buses on one of the busiest public transport routes in and out of the city. Riccarton Road should be prioritised as a public transport and pedestrian corridor, and traffic re-directed to other routes such as Blenheim Road where possible. Such a lane could also be used as a high-occupancy vehicle lane in the future. 13. The CDHB recommends that bus and cycle priority lights are used down Riccarton Road. This will enable buses and cycles to safely navigate these busy intersections given they will be travelling in close proximity to cars. An example of an existing intersection which works well in this respect is Colombo Street at the Moorhouse Ave underpass. Prioritising the movements of buses and cycles also provides incentive for people to use public or active transport by assisting these modes to achieve efficiency closer to private vehicle use. A change in travel behaviour from private vehicles to active or public transport carries a number of benefits for physical health, mental health and environmental outcomes. 14. It is difficult to establish from the concept designs provided the width of the footpath alongside streets. It appears that grass verges have been added in sections, of which the CDHB is generally supportive, however not at the expense of a flat footpath of adequate width. Riccarton Road in particular requires footpaths which achieve minimum width (1.2m), however ideally would achieve best practice of 1.5m given that space on footpaths is now shared between people who walk, people who use mobility aids and e-scooters. Safety is paramount for pedestrians given that many people will be travelling by foot to access businesses and other amenities in the area. 15. The CDHB supports turning restrictions as indicated in the concept designs as these will reduce the chance of crashes, particularly at Riccarton/Ilam/ Middleton Road where the â€¯S-bend' of this intersection makes visibility for turning traffic very poor without such turning restrictions. Conclusion 16. The CDHB does not wish to be heard in support of this submission.

21538	No	Neil	Butterfield		As the owner of the property at [redacted] I am very concerned that the proposed changes to the Ilam Road, Middleton Road, Riccarton Road intersection are the best the Council's traffic engineers (SIC) can come up with. The Council should have been forward thinking a few years ago and bought what was a vacant section on the corner of Ilam and Riccarton Roads, and which is now the vets. In fact, this is still the best option and the logical way to straighten a much used and needed intersection. Looking at the suggested plan, where is all the traffic coming from Blenheim Road going up Middleton Road and proceeding into Ilam Road, going to go? Hundreds of cars travel this route every day. What will happen is this traffic will be pushed onto other streets creating more problems. Has this been thought out? The most effective solution is to simply straighten up and make safer, the existing intersection, as mentioned above. Also, what has happened to the on street parking in front of our property and the property next door? Our property at 6 Middleton Road, is 5 bedrooms and some on street parking is definitely required by the residents. Also why are cycle ways required on both sides of Middleton Road? In my opinion this is excessive â€" a cycle way on the east side would be the preferred option as there are fewer main intersections. Where is it expected that the traffic from Middleton Road will go? Down Wharenui Road? If it is thought that this will be the case, green turning arrows into Clyde Road from Wharenui/Riccarton Road and Clyde/Riccarton into Wharenui would be required. This is a major issue with this intersection now. Right turners from Clyde Road into Riccarton Road then left turning into Wharenui Road, constantly block Riccarton Road and the same problem applies in reverse. Has a survey been carried out, of where the motorists that use Middleton Road are coming from and going to? Is it the university? If this were the case, these motorists will still be needing to travel to the university and thus will cause congestion at other intersections. They are not going to decrease in number when the university is still increasing its numbers. I also fervently believe it is time for the university to be made to provide adequate car parking for its students in the form of car parking buildings, and thus stop the clogging of surrounding streets. When I leave my property at Middleton Road, which way am I to go, as I travel up Ilam Road to my home off Memorial Avenue, often? My only option will be to turn left into Riccarton Road then right into Newnham Terrace and from there right into either Rudleigh Ave or Hanrahan Street and left into Ilam Road, as will so many of the current travellers from down Middleton Road wanting to access the Ilam area, creating more congestion in Riccarton Road. Interesting scenario. Because I travel around Riccarton frequently, here are some thoughts for your consideration. - Traffic rights on the intersection of Riccarton and Middleton Roads - Delete red turning arrows from all intersections. - Remove traffic lights at Lowe/Mandeville Streets intersection as these stop traffic flow for cars turning left into Blenheim Road â€" perhaps a painted roundabout instead. - Residents only parking within a kilometre radius of the university.
21480	No	Stephen	Beuzenberg		I wish to strongly support the proposed changes, particularly at the Middleton/Ilam Rd intersection: This appears to be a sensible, well designed solution to what is the worst intersection on my daily cycle commute from Westmorland to the uni, both to work and home again. There simply is not enough room for a cycle and a car to go around the corners together, and there is never any certainty whether the car will allow you the space, or force you into the gutter. Actually, the same applies just back up the road at the Middleton/Suva St intersection in front of the dairy, where parked cars and the traffic island leaves no room for cycles, causing scary moments. In this case a marked cycle lane would mostly solve the problem. Thanks for the opportunity to comment.
21470	No	Sarah	Plom		As a university student who commutes past this intersection multiple times a week, I would welcome ANY improvement to this intersection.
21466	No	Joy	Priest		Please do not remove the left turn from Ilam Road to Riccarton Road.

21453	No	Brian	Goulter		I frequently drive down Middleton Road and cross over to Ilam Road. I like the proposed changes. The intersection has been difficult to use for many years. It will mean taking an alternative route from Blenheim Road to Ilam Road, but is only a minor inconvenience.
21447	No	Digby	Symons		I support the proposed changes to the Ilam Road, Middleton Road, Riccarton Road intersection. The junction is awkward to negotiate as a car driver and feels dangerous as a cyclist. There are a number of schools nearby so I fully support improving this junction to help children walk, scoot or cycle to their schools safely.
21441	No	Velda	Kelly		Thank you for the opportunity re Ilam/Middelton/Riccarton Intersection 1. There will be increased traffic into Field Terrace from Middleton Road. Will there be a controlled intersection to assist turning right traffic. 2. There will be considerable traffic turning (L) onto Riccarton Rd from Field Terrace. Will this intersection be controlled. If not I believe the cars wishing to turn (R) into Ilam will have difficulty crossing over into the (R) turning lane. The straight ahead traffic will not always allow the Field Tce traffic access. Clyde/Riccarton/Wharenui Road 1. I have concern re the traffic turning (R) into Riccarton from Wharenui. Currently too many cars enter the intersection without hope of moving prior to the lights changing & the city bound traffic is held up. Always a bottleneck here - hopefully there is something in your plan to alleviate this situation
21440	No	Emma	Read		I love the proposed changes for this problematic intersection. At present I walk and / or drive through this intersection multiple times a day, routinely witnessing driver & pedestrian confusion about right of way and who can turn and when. The new proposals give greater thought to pedestrian / cyclist safety which is crucial. My children use this intersection to scooter to school (Middleton Grange) and presently have to make difficult (developmentally) decisions about traffic safety particularly with cars turning left using give ways / pedestrians crossings
21424	No	Katie	Symons		I fully support the changes proposed here. The current layout is dangerous and confusing for drivers, and the changes give priority to cyclists. Currently Riccarton road is a barrier to our children cycling south: this will provide a much-needed access way across the road.
21421	No	Roy	Britten		I fully support this proposal. In particular, the Ilam/Riccarton/Middleton intersection is becoming increasingly dangerous, especially for the children who walk and bike through there to school. We're increasingly seeing dangerous turning practices at this intersection, and it's no surprise at all that the accident rate is so high. While these changes will inconvenience us as car drivers and motorcycle riders, it will be of great benefit to the children of the area, and as such deserves full support. One can imagine additional traffic diverting down Suva Street, and possibly Auburn Avenue, to work around the turning restrictions. There is heavy school student foot traffic on both these streets at times, and some additional thought might need to be given to ensuring their safety.

21417	No	Faith	Alexander		Thank you for these proposed changes. We have lived in Middleton Rd for 20 years and they will bring welcome improvements to this very difficult intersection. I look forward to the increased safety for all road users and pedestrians.
21406	No	Jenny	Abrahamson		Looks as if you're stopping cars from travelling from Ilam Rd to Middleton Rd. All in favour of cyclists. Totally against this - not everyone can cycle, and how are motorists supposed to get from Ilam to Blenheim Rd. You anonymous people on the council surely don't have the right to close down our main access roads like this.
21359	No	Mel	Bird		I've been using this road all my life, taking my life in my hands all through school years on a bike, and now more from car perspective, and so I'm glad you're thinking about changing it. I think that WHAT you are proposing is a nightmare tho! Removing the ability to go straight through from Middleton to Ilam will divert traffic into already clogged intersections in either direction or driving people to do risky manoeuvres on Riccarton Road to divert back onto Ilam Rd - the obvious one to me is cutting through the ANZ bank car park to nip down Newnham Tce (which is already a terrible idea with cars parked on both sides all day every day reducing it to a one lane!) Surely the more straightforward plan is to remove all ability to turn right at the intersection?? There are reasonable work-arounds for those that need to access Riccarton Rd, would keep cyclists and pedestrians safe without requiring a seperate light change for them, and would actually allow better traffic flow through the area? I assume I'm oversimplifying, but I would just implore you to give it some extra thought and reconsider the straight through concept. For people that live in this area, using it multiple times a day, its a pretty big, pretty gutting change requiring significant detours and delays just to get a couple of minutes down the road. Thanks heaps!
21357	No	Kathy	Tong		It's about time someone do something about that intersection, I bike from my house to university and it's so dangerous, I got knocked off my bike a few times!
21351	No	Lucas	Toovey		I fully support this proposal. Talking mainly as a road user, this layout minimises the significant blind spots that are currently present. This not only gives drivers confidence when using this intersection, but also in nz roads and ccc
21347	No	Jorja	Miller		Middleton road is still one of the busiest roads and the easiest way to access Blenheim road. There's are no other roads which give easy access to Blenheim road in this area and now this will mean riccarton road will get busier than it already is as no one will be able to get onto Blenheim and will have to use other ways. The proposal seems as though they've only looked at one problem and decided to fix that and ignore the rest. Great idea for turning lanes to Riccarton road but what about the rest of us who want to access Middleton. There's not enough information on what you're planning to do to the roads it was very confusing to actually figure out what was happening.
21345	No	Jaime	Gilchrist		I think the changes are great :)
21343	No	Courtney	Dyson		I agree that something must be done with the Ilam Rd intersection and believe that this option would be the most effective. However I do have two concerns I would like to raise: 1. What route will people who have previously turned right out of Middleton Rd into Riccarton Rd be advised to take once this right turn is removed and how will this impact traffic flow in the surrounding areas? 2. Will changing the right hand lane at the Riccarton Rd-Wharenui Rd intersection into a right turn only lane result in a build up of traffic for people wanting to go straight? Even with two lanes that intersection can be very congested in my experience and so I would be concerned that reducing this traffic to one lane may make things worse. I would just like to say thank you very much as well for finally doing something about this intersection which has caused so many problems for so long. I am confident that whetever happens in the end, as long is there is change from the current layout then it will be an improvement!
21340	No	Tanja	Clark		We use this intersection (Ilam/middleton.Riccarton) regularly and instead of spending so much money on changes - all it needs is a different set of light cycles where the Ilam Rd and Middleton Rd traffic goes separately instead of together. Won't take that much longer since there will be no interruptions from right turners and both green light cycles could be half of what they were before together. Money saved, lives saved, stress saved! We go straight through there all the time!

21338	No	Daisuke	Seto		I just want to share my very minor car accident at the Riccarton-Ilam rd intersection. I was the second car stopping at the red traffic signal on Ilam rd. There was a bus left-turning onto Ilam rd from Riccarton Rd, but the car in front of me was too close to the centre line and stop line that the bus could not make the turn. The bus driver signaled to the car driver to back off and he backed straight into my car. It was a light bump with no damage. I think many people don't expect buses to make a turn at the intersection, so maybe an additional sign or stop line further back may help similar accident. Hope you can make a successful redesign!
21337	No	Tom	Meaclem		I am in full support for proposal for the riccarton-ilam-middleton road intersection as well as the other proposed changes. I use this cycle way daily for my commute and in its current form is very dangerous for cyclists. Separation of the traffic as proposed will provide a much higher level of safety and visibility for all the road users. This is important as this intersection is user by university students and students of the three surrounding schools and the proposed changes will encourage these people to walk and cycle more
21329	No	Gemma	D		Support all the changes including removal of parking to provide the extended turn lanes. This is an awful intersection and the efficient movement of people along this corridor, particularly by bus and cycle is a priority.
21321	No	Kevin	Wakeham	Middleton Grange School	As mentioned to the person who came to school we are not opposed toy this as long as it doesn't move more traffic down Suva Street. They were going to run some numbers and come back to us but we haven't heard anything yet. From a personal point I cycle through that intersection daily to and from work and even this morning found that cars traveling from Ilam Road through to Middleton Road hug the corner so much that the cyclist feels unsafe. With the changes cyclists will be able to cross at lights without worrying about the traffic so that will be much better. I support the change.
21320	No	John Yi	Ji'ang		The design ideas are fully expressed but the layout space is not sufficient. Looked too busy and messy. Put all pedestrian and bycelists confused and therefore cause potensial huge dangers to the public. Trafic flow coming from Blenham Road has only L turn to Riccarton Road and unable to go straight to Ilam Road. also the same the cars from Ilam are unable to straight to go to Middleton Road heading to Blenham Road. This outcome propably was designer's intentions, but is definitely wast of money spent on the roads and poor results causing inconvenience to both cars drivers, and bikelists and pedestrians. Waste of spaces on Middleton Road ..... narrow lanes for both cars and bikes. Suggest aquire some land on the corner of 305 Riccarton Road. Opening up spare ... roading directly cross Riccarton Rd on both ways of Ilams Road and Middltons Road Building two lanes on the L road of Middleton Road on the corner ..... smooth and easy free flow for Ilam Middleton and Ricccarton Roads. This is really plan for next 30 - 60 years future. The key point is aquire small piece of land on 305 Riccartons property, which a portion of will result all the problems!!! otherwise better just leave it as it is, no waste of money

21315	No	Jennifer	Porter		1. The wide pedestrian / cyclist shared paths on Middleton Road have constricted the road way and will slow traffic unnecessarily as few walk or cycle there. 2. With Hanson's Lane & Wharenui being the only right hand turn (from the W) to Blenheim Rd from Riccarton Rd, there will be new congestion areas. 3. Without knowing the placement and phase of traffic lights it is difficult to imagine how the new "routes" will flow. Perhaps another consultation after the system has been running for 6-8 weeks 4. Right or left turn only lanes should help - if people observe them! I have seen some very scary manoeuvres at such places. 5. Extending the right turn facility into Waimairi Rd does not mean much - what about turning right off Riccarton into Auburn Ave? With no right turns into Middleton or Field or Euston(?) traffic will increase in unexpected areas. 6. People turning right into Riccarton Rd from the Bush Inn or the BP garage or Newnham Terrace will cause problems unless the strips are replaced / reinforced with concrete stripe. 7. I foresee learning new routes to cope with changes TREES IN CENTRE OF RICCARTON RD I am baffled by the plan to continue with these. I went to several meetings/discussions at the time. No one was in favour of central trees. Trees, yes but on the sides. Even a narrow median strip will cause serious obstruction to emergency vehicles. Bus drivers have no idea how they will cope. Newspaper articles claim people were in favour - I would like to see the actual numbers for and against. How about street polls IN THE AREA. Not just planners' views
21314	No	Brent	Bailey		Eletric buses, free of course. No sale of water. Farm storage ponds for droughts. Other Feedback: Eletric buses, free of corse No sale of water - Farm ponds (storage) for droughts Emergancy services access on Main Roads should be looked into carefully Stop all growth, we have enough already
21302	No	Adeian	Pitman		Keep up the good work. A cycle friendly city is a great city. I love the direction CCC has chosen for it's roads
21295	No	Sophie	Tremewan		I think that, on the Ilam/Middleton/Riccarton road intersection, there should be no right turn. The T-intersection would be an inconvenience, whereas no right turn would ensure the free flow of traffic.
21284	No	Kate	Klubien Page	Please select	I think the proposed changes seem practical and appropriate. My only thought is that the cars coming out of Field Terrace and turning left will most often be wishing to joining the right turning lane into Ilam Rd. Would it be appropriate to paint a 'leave clear' signage on the road markings on Ilam Road to allow easier access to the right turning lane for those cars coming out of Field Terrace?
21283	No	Nic	Bason		Excellent solution to a long standing problem intersection.

21282	Yes	Simon	Parkes	Engineer	For cyclists south bound on Middleton rd, they're on a shared path on the footpath/berm, then they have to exit onto road. Currently they have to turn around the grass patch to get back onto the road (outside number 7). I suggest keeping the shared path wide beyond the 'pedestrian/cycle shard refuge, until the cyclist are back onto the road, (removing the kink in the cyclists line, so they can keep straight when merging onto the road and have a no parking zone extended just beyond the drive way to house 7 so they can merge back onto the road safely&smoothly without hitting cars/pedestrians). thanks Otherwise I very much am in support of this development - particularly the cycle safety/encouraging features.
21279	No	Dr Jan	Cameron, Michael Latty & Dr Joanna Thwaites		Thank you for the opportunity to comment on the proposed changes to the Ilam/Riccarton/Middleton Road intersection. We have lived in this neighbourhood for around 35 years and are well aware of the accident issues at this intersection. It is reassuring to see attempts being made to mitigate the risks at the intersection. This is a neighbourhood that includes a significant number of elderly people (who are unlikely to use the proposed cycleways); in addition to the University, there are also three schools in close vicinity which at times (e.g. wet days) bring heavier than normal vehicle traffic. Kirkwood, in particular, draws students from both sides of Riccarton Road, and we understand that Middleton Grange draws students from all over Christchurch. Presumably parents and staff from all three schools have been included in your consultation, even if they do not live in the immediate area. We have a number of queries for which we would appreciate a response, or clarification. It would be useful if these could be addressed at the community meeting on 27 February. It would also be useful to know something of the other 15 options that were considered, in particular the best of these options and why they were rejected. 1. The intersection of Ilam/Riccarton/Middleton has directional signage facing Middleton Road, showing the path to be taken by turning vehicles. However the location of this is not ideal, compared to similar signage facing traffic coming from Ilam Road. It used to be on the pole with the traffic signal, which is at least a place all motorists should look to. Currently it is on a bent pole in front of the vet's premises. a. Have you considered relocating the directional signage? b. Why have painted directions on the actual road not been introduced? c. Have phased lights been considered to alternate through and turning traffic to and from Ilam/Middleton (similar to the Clarence St/Riccarton Rd intersection) or to filter turning traffic (such as were introduced a few years ago to filter traffic turning right from Riccarton into Middleton)? d. Why would c, or a & b together, not be considered adequate to address the specific accident-risk problem? While the consultation document notes â€œnetwork efficiency for public transportâ€ (pg 2) as a consideration behind the proposal, the rationale for the changes highlights safety issues. On the face of it, the current proposal appears to be a very expensive and complicated strategy, impacting on a significant number of people, to solve a safety problem which might be solved more simply with more sophisticated light phasing. It would be useful to understand why these options have either not been considered or have been rejected. 2. Middleton Road currently feeds traffic coming off Blenheim Road, a major arterial route. We anticipate that a significant amount of the current traffic on Middleton Road, especially at peak hours, is headed to or from the University. This morning (14 February), for example, at 8.50am there were 20 cars backed up on Middleton and all appeared to be headed straight through to Ilam Rd. a. What are your traffic engineers' figures on current traffic movement (timing, numbers, proportions to Ilam, city or Westfield area destination)? Under the proposal, it appears that traffic from Ilam Rd may proceed straight through to Middleton, but it will not be possible in the other direction. b. Why was it decided that traffic from Middleton would not go straight through to Ilam, but that traffic in the other direction would be acceptable? On what grounds was one direction prioritised over the other? How will this assist addressing the vehicle accident issue that the preamble highlights? c. What are the alternate routes that traffic from Middleton to Ilam is expected to use and how will the proposals ensure this doesn't simply shift congestion to somewhere else (Wharenui Rd or Hansons Lane for example, or closer by-passes â€“ see 3 below). 3. At what point on Middleton Road will traffic be advised that there is no right turn into Riccarton and no through route to Ilam?

					If this is at the Riccarton Road end of Middleton then the options for traffic will be Suva St, Auburn Ave, Lochee Road or Field Tce. Closer to Blenheim Rd, Arthur St also becomes an option. a. Suva, Auburn, Arthur and Lochee are already inhospitable streets for heavy traffic flow, with bends and raised platforms. Arthur and to a slightly lesser extent Suva and Lochee become impassable for meeting traffic if there are parked cars. There will be further impediments to traffic flow on Lochee Rd and Suva St if the proposed South cycleway uses part of those roads. Arthur and Suva enclose a school, with its attendant high pedestrian flow at peak times. (See photos attached). A significantly increased traffic flow using these streets as a bypass to get to or from Riccarton seems to risk a potential bottleneck both on these streets themselves and also on Wharenui or Hansons Lane and in turn at their intersections with Riccarton. Use of Suva St (or Arthur St) as a bypass will then involve right hand turns onto Hansons Lane, in the face of potentially increased traffic on that road. b. Traffic from the south side of Riccarton Road delivering school children to Kirkwood Intermediate who cannot turn right from Middleton, will presumably turn left into Riccarton from Wharenui, and then park opposite Kirkwood â€" requiring children to cross Riccarton Road. c. Is it likely that, in future, traffic from Middleton heading to Ilam will use Field Tce as a bypass to Riccarton (left turn) and then to Ilam Road? What will be the implications of this for access to and traffic build up in the right turn lane from Riccarton into Ilam? 4. Under the proposal, people living in Field Tce have no right turn to access Field Tce from Riccarton heading eastwards, either via Middleton Rd or to Field Tce off Riccarton. We note that currently turning right from Riccarton into Field Tce has not been a problem. There is a wide median strip and traffic which is already slowing or stopped for lights readily let vehicles cross. On the proposal diagram this painted median strip is retained at the point of the Field Tce intersection. a. Why can it not remain possible to turn right into Field Tce? Accessing Field Tce via Auburn Ave would require a right hand turn at the Waimairi end of Riccarton Rd (either from Waimairi Rd or from Bush Inn carpark), in a less safe area than at Field Tce. Any other option would seem to require residents to travel considerably out of their way to get back to Field Tce â€" for instance, from the Middleton/Ilam intersection they might go down to Wharenui, back down Lochee, to Middleton and then to Field Tce, a distance of around 1.5km extra plus three right hand turns. From the Bush Inn carpark they would need to go to Waimairi Rd, down Hansons Lane to Suva Street and back up Middleton, an extra 800m. Similar challenges would affect residents of Haslett Place. b. How is it anticipated residents in Field Tce and Haslett Place access their streets from Riccarton Road when heading eastwards (eg from Waimairi Rd or the Bush Inn carpark)? What is the preferred, expected or most likely route? Has there been any survey of all residents in these two streets to discover their current travel behaviour and the potential impact of the proposed changes? We look forward to your response to the above points, and to receiving your summary document in May/June. We are particularly concerned to receive a response regarding: - The implications of the removal of any right turn to access Field Tce from Riccarton Rd; - The possibility of Field Tce being used as a bypass to Ilam; - Whether alternating light phasing of â€œthrough plus right turnâ€ from Ilam and then from Middleton have been considered and, if so, why this option cannot be trialled before committing to other expensive options.
21275	No	Kate	Miller		Please change this intersection it is extremely dangerous
21274	No	Edwin	Stanton		Why don't you just change the phasing so ilam road gets a straight/right turn, then Middleton, so the people who don't understand how to turn right never turn against opposing traffic. Much cheaper than this faf and easy to implement
21273	No	Ella	Hawkey-D'Aeth		This makes it even harder for those coming from middleton road and trying to get onto Ilam road. Lots of people, including myself, come from bleinham road onto middleton to avoid riccarton road traffic when trying to get to university. This would cause issues for many people, and make riccarton road traffic even worse as people trying to get to Ilam area would have to go down riccarton road instead of just coming from bleinham and down onto middleton road, to ilam road.

21272	No	Emma	McCone		I support the proposed road layout changes. The intersection is dangerous and needs to be made safer and more accessible for pedestrians and cyclists, especially as a key connecting road to the University.
21267	No	Melissa	Ward	University of Canterbury	To prevent accidents Riccarton Road needs Right Turn arrows on the traffic lights at this intersection, and Middleton Road and Ilam Road traffic lights need to work independently allowing Ilam Road traffic to go, then Middleton Road traffic to go. This is because there is no right turning lane from Ilam Road onto Riccarton Road, and traffic on Ilam Road backs up while cars are waiting in the middle of the intersection to turn right. Due to the shape of this intersection, those cars waiting to turn right from Ilam Road often obstruct the flow of traffic from Middleton Road to Ilam Road causing accidents.
21249	No	Pete	McGinigal		Fully supportive of attempts to improve safety for cyclists when going from Ilam to Middleton and vice-versa. I ride this way a few times a week and this junction is the one area where it always seems risky. With the proposal there will have to be satisfactory gap between cyclist lights and car lights, example being the risk from cars turning left from Ilam to Riccarton trying to catch the end of the Amber light but really jumping the Red light and going through cyclist crossing From Ilam to Middleton Roads.
21247	No	Simon	Roughan		This opportunity for public submissions regarding serious road safety issues along Riccarton Road is encouraging and most welcome for me as a property owner and a ratepayer on Riccarton Road for close to three decades. I have been left unheard for years, as a concerned resident of Riccarton Road. I have proactively contacted the Christchurch City Council numerous times over the past twenty seven years, to report multiple road accidents involving both vehicles and pedestrians outside my property at 316 Riccarton Road. The lack of concern and neglible interest on the part of the Christchurch City Council to my reported concerns has been a consistent response from this publicly elected entity. The number of rear-ended motor vehicle accidents outside my address have been so numerous to document, year after year. With the resultant body trauma injuries, crippling neck whiplash injuries and the like, the Christchurch City Council response to my calls has always been that unless an ambulance was required the Council wasn't interested in such "minor" or insignificant injuries. Even the many cyclist injuries of mainly school children that so frequently occurred as the result of the kerbside parking along Riccarton Road from the Bush Inn corner to the Ilam Road corner, the Christchurch City Council again deflected my many telephone calls of requesting new road safety measures along this busy section of roading, which involved hundreds of students travelling to four sizeable high schools, not to mention the University foot traffic and many primary schools in the area. Writing this submission regarding the proposed Christchurch City Council changes to the Ilam Road/ Riccarton Road intersection may continue to be futile within the context of my previous communications with the City Council offices, that have been consistently ignored. As a registered health care practitioner I am gravely concerned at the lack of interest by my elected Council to the road safety concerns of its ratepayers to such a dangerous piece of roading here in Christchurch. The Ilam Road/ Riccarton Road intersection needs to become a T intersection that no longer includes Middleton Road. A left turning slipway into Ilam Road off Riccarton Road, and a left turning slipway onto Riccarton Road from Ilam Road can be achieved with a high safety factor not requiring stop lights. A traffic lights controlled cycleway from Ilam Road across Riccarton Road into Middleton Road would satisfy the many cyclists involved in getting to school. This is not a justification for vehicles to cross Riccarton Road from Ilam, nor to be able to turn into Riccrton Road from Ilam Road. Such current manourves are a cause of repeated multiple car crashes, and a serious health risk to all road users. Riccarton Road is a busy thoroughfare from our Western suburbs into the city and into Riccarton Mall. The busy thoroughfare status totally justifies the removal of all kerbside parking along the length of Riccarton Road, from the Bush Inn corner down to Hagley Park. Such a kerbside road space would be better utilised as a dedicated Bus lane and/ or a cycleway. Such a sensible road safety initiative as this would reduce so many unnecessary crashes and pedestrian injuries. With the majority of traffic in an east bound direction along Riccarton Road being visitors coming into town from the West Coast or South Canterbury, the previous Christchurch City Council policy of allowing Motel development only on the north side along Riccarton Road made logical sense. This east bound traffic could slip into a motel carpark without in any

					way disrupting the traffic flow. But in stark contradiction to their earlier policies the Christchurch City Council has in the past decade, against objections, is now allowing for the rapid development of motels along the south side of Riccarton Road, such as betweem Ilam Road and Bush Inn, that has seen the increase in crashes and disrupted road traffic flow due to vehicles coming from the west needing to stop and cross this busy road to get in to their motels. None of these "south side" motels have traffic coming into them from the city end of Riccarton Road. Their patronage is always from the (east bound) Yaldhurst diection, including airport arrivals, which sees traffic arriving at these motels located on the wrong side of Riccarton Road. Where were the city planners and traffic engineers when the Christchurch City Council approved and consented the construction of motel developments on the south side of Riccarton Road? Hopefully the Christchurch City Council will listen carefully to its many constituents who live out their human lives in this Riccarton Road/ Ilam Road locale, and who have the safety and welfare concerns for all road users, especially of school age children who need to frequent this footprint precinct for their education.
21241	No	Olivia	Clendon		I'm very pleased to see the intersection at Ilam/Middleton/Riccarton modified. I agree it is dangerous and confusing due to the off-set alignment and can be difficult to negotiate at peak times. I am not an engineer and have no experience with traffic or road maintenance, so I am satisfied that multiple options were investigated and what is proposed is deemed to be the best for all road users. However, as a resident (home-owner) of Field Terrace, I have some concerns regarding the proposal. INCREASED TRAFFIC SHORT-CUTTING THROUGH FIELD TERRACE I believe the proposal will increase traffic short-cutting through Field Terrace in order to get to Ilam Road from Middleton Road. I think this because my immediate thought when looking at the proposal was how I would do the same, and I realised quickly that I could go LEFT at the intersection of Field Terrace and Riccarton Road (proposed left in, left out access only) and then immediately RIGHT at the Ilam Rd/Riccarton Road intersection. While I appreciate that making the Field Terrace/Riccarton Rd intersection left in/left out will discourage through traffic for vehicles trying to travel eastbound onto Riccarton Rd from Middleton Road (ie they cannot turn RIGHT onto Riccarton Rd from Middleton Road or Field Terrace), it will not stop the traffic that would currently be going straight across the current intersection into Ilam Rd. At peak times in the morning and afternoon the traffic is backed up from the current intersection at Riccarton Road well down Middleton Road (past Field Terrace). From observation, the majority of these cars are traveling straight through the intersection onto Ilam Road (I'm confident that in preparing the proposal some surveying of this would have been done, so presumably you have these numbers - if this surveying hasn't been done I would insist that it is before finalising the proposal). INCREASED DANGER FOR PEDESTRIAN CROSSING IN FIELD TERRACE While I accept the potential for increased through-traffic into Field Terrace from Middleton Road in order to improve the safety of Ilam/Riccarton/Middleton intersection my concerns are largely with regard to how pedestrians use Field Terrace. Field Terrace is a very wide street and currently there are no road markings or pedestrian refuges; this allows vehicles to travel at high speeds around the corners - especially at the Middleton Road/Field Terrace intersection (from both directions, but especially for northbound traffic turning right into Field Terrace from Middleton Road, it's possible to take a very wide berth and make this turn at quite high speed). As a mum with two young kids (1 infant in a buggy and a toddler on bike +/- dog) it can be nerve-wracking to begin crossing the road and have a car approach at high speed very quickly when previously the road was clear of traffic. I can take some time to completely cross the road from footpath to footpath. If more traffic will be diverted into Field Terrace from Middleton Road (attempting to get to Ilam Rd), which I strongly believe it will, then I think there needs to be some safety features put in place to slow the traffic down and make pedestrian crossing easier such as: 1) a pedestrian refuge at the entrance to Field Terrace from Riccarton Road 2) a raised platform to slow down traffic turning into the street, 3) road markings 4) other strategies (such as narrowing the entrance to the Terrace from Middleton Road?)

					In my mind, the aim would be to slow down traffic and make the road safer and more able to accommodate a higher volume of cars while allowing safe pedestrian crossing. Also important is continued on-street parking for residents - there is a high proportion of university housing in this street and there are often many cars parked on the street. INCREASED TRAFFIC DOWN LOCHEE ROAD As for the traffic that currently heads northbound up Middleton Road and then turns RIGHT onto Riccarton Road, which will no longer be allowed, I believe many of these vehicles will head eastbound down Lochee Road to get to Wharenui Road and then onto Riccarton Road, but Lochee Road is proposed to be part of the South Express Major Cycle Route so presumably an increase in motor-vehicle traffic is not particularly desired down this street either. (Although Lochee Road already has some of the safety features I'd like to see added to Field Terrace such as speed bumps and a pedestrian refuge at the Lochee Road/Riccarton Road intersection. OTHER I would also like to point out, due to our proximity to the university; there is a large number of university students living in Field Terrace in rental properties. This may reduce the number of Field Terrace residents from responding to this proposal due to the transient nature of the occupants of some of the properties on this street. Thank you for the opportunity to provide feedback, and for making changes to this difficult intersection.
21238	No	Sharron	Denekamp		I support the proposal for changes as set out in the document about the Ilam Road, Middleton Road, Riccarton Road intersection
21237	No	Michael	van Ee		I support improved pedestrian and cycling safety but this proposed road layout is terrible. Middleton road is a main thoroughfare from Blenheim road to Ilam road and to the university. Blocking this will add to the already congested Riccarton road. The problem at this intersection come from traffic turning right into Riccarton road from either Ilam or Middleton roads. If this was prevented all these problems disappear. Wharenui / Clyde road congestion could be greatly reduced by creating a left turn lanes with green turning arrows on Riccarton road. The proposed Wharenui / Clyde road changes will do nothing to improve traffic flow or road safety.
21236	No	Jenny	Owens		I have studied then worked at the university of Canterbury for 34 years. Over that time I have used this intersection regularly both as a cyclist and in a car. I know it very well. I also have a family member I visit regularly in Ilam Arvida rest home close to the intersection. I fully support this proposal for Ilam/Middleton/Riccarton road intersection. It will make it much safer to make a right turn from Ilam Rd into Riccarton Rd in a car. As a cyclist I avoid this intersection where possible, and I probably still will.
21235	No	Paul	Smith	GTS Trust	I support the proposal I think it could be improved if pedestrian safety was considered slightly further along Waimairi Road. Between the Bush Inn entrance and No 30 Waimairi Road the footpath narrows to provide a taxi rank. This pathway is not wide enough to accommodate the volume of traffic that uses the pathway. Scooters, bikes, people with trolleys and shopping, commuters and older pedestrians like my Dad compete for space on the narrower pathway. He has almost been hit and left quite shaken by both bikes and scooters that are moving quite fast along here... They don't bother to cross to travel down the road or slow down. Can you widen the existing pathway towards the Bush Inn so that we can share the space ? Happy to discuss further if needed
21233	No	Laura	Revell		I bike through this intersection twice daily on my way to/from the University of Canterbury. It is an awful intersection and I fully support upgrades to improve safety. It is not clear, when coming north up Middleton Road and crossing over to Ilam Road, if the crossing will be controlled by traffic lights for cyclists?
21231	No	Julien	Gutknecht		Pedestrians and cyclists should have priority crossing on minor roads (zebra crossings, NOT platforms if at all possible). The NorWes Arc crossing on Middleton Road should be a vehicle give way crossing, anything less on a major cycle way is unacceptable.

21230	No	Kelly	Dombroski	University of Canterbury	I support making changes to Middleton/Ilam/Riccarton Intersection, it is terrible. I often had to cross this road cycling with my baby in a cycle trailer to take him to childcare in Middleton road then return to work at the university or pick up the kids from Ilam school, or home up Riccarton road. It was very scary because people came around the blind corner too fast and could then hit me/baby (very slow with my trailer). I used to take the bike trailer and bike on the footpath to avoid this, but the footpath is very narrow, also has a blind corner, and has one space where the hedge is so overgrown that you cannot get past with a pram or trailer, yet the drop to the road is too steep for a bike trailer or pram. I hope the gutters will be made more shallow here and consideration for bike trailers in the design (including the traffic island -- often they are too short to hold a bike and trailer with a child safely, e.g. the island crossing Peer St from Athol Terrace is very dangerous). For us, a bike trailer is a great way to avoid purchasing a second car or paying for parking at Ilam school or the University, and for our children to keep fit, learn road rules, and become independent. Having safe intersections is essential for this.
21228	No	John	Schaper		Concerns re Field Tce traffic calming as part of the Middleton/Ilam Rd modifications. As Middleton modifications will be reduced to left turn exit (West bound onto Riccarton Rd), those wishing to proceed East bound will endeavour to utilise Field Tce to access Riccarton Rd. Traffic calming and shaping to prevent right turns onto Riccarton Rd from Field Tce will risk shifting the issue somewhat. Residents of Field Tce will, no doubt, notice a increased traffic flow (as access to Ilam Rd from Middleton will now require the diversion along Field Tce), as well as the existing narrowing of egress and proposed left in/out modifications may increase risk of accidents at this intersection (including those from illegal right turns) and increased noise. It would be my suggestion to remove existing traffic calming on Field Tce and permit right turns (as is currently possible) onto Riccarton Rd. Establishment of road markings to assist in keeping the egress of Field Tce onto Riccarton Rd will also assist in improving traffic flow.
21227	No	Yik Chun K	Wong		We Yik Chun Kwong (also known as Gene Kwong) and my wife Pearl Yin Chu Kwong are the owners of the rebuilt [redacted] We strongly oppose any council plan to remove four very valuable car parks outside 233-235 Riccarton Road. Our support person Mr Norm Withers M.N.Z.M. retired Christchurch Deputy Mayor and I made a deputation to the Riccarton/Wigram Community Board to plea to remove a clause in the council officers report that was going to prohibit stopping on the southern side of Riccarton Road commencing at the intersection of Euston Street and extending in an easterly direction for a distance of 55 metres. As a family we suffered severe hardship when our original Clyde Building was written off following the earthquakes. Fortunately our bank offered to lend, with family financial input, the money to rebuild. One of the banks concerns was that council's proposal to to prohibit stopping outside the Clyde Building would be overturned in the interest of both parties ie. the bank and us. Car parking, today, is very valuable to assist economic viability of businesses and we have a new tenant opening a 'Bubble Tea House' in the next month and the last thing we want to see is parking being removed from outside their business as they are investing a lot of money to establish this business. We have worked very hard over 30 years and it is important to note that the original Clyde Building was built long before traffic lights, traffic refuge etc were ever installed in Riccarton Road. Up to 25 staff members are employed in the Clyde Building and naturally they have to find parking away from the establishment so as not to affect the customer parking usage that is currently available. Council recommendation to remove the four parks will be the final nail in the Kwong Family coffin so, board members and councillors, we respectfully ask for your support in declining the recommendation to remove the four parks in question. I wish to make a deputation to the Community Board.
21226	No	Weijing	Hao		Hi this is Weijing Hao. I am strongly in opposition to the suggested removal of four car parks outside the Clyde Building on Riccarton Road. I am the owner of The Camden Restaurant located upstairs and I might add I have invested several hundred thousand dollars to establish this restaurants (you are welcome to view sometime). We need every car park available to assist the business to run equitably.
21225	No	Sam	Sachdev		This junction can be handled very well with signals without doing major changes. Allow one set of signals for ilam to go to Middleton and Riccarton. Another set to allow Middleton to Ilam and Riccarton. And have pedestrian signals. Somewhat like the Morehouse/Barbados/ Waltham rds junction. Since only one set is working the traffic will move fast. Put markings on the road for traffic to follow when going to Riccarton road or Ilam Road. This may suffice and if further change is needed the Riccarton road signal on BP side could be shifted towards BP a little bit allowing easy flow to Riccarton and Ilam From Middleton and from Ilam to Riccarton and Middleton. Smart signals with detectors can manage a smooth flow. Cost with option 1 is minimal - only upgrading/adding the signals and painting. Am sure the traffic engineers can manage this set up.

21223	No	Richie	None		This is Richie, we are strongly opposed to the proposed removal of the 4 valuable car parks out side 233-235 Riccarton Road. We have invested substantial money to open and conduct the business of a " bubble tea house" for which we have council approval. Car parking is valuable essential in the enhancement of small business in this city and we as retailers need very bit of customer parking possible-not to lose existing parking.
21222	No	Heather	Caspersen		Many thanks for facilitating the meeting Tuesday 19th Feb Bridge Club Rooms. It was unfortunate that a few people dominated proceeding and seemed hell bent on not listening. On reflection many of the engineers points made a lot of sense to me. My greatest concern is the pressure that will be created to on street parking. There is a lot of pressure due to the University location, students and young people renting housing in the area. Many houses have numerous tenants some times with many cars. We have one flat around the corner which often has as many as 6-8 cars parked either on the road up their drive and across the footpath. The is not to say it is only students that cause the problem. The grassed areas. With a lot of rented properties in the area why put a grassed area in-front of properties where the tenant are not interested or don't have a lawn mower to cut the grass. This will quickly become an eyesore and we the rate payers will end up footing the bill to have them cut very infrequently and looking untidy for long periods. Why not put artificial grass, low maintenance and should last a long time as I believe the artificial grass has improved over time. We also have issues with people parking too close to the entrance of our street restricting the view for exiting out of the street safely. Road improvements are all well and good but unless the laws are applied and policed there are always going to be an issue. For example parking on the wrong side of the road facing oncoming traffic.
21220	No	Gina	Mintrom		I am very disappointed at the prospect of Middleton Rd having no right turn from Riccarton Rd when coming from the west. The reason drivers use Field Terrace is because of the lack of a right hand turn. Looking at the map and checking on an alternative route means driving FUTHER ie coming from Bush Inn mall which promises to become more useful in the future. Is it possible for the lights to be phased so each intersection can function or go separately ?? How will cyclists make a RH turn ??? I can only assume they will use the proposed 'barn dance' somehow. Cyclists are drivers too, especially in winter, so I can see no particular use in this idea. I am also very UPSET about the loss of the variegated elms in the Riccarton shopping centre. All that does is expose the filthy footpaths even more. Cheers !!
21208	No	Rebecca	None		RE; Ilam/Middleton/Riccarton Intersection My current position is walking to & From work (UC), especially in the evening is that cars will turn right from Ilam Road onto Riccarton, even while I am walking across. The barrier will stop those crossing behind me, before I fully make it across. However, my main problem has been people simply just turning without looking. I have had to stop a few times in the middle of Riccarton Rd , even to the point the lights were red. To make sure I can walk across & reducing any chance of an accident I turn around & partially walk backward. I am not sure how the new intersection layout will help this, hopefully it does. But it might be worth considering this when designing the light sequence. It might even be worth all pedestrian crossing lights going all together, like they do in the city? Or setting a delay so pedestrians go & so drivers can see them/pedestrians crossing the road
21207	No	Ryan	Coey		The easiest fix would be to adjust the traffic lights, so that traffic comes from Ilam road going straight and right while Middleton rd is red lighted, and then have straight and right traffic coming from Middleton rd while Ilam rd is red lighted so that traffic does not cross paths as it does currently. This method would require no new roading development, just a change in the lights cycle
21200	No	Craig	Downing	St John New Zealand	From St John I cant see any issues from us.
21199	No	Terry	Foote	Red Bus	Thank you for the opportunity to engage on the planned changes at the above intersection. In regards to any improvements at the intersection there is a pressing need for a right turn arrow for traffic that is heading west along Riccarton Road and turning into Ilam Road. Buses (and all other traffic) have serious delays when trying to make a right turn due to the traffic flow along Riccarton

21198	No	Sue	Chamberlain		Green turning arrows would be a good idea and sole some of the problems that exist when turning right from Riccarton Road into Middleton right and the same for the traffic trying to turn right into Ilam Road. Traffic still needs to flow through from Middleton onto Ilam Road â€¦So I think further investigation needs to be looked at before any changes are made. Thanks Sue Chamberlain
21197	No	Leila	Torrington	Environment Canterbury	Thank you for the opportunity to provide feedback on the Ilam Road, Middleton Rd, Riccarton Road intersection project. This submission is from the Public Transport team at Environment Canterbury. We agree that the current layout of this intersection can be confusing for drivers, creating danger for all road users. We support the changes overall, and note the consideration of the impact on buses at this intersection, and at the two neighbouring signalised intersections (Clyde/Wharenui/Riccarton, and Hansons/Riccarton/Waimairi). Specifically: - We support the removal of the right turn from Middleton Road into Riccarton Road (eastbound) to improve the safety of this intersection. - We support the introduction of bus lanes and other bus priority measures as proposed. - We would also like to suggest the limit line for west bound Riccarton Road traffic lane on the corner of Riccarton Rd and Wharenui Rd (outside Ilam Toyota) is pulled back. The route 80 bus service currently struggles to turn right from Wharenui Road around this queueing traffic, so moving this line slightly further east would help this turning movement. - We support the extended right-turning lane from Riccarton Rd into Waimari Rd to accommodate queueing traffic. The high frequency Orbiter bus route turns right at this location. - We also strongly support the introduction of a right-turning arrow for vehicles turning from Riccarton Road into Ilam Rd. This is vital to assist the high frequency Purple Line route to safely make this turn through traffic travelling straight through on Riccarton Road.
21194	No	Diane	Mulholland		Feedback about the proposed changes to Ilam/Middleton/Riccarton Rd intersection. While I agree the intersection needs to be made safer, as I travel via this intersection at least a couple of times a day to get children to and from school, I still believe traffic needs to be able to travel both from Ilam Rd onto Middleton Rd, and Middleton Rd onto Ilam Rd. Otherwise how do you propose traffic gets from Middleton Rd onto Ilam Rd? The current design would push a lot more traffic onto Riccarton Rd and then onto Waimari Rd or possibly to Riccarton Rd/Wharanui Rd/Clyde Rd intersections which both don't allow much movement in traffic turning off Riccarton Rd, and especially at peak times this is not a good choice due to these roads already being really really busy/congested. Lights that enable traffic to travel from Ilam Rd to Middleton Rd, seperate from traffic travelling from Middleton Rd onto Ilam Rd would be ideal and could be implemented without any layout changes. Could this be part of the final plan and well as part of an interim solution to see what impact it has before the changes take place. Busses travel through this intersection for both Ilam school, Middleton Grange School and public transport so narrowing the entrances to the street does not allow busses, trucks etc to navigate the entrance to the street with its alignment, without going onto the other side of the road. You just have to watch busses come out of Homestead Lane on Ilam Rd to know that narrowing of street entrances have a big impact on busses exiting streets as I have not see one single bus that has been able to get out of Homestead Lane without having to cross the centre line onto the wrong side of the road. Public transport or cycling is not feasible for one of my children due to a disability.
21193	No	Leanna	Dodge		Agree that the Ilam/Middleton/Riccarton Road intersection is unsafe. However to close off access from Middleton Road to Ilam or right onto Riccarton Roads will have a major impact on families travelling to and from Middleton Grange School, Cornerstone Preschool & the Rannerdale sports fields. The only other option for this traffic would be to use Hansons Lane to turn right onto Riccarton Road. However, accessing Hansons Lane from Suva Street is a right turn, which at peak before and after school times is ridiculously busy and also unsafe for right turns. Has any consideration been given to installing right turning arrows at the Riccarton/Middleton/Ilam intersection, or failing that, installing traffic lights with right turning arrows from the Middleton/Rannerdale side of the Suva St & Hansons Lane intersection? Otherwise, you are likely to simply see the high accident rate move from Middleton/Ilam/Riccarton to Suva/Hansons intersection.
21191	No	Sarah	Wylie		I agree with the proposed changes, which I believe will enhance safety and traffic flow for cyclists and drivers. I drive and bike in this area often.

21189	Yes	Garry	Keast		Hansens Lane / Riccarton Rd / Waimairi Rd I bring to your attention that Liquor King closed 12 months ago and Armitage Williams are now 2019 building a Briscoe's to to replace it. The new driveway into Bush Inn Center is going to be beside my Tavern and not as per your plan and we loose 88 carparks because of this
21173	No	Priscilla	Byrne		As I am a resident of Field Terrace and am regular shopper at Bush Inn Centre and Countdown I would very much like to know how I am going to turn into Field Terrace from Riccarton Rd ? Am I meant to go through Middleton/ Ilam intersection and do a u turn somehow on Riccarton Road and then turn left into Field Terrace?? Just Asking...
21165	No	Mark	Darvill	Riccarton Clinic and After Hours Medical Centre	Many of the changes proposed are too far from our facility to impact upon it directly but many of our staff travel from the Riccarton direction and we are making our comments on behalf of those that we have spoken with. Generally we support the changes but we have some concerns at Middleton Road and Auburn Avenue. Middleton Road - we support the changing to left turn only but we have some reservations over narrowing of the lane to a single car width. A number of our staff cycle northwards along Middleton Road as they find it easier to turn right into Middletone off Blenheim than the alternative (Hansons Lane). I am told that the timing of the traffic lights on Blenheim Road mean that cyclists often arrive at the Middleton Road turning when there is little following traffic on Blenheim. This is not true at Hansons Lane. Accordingly, stationary traffic on Middleton Road awaiting a left turn onto Riccarton Road will leave very little room for northwest bound cyclists. Drivers may expect cyclists to mount the pavement heading north but the cycle path terminates before the intersection and then heads east before north again. Auburn Avenue - the extension of the right turn to Waimairi Road from Riccarton Road is supported although staff inform me that there is frequently some difficulty reaching that right turn lane as cars proceeding east on Riccarton Road effect a right turn into Auburn Avenue at the exact point that cyclists move from the nearside of Riccarton Road towards the right turn lane. Currently the cyclists turn after the cars. If the proposal goes ahead cyclists will cross exactly where the cars cross. A green-painted cycleway from the kerb to the right hand turn lane would provide a visual cue to both the cyclists and drivers.
21157	No	Jen	Goldie		The proposed changes make it potentially much harder for people living down Middleton road and its side streets. The right turn ban could be potentially solved with a green arrow, which would also mean you aren't cutting off people trying to get home at the end of the day, or people who made a quick stop at the Bush Inn center and want to get back home. As someone who commutes straight up Ilam from Middleton to get to work, the proposed change would force me down Riccarton to the turn by the Bush Inn center, which I hope would be accounted for with the right turn and light changes/times there as well if this was to go ahead, otherwise it could cause more congestion and frustration just a bit further down the road with the potential influx of commuters (and parents dropping kids off at Middleton Grange) needing to find alternate routes.

21155	No	Sonia	Bell-Thompson		One problem with the Ilam/ Middleton intersection is that people do not follow the recommended turning procedure when making a right turn from Ilam Road into Riccarton Road allowing the traffic from MIddleton Road to be able to make a right hand turn in to Riccarton Road. A family member is one of the biggest problems. I regularly walk the family dog along Ilam Road across Riccarton Road and into Middleton Road during the day and have never had any issues with traffic or the pedestrian crossings to Middleton Road and seldom see cyclist on Middleton Road. One suggestion is to give the walkers a little longer time to cross the road. When I drive I like the free left hand turn from Ilam Road into Riccarton Road and the free turn from Riccarton Road left into Ilam Road. I do take a short cut off Riccarton Road into Newham Terrace and down Rudleigh Ave. if the Riccarton Road traffic isn't moving. Occasionally I try Balgay street, Kirkwood Ave when the cue of traffic on Riccarton Road is long even try Clyde Road Kirkwood Ave. Could the out of Middleton turning right into Riccarton Road traffic be given their own lane? Reposition the pedestrian crossing on Middleton Road further back on Middleton Road to make space for a third lane, one left free turn into Riccarton Road, one across Ilam and one turning right into Riccarton and change the light phase so any traffic out of Middleton has its' own phase. Of course that would make three light phases instead of the existing two. Put the cyclist on the foot path with the Lime scooters and skate boarders, but could they ring a bell when coming up behind pedestrians. Alternatively make one footpath for pedestrian and prams/pushchairs and the other footpath for the non-pedestrians.
21152	No	John	Higgins		Affected property [redacted] Generally support the proposal. Support closing of right hand turns out of Field Terrace for safety reasons. Oppose closing of right hand turns into Field Terrace for the following reasons: - right hand turns from Riccarton Road are also being closed at Middleton Road, so if eastbound along Riccarton Road the route to Field Terrace is considerably longer. - there appears space to queue in the flush median without blocking the eastbound lane. - volumes turning right from the eastbound lane are likely low. - closing right hand turns out of Field Terrace would reduce safety issues turning right in to Field Terrace. - there are many other examples of right turning along Riccarton Road that restricting right turns into Field Terrace likely wouldn't result in a noticeable safety improvement.
21148	No	Joyce	Qu		Changing Middleton Road into T intersection is a stupid idea. Lot of car reply on the intersection to travel to university and after work. The best way to stop the crash is to stop traffic, from Ilam road and Middleton Road, turning onto Riccarton road. This will solve all problems.
21147	No	Jim	Yu		Changing Middleton Road into T intersection is a stupid idea. Lot of car reply on the intersection to travel to university and after work. The best way to stop the crash is to stop traffic, from Ilam road and Middleton Road, turning onto Riccarton road. This will solve all problems. And please stop wasting tax payer's money on cycle lanes. As majority of road users travel in cars. Cyclist are the ones ignoring red lights and being very agreesive on the road.
21146	No	Ru	Shen		We travel using this intersection all the time. To solve your problem all you need to do is to stop traffic from Ilam road and Middleton road right turning into Riccarton road.
21145	No	Yang	Yu		Changing Middleton Road into T intersection is a stupid idea. Lot of car reply on the intersection to travel to university and after work. The best way to stop the crash is to stop traffic, from Ilam road and Middleton Road, turning onto Riccarton road. This will solve all problems. And please stop wasting tax payer's money on cycle lanes. As majority of road users travel in cars. Cyclist are the ones ignoring red lights and being very agreesive on the road.

21144	No	Louette	McInnes		Concerning the 'no turning' at Ilam and Riccarton Rd - that is a good move to prevent accidents. However, Middleton Rd is a main route to the university for traffic straight through from Middleton Rd to Ilam Rd. That means the traffice coming north on Middleton will need to turn left, then go up to Waimairi Rd. With more traffic likely on Balgay St, and on Newnham Terrace with the proposed changes to the roads, I would like to see parking only on one side of those streets. Both have bends that make it dangerous to travel when cars are on both sides of the street at the bends and visibility is severely restricted when cars are parked on both sides. At the moment, both sides can be used until March 1st until the end of November , but the univ started orientations several weeks earlier, and the workers/construction workers at the univ have found the street and park there all summer. I nearly had two head on collisions there in just the last week since cars heading to Riccarton Rd are coming from a straight section of road at speed. Only my extreme care prevented the collisions. Very short term parking is allowed on Balgay when Ilam Primary and Kirkwood Intermediate let out, and cars don't usually park on that bend then, so the short term (10 minutes) works okay. I would also like to request all the no parking yellow lines on Milnebank St, and the white parking space lines, be repainted since students try to park there as soon as the lines get a bit worn, which they have. Also, I can see no need to change anything at Field Terrace.
21143	No	Samantha	Eason		Thank you for the opportunity to provide feedback on this proposal. I am very familiar with this intersection and the problems as I drive through it twice a day. Rather than go straight to the reconfiguration proposed, I would like to suggest a trial of an idea that is much less expensive: prohibit right hand turns onto Riccarton Rod for traffic traveling North/South through the intersection. The current proposal risks directing traffic away from Blenheim Road (a road designed to handle large volumes of traffic) and onto Riccarton Road (which is already struggling with congestion). At the times of day that I drive through this area, most of the cars traveling through this intersection are going straight through but the biggest danger is caused by a smaller number of vehicles turning right onto Riccarton Road from either Ilam or Middleton Roads. It's particularly precarious when there are two vehicles trying to make right hand turns onto Riccarton Road at the same time. Often they try to go around each other rather than pass on the outside (despite the current signage that shows them what to do) and typically turning traffic blocks the passage/sight-lines for straight-through traffic making the give-way rules hard to follow and causing confusion. I've witnessed a number of near misses that would be avoided if right-hand turns onto Riccarton Road were prohibited for general traffic. An exemption would need to be made for public buses.
21137	No	Gordon	Burnett	Five Axis Machining Limited	There needs to be speed restrictions along Riccaton rd and other incentives to get traffic to use alternative routes into town. This would allow mall and other local destination travel to move more freely . town traffic needs diverting at either end, and the resulting flows need to be managed for improved access to the destination.
21131	No	Teresa	von der Heiden		Hi, long overdue upgrade of the Ilam Road / Riccarton Rd intersection. Crossing Riccarton Rd there is every time a little nightmare. So good idea making it a T intersection! Important would be also a right arrow for westbound traffic turning right from Riccarton Rd into Ilam Rd. Currently you can only turn when the lights are turning red because of too much straight through traffic. Another nightmare! I can't wait for the upgrade. Thanks!
21125	No	Phil	Wilson		These changes look excellent and are much overdue. The intersection with Ilam/Riccarton road is a well-known nightmare. The proposed left-in/left-out restrictions, lengthened right-turn lanes, and other improvements for pedestrians and cyclists look well-thought out and should increase safety.
21121	No	Martin	Dixon		I use this dreadful intersection regularly. The main problem I perceive is when cars go straight on from Middleton Road to Ilam Road or vice-versa. Some drivers(like myself) 'straight on' without using indicators. Others use right indicator followed by left indicator which may cause confusion and a possible accident for someone coming from Ilam Road. A simple way of getting rid of such confusion is changing the pattern of the traffic lights. Starting with cars coming from Middleton Road, let the lights for these drivers be green with a green right arrow as well. Traffic lights for all other directions must be red. Next with cars coming from Ilam Road, let the lights for them be green with a green right arrow as well. Traffic lights for all other directions must be red. Finally for traffic in Riccarton Road(either way) just have normal traffic light pattern with green lights. Middleton Road and Ilam Road must have red lights. That should solve the main problem cheaply and with minimum cost.

21119	No	Hamish & Pam	Horton	NA	We consider this to be a very sad proposal because a major straight through route to the North will be closed, the only one proposed to e closed going North across Riccarton Road. We have lived off Middleton Road for 40+ years and are too old to cycle, which seems to be one of the major reasons for this proposal. It is apparent to us that the majority of traffic is straight through along Middleton and that the majority of accidents have been caused by R turning vehicles (we have to negotiate them every time we go through this intersection). As we use this route a lot a long time ago we deduced that turning R into Riccarton Road was too risky so have not done so. What is proposed seems all very complicated and costly. We feel the simplest and cheapest option would be to leave the intersection essentially as it is BUT prohibit turning R out of both Ilam and Middleton Roads. (Incidently, our son was run into by a R turning vehicle at this intersection some years ago.) Surely this could be engineered by appropriate and effective means. We are sure that the residents and community of both Middleton (eg school) and Ilam (University)will be grossly disadvantaged by the closure to through traffic. Having worked at Christchurch Hospital for decades I am very familiar with the usefulness of accessing Blenheim Road and have noticed many using the same route via Middleton Road enroute to Ilam. The alternative routes will require using "back streets" meaning higher volumes and the liklihood of more accidents and injuries. I notice that in the submission circulated you do not provide absolute data. The causes of the accidents for instance, plus the volumes of traffic going straight through versus those turning. I could count it myself but, as we use this intersection so much, our conclusion is well and truly in favour of through traffic being the majority users. So, in other words, this change we feeel is being made in favour of the minority. We absolutely oppose this proposal and feel discriminated against. We feel that it is akin to putting a gate at one of the major exits to our suburb and locking it. Please reconsider this proposal.

21106	No	Bronte	Barber		I 100% disagree with this idea of the intersection plans. As someone that has taken this road for At lest the past 15 years, and personally driven it for 8 of those years, I think all you need to do is create 'No Right Turns'. The build up is from both sides trying to turn right, however, if you make it just a straight road, then you will get a constant flow of traffic. With this plan you have put all the traffic down Riccarton Road, towards bushinn, which already gets congested. There are plenty of side streets off Ilam and Middleton that can take those people turning right to the places they need. I know I would prefer to turn right down Auburn, Suva or Arthur street just to save turning right at that intersection. Also; residents that live at the top of ilam coming from Middleton would then either have to make a u-turn down Riccarton Road, or get stuck at the lights on Waimairi Road/Riccarton just trying to get to Hanrahan to get back home. Making a left turn will create more frustration. Please don't do it.
21105	No	Duncan	Henderson		I think it is great that you are finally looking at doing something to the Ilam/Middleton/Riccarton Road intersection, it's a terribly designed intersection and it is long overdue. Unfortunately I think the one idea presented for this intersection is not good. I appreciate that you are trying to get the best of everything, for motorists, cyclists, pedestrians, traffic flow and buses (I myself am a cyclist), however I just think that cutting off Middleton Road like that is a bad idea. It is a very common route for travelling across town, i.e. my partner regularly uses it to get from Halswell to Jellie Park. When we used to flat in Ilam we would often use it to get to Tower Junction or other places on Blenheim Road. There are also a huge number of university students who flat down or off Middleton Road who will be adversely affected by cutting off through-traffic between Ilam and Middleton Roads, particularly for cyclists. I'm not aware of the route of the new cycleway going in here, but will it allow cyclists to get efficiently from Middleton Road to Ilam Road and the university? While keeping traffic flow and buses moving on Riccarton Road is a good idea, the ridiculous offset intersections at Clyde/Wharenui Road and Hansons Ln/Waimairi Road are what really slow down traffic along Riccarton Road and clog up intersections, particularly around Bush Inn. While they might be 'safer' in terms of a reduced opportunity for head-on collisions, it seems they do more harm than good. If you really want to speed up traffic on Riccarton Road, you need to re-align all three of these intersections so they are straight cross-intersections. I realise this is the expensive option, due to the property purchases which would be required, but cutting off Middleton Road is really only a temporary measure for traffic on Riccarton Road, which is still only going to get worse while these other intersections remain. Changing the western approach lane on Riccarton Road to Wharenui Road to a right turn only is a good idea that should have been done years ago.

21104	No	Amanda	Simpson		The changes proposed to Riccarton, Ilam and Middleton Roads are excellent and will make a huge difference to safety. Thank you for making these changes!
21103	No	Aaron	Cornwall		I'm really against getting rid of the straight through traffic from Middleton to Ilam rds as I use it very regularly as do others it will severely restrict me getting to the other side of the city. How about buying parts of the properties on each corner to align the two roads better?
21102	No	Rawa	Karetai	Home	I like the proposed changes to the Ilam / Middleton / Riccarton intersection - Looks great In regards to the Clyde Road / Riccarton Road / Wharenui Road intersection - I think there are two options here - Either do the same as you would for the Ilam / Middleton / Riccarton intersection option or, make it so that when you are turning right from the wharenui entrance that you can safely cross over into the lane turning left into Clyde road. This can be achieved in a number of ways, delaying the lights so that there is enough time for the traffic to clear the intersection for the traffic coming from Wharenui to Clyde Road or allow for there to be two lanes so that it is clear, those in the middle lane are to turn onto Clyde street only. I would follow these suggestions for Hansons Lane / Riccarton Road / Waimairi Road intersection also.
21099	No	Antony	Fairbanks		I drive up Middleton Road every work day to go to the University. This is the major route into the University for hundreds of drivers, that you will completely cut off with the proposed changes, which will then require everyone to turn right from Riccarton Road into Ilam Road instead. It will therefore significantly increase congestion on Riccarton Road, and produce very long right turn queues, that a simple traffic light arrow will not be able to cope with. Morning rush hour will be gridlock. So I think what you suggest is therefore a dumb idea. I suggest you either straighten the road (compulsory purchase 305B and demolish house) and add left and right turn arrow on both Ilam and Middleton roads, or put a roundabout in. The latter is a simple solution...if only someone would teach ChCh drivers how to use them...
21098	No	Catherine	Baker		I use this intersection regularly. There need to be 3 separate lights changes for this intersection. 1 change for Riccarton Road cars. 1 change for cars and cycles leaving Ilam Road then a 3rd change for cars and cycles leaving Middleton Road. At the moment it is impossible for cars or cycles to turn right into Riccarton Road from Ilam or Middleton Roads.
21097	No	Matt	Coulthard		With regards to the change at Middleton/Ilam/Riccarton. I lived at 5 Auburn Ave and commuted via bike or foot to the university in 2013. This intersection was the most dangerous part of my commute. Although a re-alignment would have potentially been a better option, given the lack of space and neighboring properties, I fully support the current proposal.
21096	No	Sophie	Walker		Hey there - I use the Middleton/Ilam/Riccarton road intersection on a daily basis for my commute home from work. I travel north along Middleton to cross it to Ilam road. I find what is most frustrating about this intersection is that those turning right onto Riccarton road block the straight through traffic and this happens for those on ilam turning right onto Riccarton too. My suggestion would be to time each lights seperatly - so that only people say heading north from Middleton or turning right onto Riccarton have right of way. And then the same happens on the opposite side so that only south travellers go on the green. This would keep cyclists safe as there is only one stream of traffic, and pedestrians too who need to cross. Thanks for reading

21095	No	Tony	Thompson	Officetech	I have used this intersection every day fro 15 years and I agree this intersection needs attention, however, it has a high flow of traffic transiting Riccarton Road and one of only 2 good options for traveling North from Blenheim Rd to the North of the City, the other being Clyde Rd. Waimari Rd is already way overloaded as an option as is Clyde Rd and Straven Road is a nightmare. In my opinion, all you need to do here is stop people from turning right into Riccarton Rd from both Middleton and Ilam and the traffic will flow safer and with more freedom. There are other options for people who need to join Riccarton Rd. If you stop traffic flowing through this intersection with the proposed road layout, pressure on Clyde, Waimairi and Straven will be dreadful.
21093	No	Logan	Stephens		I agree with the proposed changes, however would like to see the scope included to consider the intersection of Riccarton road and Yaldhurst road at Church corner to be included. Currently it is extremely dangerous for cyclist wanting to continue from the end of Riccarton road onto Yaldhurst road, and having to cross multiple lines of traffic. I have battled with this intersection daily on bike and it needs to be resolved. This is the perfect opportunity to add a cyclists refuge or safe passage. Please correct me if plans already exist to improve this for cyclists.
21092	No	Alistair	McKinnon		As someone who regularly travels down Middleton Road, Hansons Lane and Ilam Roads either by bike (commuting to work) or car these plans do not seem to have taken into account the volume of traffic at peak times of the day. Hansons Lane already banks up well beyond its capacity at school drop off and pickup times and the proposed plans will increase this further (by restricting options from Middleton Road into Riccarton Road). Given that the plan already has the preferred cycle path going Hansons Lane, Suva Street, Middleton Road this will further increase congestion for cyclists. The Suva Street plan for cycles will have a significant impact on parking and while the proposed changes here do not reduce the parking significantly, in the context of a significant change proposed in Suva Street there needed to be a thought to this as part of the plan. The Suva Street bike pat h already consulted on feels dangerous as a cyclist and is likely I believe to lead to cyclists avoiding this and using the other roads in the area, (too many places exists that cause cyclists to cross pedestrian pathways with limited visibility either for the cyclist or the pedestrian). I agree these corners are a safety concern, these plans do address some of these issues, however, they have a serious risk of moving the issues to either Hansons Lane or other streets. It appears as someone who uses this area regularly that the impact of traffic around the Middleton Grange Entrances (both cars and pedestrian) has been almost ignored. The plan has narrowed streets, built out areas around corners which in other areas (eg Suva Street into Hansons Lane) have significantly reduced visibility and increased congestion leading to far less safety for road users. Needs a rethink before it is too late
21090	No	Erin	Tait		I support the change!
21089	No	Allan	Kennaird	Contractor	Have all 4 intersections controlled separately with left turning (controlled) where appropiate
21088	No	John	Richardson		This seems largely to be beneficial, but I am skeptical about completely eliminating the access from Ilam road to Middleton road, as this is one of the only ways that does not already get extremely clogged with traffic to travel from the University through to blenheim road. Curletts road is rarely fit for purpose, the intersection at the corner of riccarton and wharanui road is near impossible to turn right at in peak traffic and this would leave a dog leg to Hansons lane as the only suitable option, and even this is a regularly overcrowded and difficult to navigate road at peak traffic hours. It seems this will put significant strain on the surrounding streets.
21087	No	Phil	Tappenden	Kirkwood Intermediate School	Thank you for the opportunity to comment. I believe that the recommendations as made are sound. I particularly think the single right turn lane into Wharenui Rd makes a lot of sense. Sorting out the Ilam/Middleton intersection should increase the safety of our pupils. I think there is a need for a loading zone on both sides of Riccarton Rd near our school to ensure that the buses can safely drop off and pick up both technology client pupils and our own school pupils. I have in the past asked for a small barrier near the pedestrian crossing from Riccarton Rd to Wharenui Road - this would greatly increase the safety of our pupils when leaving school. I am more than happy to discuss this further.

Submission #21189 Keast

Name* GARRY KEAST.

Address* [redacted]

Postcode

Phone

Email*

* required fields

Please note:

We require your contact details as part of your submission – it also means we can keep you updated throughout the project.

Your submission, name and address are given to decision-makers (Community Board/Committee/Council) to help them make their decision. Submissions, with names only, go online when the decision meeting agenda is available on our website.

If requested, submissions, names and contact details are made available to the public, as required by the Local Government Official Information and Meetings Act 1987.

If there are good reasons why your details and/or submission should be kept confidential, please contact our Engagement Manager on (03) 941 8999 or 0800 800 169 (Banks Peninsula).

Please fold with the reply paid portion on the outside, seal and return by 11 March 2019

fold staple or tape here fold

Please give us any other feedback you would like us to consider

Hansens Lane / Riccarton Rd / Waimairi Rd.
I bring to your attention that Liquor King closed 12 months aga, and Armitage Williams are now 2019 building a Briscoes to to replace it, The new driveway into Bush Inn Centre is going to be beside my TAVERN and not as per your plan. and we loose 88 carparks because of this.

fold fold

FREEPOST Authority No.178

Free

tape here

Attention: Philippa Upton
Ilam Road / Middleton Road / Riccarton Road intersection
Engagement Team
Public Information and Participation Unit
Christchurch City Council
PO Box 73016
Christchurch 8154

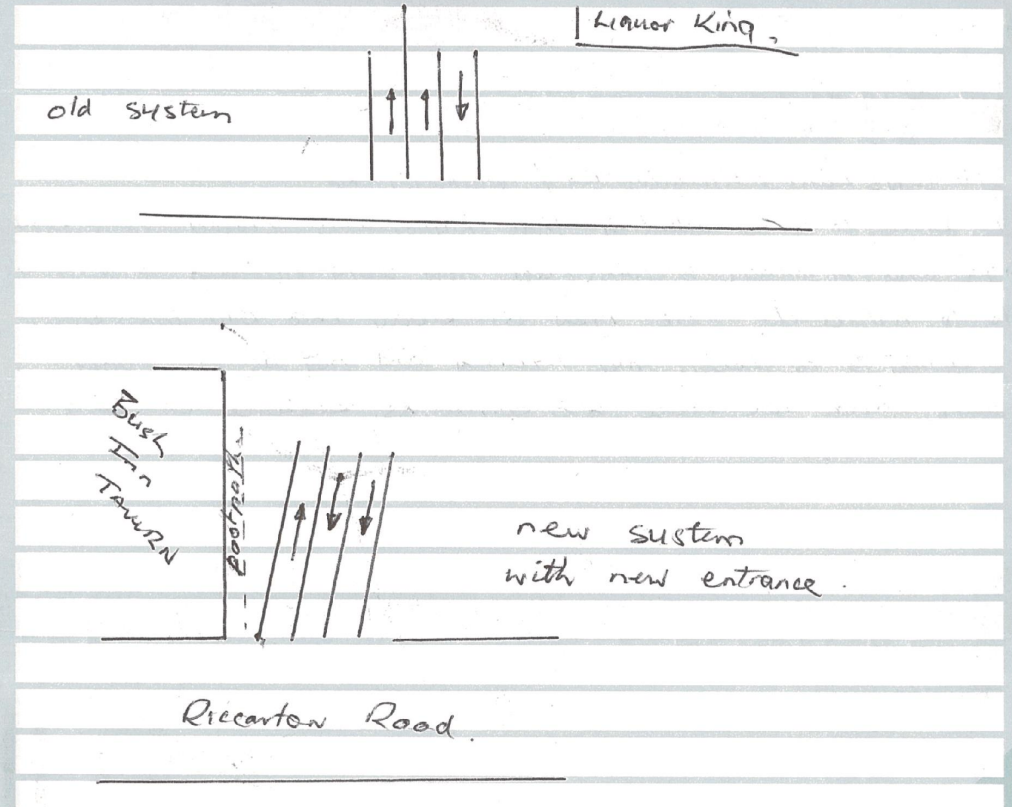
Christchurch City Council

Have your say

Make sure your feedback gets to us before 11 March 2019

Save time and do it online ccc.govt.nz/haveyoursay

Comments



14 Ilam Road / Middleton Road / Riccarton Road intersection

Submission #21627 CDHB

Canterbury District Health Board
Te Poari Hauora ō Waitaha

Submission on Ilam/Middleton/Riccarton Road Intersection

To: Christchurch City Council

Submitter: Canterbury District Health Board

Attn: Bronwyn Larsen
Community and Public Health
C/- Canterbury District Health Board
PO Box 1475
Christchurch 8140

Proposal: CCC is proposing changes to the Ilam/Middleton/ Riccarton intersection to make our roads and footpaths safer for drivers, cyclists and pedestrians.

SUBMISSION ON ILAM, MIDDLETON, RICCARTON ROAD INTERSECTION

Details of submitter

1. Canterbury District Health Board (CDHB).

2. The Ministry of Health requires the submitter to reduce potential health risks by such means as submissions to ensure the public health significance of potential adverse effects are adequately considered during policy development.

Details of submission

3. We welcome the opportunity to comment on the Ilam, Middleton, and Riccarton Road Intersection. The future health of our populations is not just reliant on hospitals, but on a responsive environment where all sectors work collaboratively.

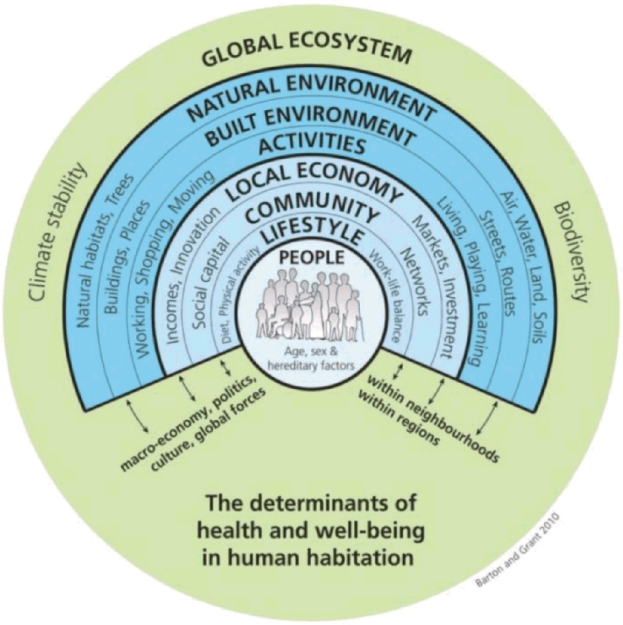
4. Health creation and wellbeing (overall quality of life) is influenced by a wide range of factors beyond the health sector. These factors can be described as the conditions in which people are born, grow, live, work and age, and are impacted by environmental, social and behavioural influences. They are often referred to as the 'social determinants of health[1]. The diagram[2] below shows how the various influences on health are complex and interlinked.

5. Transport and urban design have particular influences on the health and wellbeing of New Zealanders. One obvious health outcome which is of particular relevance for this intersection is increased safety for all road and footpath users and reduced crash risk. However, the greatest health impact is how the design of streetscapes can encourage or inhibit physical activity. Low physical activity is the 10th leading risk factor for death and disability in New Zealand and contributes to a number of preventable diseases which cause the most deaths per year in the developed world[3].

6. The most effective way to maximise people's safety and physical activity is to take these factors into account as early as possible during decision making and design development. Initiatives to improve health outcomes and overall quality of life must

[1] *Public Health Advisory Committee. 2004. The Health of People and Communities. A Way Forward: Public Policy and the Economic Determinants of Health. Public Health Advisory Committee: Wellington.*
[2] Barton, H and Grant, M. (2006) A health map for the local human habitat. The Journal of the Royal Society for the Promotion of Health 126 (6), pp 252-253. http://www.bne.uwe.ac.uk/who/healthmap/default.asp
[3] Institute for Health Metrics and Evaluation. 2018. http://www.healthdata.org/new-zealand

involve organisations and groups beyond the health sector, such as local government if they are to have a reasonable impact[4].



General Comments

7. The CDHB is generally supportive of changes to the Ilam/Middleton/ Riccarton Road intersection which, as crash statistics confirm, is currently not a safe road design for people who drive, walk, cycle or bus.

8. It is acknowledged that this area is extremely busy, due to a number of key activity centres being located in close proximity and space for various travel choices is at a premium.

9. Riccarton Road experiences a high rate of vehicle congestion during peak periods, which impacts upon crash risk, physical health and environmental outcomes. Exposure to emissions and associated risks to respiratory health are greatest for car drivers when sitting in congestion[5], and congestion causes unnecessary vehicle

4 McGinni s JM, Williams-Russo P, Knickman JR. 2002. The case for more active policy attention to health promotion. Health Affairs, 21(2): 78 - 93.
[5]Apparicio,P., Gelb, J., Carrier, M., Mathieu, M-E. & Kingham, S. 2018. Exposure to noise and air pollution by mode

emissions which impact negatively upon achieving urgent goals to mitigate climate change and other adverse environmental effects. The CDHB encourages Council to take this opportunity to reconfigure preferred transport choice down Riccarton Road from private vehicle use to modes which promote better health and environmental outcomes. Prioritising bus and pedestrian movement down Riccarton Road via dedicated bus lanes and footpaths would promote these ways to travel as the easiest, most convenient and healthiest option.

10. The CDHB has a number of specific recommendations for consideration which would further improve health outcomes for the community.

Specific comments

11. The CDHB recommends that traffic continues to be strictly controlled via right turning arrows from Riccarton Road into Ilam, Clyde and Waimairi Roads. Red light cameras may also need to be considered at these intersection to ensure compliance. This combination will reduce crash risk, particularly for vehicles and cycles travelling straight through on Riccarton Road. Additionally, it is likely to ensure traffic flows better through these intersections, provided the duration of the turning arrows are sufficient, relieving potential build-up of traffic waiting to turn right.

12. The CDHB recommends that a full-time bus lane is considered down the length of Riccarton Road. Adequate lane space to implement this would of course be a factor, and trade-offs such as removal of all on-street parking and removal of verges (while ensuring that footpaths remain optimum width for accessibility) would need to be factored into such a consideration. However the benefits would be ensuring that maximum efficiency is achieved for buses on one of the busiest public transport routes in and out of the city. Riccarton Road should be prioritised as a public transport and pedestrian corridor, and traffic re-directed to other routes such as Blenheim Road where possible. Such a lane could also be used as a high-occupancy vehicle lane in the future.

13. The CDHB recommends that bus and cycle priority lights are used down Riccarton Road. This will enable buses and cycles to safely navigate these busy intersections given they will be travelling in close proximity to cars. An example of an existing

of transportation during rush hours in Montreal. Journal of Transport Geography Vol 70: June 2018. Pp 182-192

intersection which works well in this respect is Colombo Street at the Moorhouse Ave underpass. Prioritising the movements of buses and cycles also provides incentive for people to use public or active transport by assisting these modes to achieve efficiency closer to private vehicle use. A change in travel behaviour from private vehicles to active or public transport carries a number of benefits for physical health, mental health and environmental outcomes[6].

14. It is difficult to establish from the concept designs provided the width of the footpath alongside streets. It appears that grass verges have been added in sections, of which the CDHB is generally supportive, however not at the expense of a flat footpath of adequate width. Riccarton Road in particular requires footpaths which achieve minimum width (1.2m), however ideally would achieve best practice of 1.5m given that space on footpaths is now shared between people who walk, people who use mobility aids and e-scooters. Safety is paramount for pedestrians given that many people will be travelling by foot to access businesses and other amenities in the area.

15. The CDHB supports turning restrictions as indicated in the concept designs as these will reduce the chance of crashes, particularly at Riccarton/Ilam/ Middleton Road where the 'S-bend' of this intersection makes visibility for turning traffic very poor without such turning restrictions.

Conclusion

16. The CDHB does not wish to be heard in support of this submission.

Person making the submission

Dr Anna Stevenson
Public Health Specialist

Date: 4/03/2019

[6] Husnain, B. et al. 2018. *What If We Can Design Transit to Improve Our Health*. WSP: Canada. Accessed from: https://www.wsp.com/en-CA/insights/ca-what-if-we-can-design-transit-to-improve-our-health
Page **5** of **6**

Contact details

Bronwyn Larsen
For and on behalf of
Community and Public Health
C/- Canterbury District Health Board
PO Box 1475
Christchurch 8140
P +64 3 364 1777
Bronwyn.Larsen@cdhb.health.nz

Submission #21823 Karino

Name* Ayumi Karino

Address* [redacted]

Postcode

Phone

Email*

Please note:

We require your contact details as part of your submission – it also means we can keep you updated throughout the project.

Your submission, name and address are given to decision-makers (Community Board/Committee/Council) to help them make their decision. Submissions, with names only, go online when the decision meeting agenda is available on our website.

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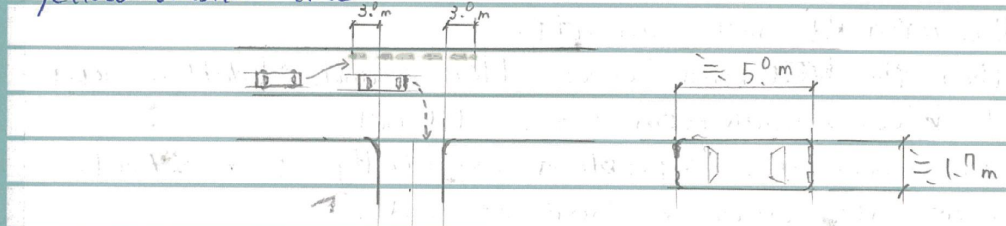
Please fold with the reply paid portion on the outside, seal and return by 11 March 2019

fold staple or tape here fold

Please give us any other feedback you would like us to consider

About T junction, I think there should be yellow dashed line



So that a car turning right will not be blocking cars behind going straight.

thank you very much.
Regards Ayumi

fold

FREEPOST Authority No.178

6 MAR 19 NZPS

Free

tape here

Attention: Philippa Upton
Ilam Road / Middleton Road / Riccarton Road intersection
Engagement Team
Public Information and Participation Unit
Christchurch City Council
PO Box 73016
Christchurch 8154

Christchurch City Council

Have your say

Make sure your feedback gets to us before 11 March 2019

Save time and do it online ccc.govt.nz/haveyoursay

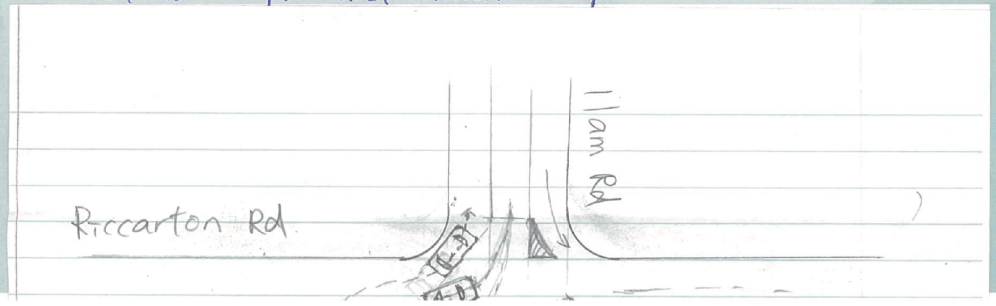
Comments

I can see some benefits for pedestrians, but where are the benefits for drivers from Middlton Rd to Ilam Rd or to Reccarton Rd towards the city centre?

Your plan shows that every car frow Middlton Rd to Riccarton Rd must turn left.
Then the ~~Road~~ road between Hanson and Middlton need to have enough room but it did not.
Even now it is a problem especially after school.
Accidents occur because of that.

Also there are Pedestrian / cycle shared Path in your plan but I cannot see the benefit of this.
Where is the asset of this fading path?

For the intersection, wee need the centre line on Riccarton Rd to show where to wait for turning right like usual intersection.
It is simple and much cheaper.



Submission #21884 Robson and Keats

Ilam Rd Middleton Rd cnr

10 Mar 2019 10:40 AM

Untitled 1 of 5

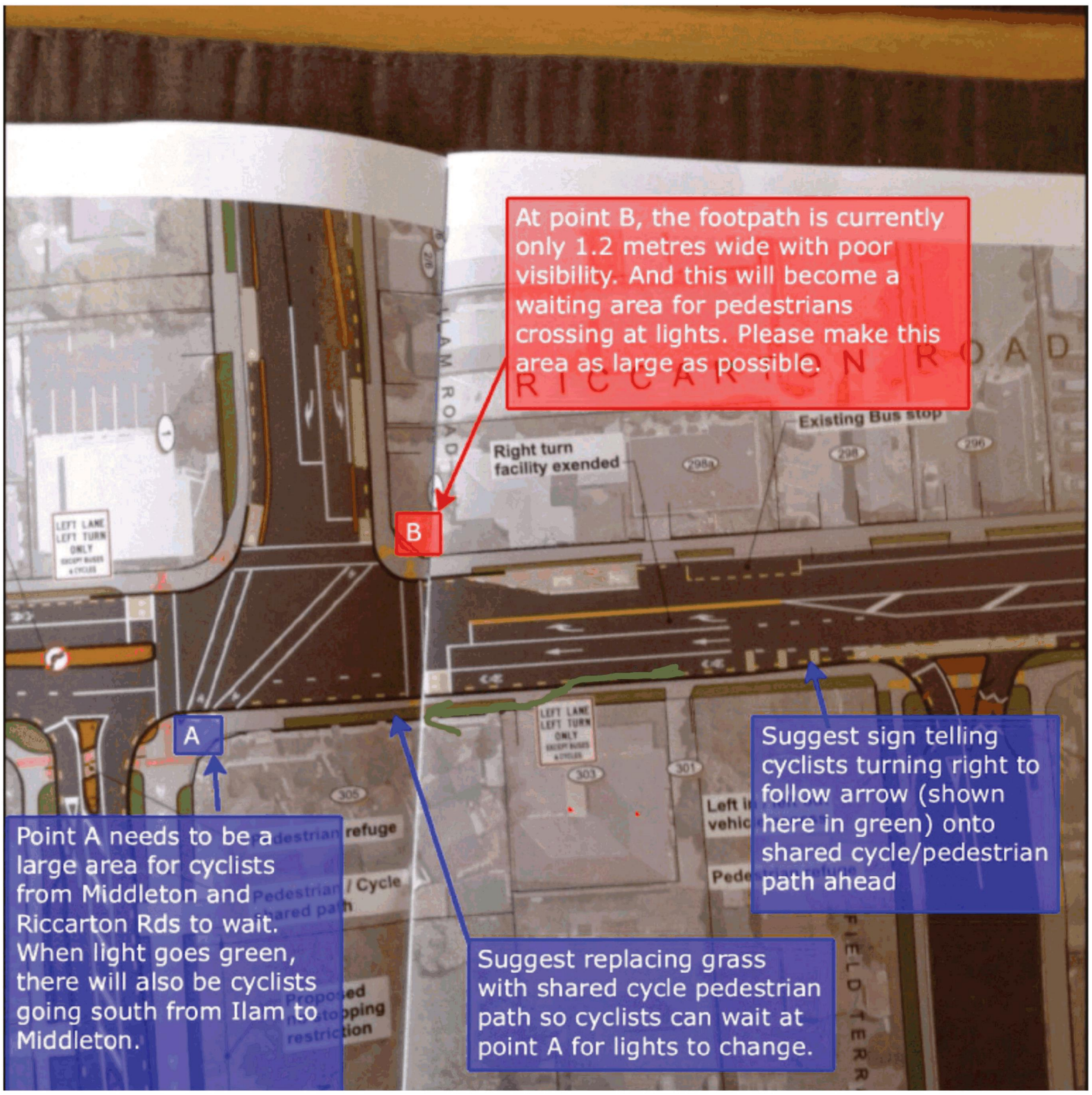
A: Ilam Rd Middleton Rd intersection

B: Cyclist turning right from Ricc Rd to Ilam

This submission considers a cyclist going west on Riccarton Rd turning right on to Ilam Rd towards the university. It also discusses placement of street furniture.

Ilam Rd Middleton Rd cnr

Ricc Rd submission 2 of 5



At point A, there are currently 2 lampposts, 2 traffic light poles, and a control box. These reduce the area for cyclists. Any grass areas at pressure points will also increase the congestion.

Ilam Rd Middleton Rd cnr

Untitled

Street furniture needs to be placed carefully for pedestrian/cycle flow. This page and the following ones show current examples near the intersection where street furniture is poorly placed.

Ilam Rd Middleton Rd cnr

Untitled

Ilam Rd Middleton Rd cnr

Untitled

This one is a reminder to make sure all street furniture and hedges leave as much width for the footpath as possible.

There are several rest home care places near here and visitors take residents for walks in wheelchairs. Scooters now are use the footpath and there are lots of pedestrians on Riccarton Rd both at night and in the day. Keep the footpaths as wide as possible.

Submission #21884 Robson and Keats

Ilam Rd Middleton Rd cnr

10 Mar 2019 10:40 AM

Untitled 1 of 5

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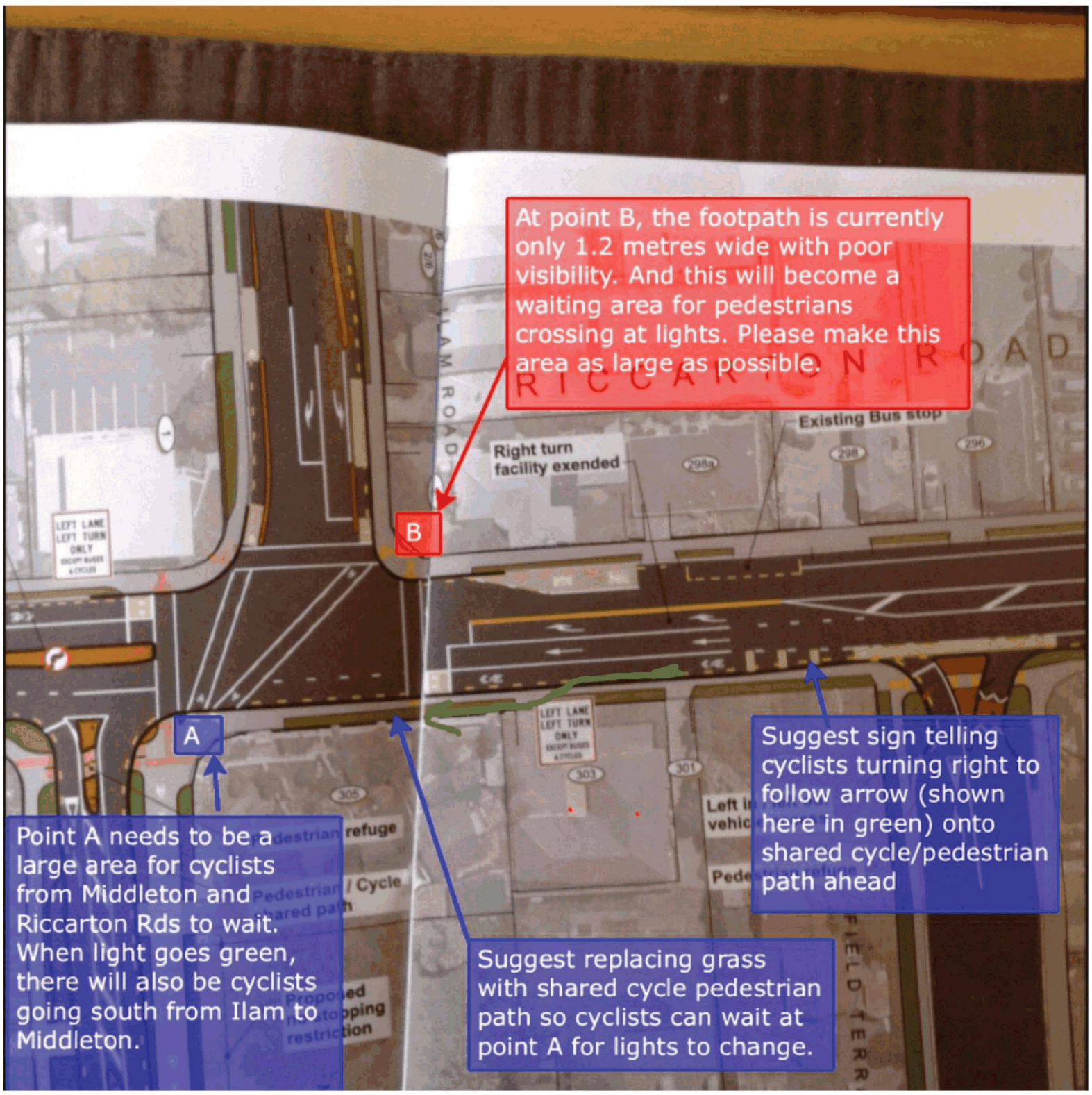
Ricc Rd submission 2 of 5



At point A, there are currently 2 lampposts, 2 traffic light poles, and a control box. These reduce the area for cyclists. Any grass areas at pressure points will also increase the congestion.

Ilam Rd Middleton Rd cnr

Untitled

Street furniture needs to be placed carefully for pedestrian/cycle flow. This page and the following ones show current examples near the intersection where street furniture is poorly placed.

Ilam Rd Middleton Rd cnr

Untitled

Ilam Rd Middleton Rd cnr

Untitled

5 of 5

This one is a reminder to make sure all street furniture and hedges leave as much width for the footpath as possible.

There are several rest home care places near here and visitors take residents for walks in wheelchairs. Scooters now are use the footpath and there are lots of pedestrians on Riccarton Rd both at night and in the day. Keep the footpaths as wide as possible.

Intersection Safety: Ilam / Middleton / Riccarton

Scheme Assessment Report

March 2017

Document completion

Action	Name	Signed	Date
Parts 1 - 5			
Prepared by	Bill Homewood		
Approved by	Bruce Conaghan		
Part 6			
Part 7			

Waipuna/Halswell-Hornby-Riccarton Community Board
04 February 2020

Christchurch City Council

EXECUTIVE SUMMARY

This intersection has an identified safety issue and has been ranked using the safer systems approach. A safer system contributes to network efficiency, saves lives and reduces injuries. Using the safer systems approach, this project will provide roads that by their design, reflect function and place to make them safer, particularly for pedestrians and cyclists. Safety improvements are targeted at hot spots, particularly intersections where significant safety issues exist.

This intersection is made up of three roads. Riccarton Road, which is a Minor Arterial Road, is aligned east – west. Ilam Road and Middleton Road, which are the northern and southern approaches respectively, are both designated as collector roads in the CTSP.

The Network Management Plan summarised the priorities for these roads. Table 1 shows these priorities.

Table 1: Network Management Plan Mode/Place/Time of Day Status

PRIORITY TABLE	Mode	Walking	Cycling		Public Transport		Freight	General Traffic	
	Network	III	I	II	I	III	III	III	IV
Place	Time	Other	1. Major Cycleways	2. Local Cycleways	1. Metro Lines	3. Other	3. Other	3a. Minor Arterial	4a. Collector
4. Outside Centres	AM	1.0	2.0	1.5	2.0	1.0	1.0	1.0	0.5
	IP	1.0	2.0	1.5	2.0	1.0	1.0	1.0	0.5
	PM	1.0	2.0	1.5	2.0	1.0	1.0	1.0	0.5
	OP	1.0	2.0	1.5	2.0	1.0	1.0	1.0	0.5
	Road	All	Middleton Ilam	Riccarton	Riccarton Ilam	Middleton	All	Riccarton	Middleton Ilam

A CAS analysis has been completed for the period 2011 – 2015. This shows a high crash rate at this intersection over the past five years. There is a total of 31 crashes in this study period, with three involving pedestrians, one involving a cyclist and 27 involving only vehicles.

The predominant crash types are rear end crashes and right turn against. The right against crashes typically involved vehicles either right turning from Riccarton Road into Ilam Road or from Ilam Road into Riccarton Road. There was one crash involving a vehicle right turning out of Middleton Road however none involving vehicles right turning in. There was a total of 10 right turn against crashes involving only vehicles. There was also a right turn against crash involving a cyclist, bringing the total to 11, where a vehicle failed to give way to the cyclist.

There were 14 rear end crashes. Eight of these involved vehicles queuing for the intersection while the remaining 6 involved vehicles driving away from the intersection, presumably these were associated with queueing for the adjacent intersections however this is not explicitly stated in the CAS data.

These crashes are explored in more detail in section **2.4.10.**

The project objectives are outlined below, and include the need to provide for bus priority measures and the Major Cycleway, both of which travel through this intersection. The Bus Priority project is currently not funded in the LTP however is located on Riccarton Road while the Major Cycleway project uses Ilam Road and Middleton Road. The MCR project has recently completed consultation, however has not yet received board approval.

The project objectives are:

- Reduce the number of fatal and serious injuries at the Ilam/ Middleton/ Riccarton intersection.
- Reduce the number of crashes involving pedestrians or cyclists at the Ilam/ Middleton/ Riccarton intersection.
- Maintain network efficiency for public transport along Riccarton Rd.
- Integrate with the future bus priority project
- Integrate with the MCR

Through the options assessment process a total of 16 options were considered, which looked at improvements to the intersections, works to mitigate effects on capacity, measures to improve bus priority and two types of MCR facilities. These are outlined in **Section 4**.

The final design is included in **Appendix P**, the key features of the design are:

- Ilam Road / Riccarton intersection change to a T intersection with Middleton Road taken out of the intersection.
- Middleton Road has been restricted to left in left out. This is self-enforcing with an island on Riccarton Road.
- The pinch points in the footpath, where Middleton intersects with Riccarton Road, has been removed through the narrowing of Middleton Road which has allowed the road space to be re
- Left turn slip lane has been removed from Ilam Road into Riccarton Road. The removal of this slip lane improves pedestrian safety and removes the pinch point on the footpath where Ilam Road and Riccarton Road intersect.
- For westbound buses the bus lane will operate as through lane for cyclists and buses but a left turn lane for vehicles wanting to turn let into Middleton Road after the intersection. This lane will be signed 'left lane left turn only except buses and cyclists'.
- For eastbound buses the left turn lane has been designed to allow the through buses to use it as well, allowing them to jump the queue. This lane will be signed 'left lane left turn only except buses and cyclists'
- A cycle crossing has been provided from a Bi Directional Facility on Middleton Road to uni direction facilities on Riccarton Road.
- A cycle crossing has been included on Middleton Road to provide a safe crossing facility for cyclists, who need to cross Middleton Road
- Pedestrian Refuge has been added on Middleton Road to replace the signalised crossing which is removed as a result of Middleton Road no longer being part of the intersection.

The scheme includes the following features at the intersection of Field Terrace / Riccarton Road:

- Field Terrace is restricted to left in left out at Riccarton Road with the use of an island on Field Terrace. This is shown in **Appendix P**.

The scheme includes the following features at the intersection of Clyde Road / Riccarton Road / Wharenui Road:

- The eastern approach right turn lane, Riccarton Road into Clyde Road, has been extended from the existing 15 metres to 55 metres. This has included the removal of five parking spaces on the south side of Riccarton Road.
- The western approach has been changed from what is currently a through lane and shared through and right turn lane to a through lane and a dedicated right turn lane. There has also been additional 44 metres of no stopping restrictions on western approach lane, which has

resulted in four parking spaces being removed. This allows right turners to queue in their own lane, something which already effectively happens as through vehicles do not tend to queue behind the right turning vehicles. This is shown in **Appendix P**.

The scheme includes the following features at the intersection of Hansons Lane / Riccarton Road / Waimairi Road

- The right turn bay into Waimairi Road from Riccarton Road has been extended to 48 metres from the existing 30 metres. This is shown in **Appendix P**.

Modelling has been completed which identified the following impacts on the network efficiency, this modelling was used to inform the options assessment and is explored in more detail in the options assessment section (section 4). This modelling has been continued to see the impact of the preferred design. Table 2 compares the base which the preferred option, including the extended right turn lanes at adjacent intersections.

Table 2: Modelling Outputs Preferred Design

	Riccarton Road Travel Times					
	AM Peak		Inter Peak		PM Peak	
	2016	2031	2016	2031	2016	2031
General Traffic - Eastbound Travel Time (s)						
Base	194	180	182	180	215	200
Scheme	200	188	167	171	192	183
Change	3.2%	4.9%	-8.5%	-5.3%	-10.7%	-8.9%
General Traffic - Westbound Travel Time (s)						
Base	168	168	187	182	220	221
Scheme	165	172	152	147	186	209
Change	-2.0%	2.5%	**-19.0%**	**-18.9%**	-15.4%	-5.6%
Public Transport - Eastbound Travel Time (s)						
Base	295	291	273	272	306	307
Scheme	309	301	299	299	300	297
Change	4.7%	3.4%	9.8%	**10.2%**	-2.0%	-3.3%
Public Transport - Westbound Travel Time (s)						
Base	284	294	264	277	307	323
Scheme	321	299	280	278	323	340
Change	**13.1%**	1.7%	6.2%	0.6%	5.0%	5.4%

A Lighting Assessment has been prepared by Connetics. The results of the assessment are provided in **Appendix Q** and identify that the current lighting meets standards, however the existing luminaires will need replacing in the next medium to short term with only two years until the end of their economic life. Replacing the luminaires will cost $35,115.

A cost estimate has been completed for this project which shows that the total cost for the work is $1,323,100, this is detailed further in **Section 5.8**. The project has a BCR of 4.3, as outlined in **Section 5.9**.

A scheme stage audit has been carried out on drawings RD3587S10 – Ilam / Middleton / Riccarton intersection, RD3587S10-004 – Hansons / Riccarton / Waimairi intersection and RD3587S10-005 – Clyde / Riccarton / Wharenui intersections. The designer's responses have been sent back to the Audit Team.

A copy of the safety audit including the designer's responses is provided in **Appendix X**. The designer's responses are provided in blue text. There were no disagreements with the safety auditor.

1 INTRODUCTION

This report documents the development of the scheme design for Ilam / Middleton / Riccarton intersection.

Figure 1 shows the location of the scheme.

Figure 1 : Location Map

The budget for each project is outlined below in **Table 3**.

Table 3: Project Budgets

Year	WBS 542/2373 TRIM CP502021/11
2016	$6,777
2017	$265,200
2018	$0
2019	$270,000
2020	$506,940
Total	$1,048,917

The Project team is outlined in **Table 4**.

Table 4: Project Team

Role	Name	Organisation
Project Sponsor	Chris Gregory	CCC
Project Manager	Andy Richards	CCC
Lead Scheme Designer	Bill Homewood	CCC
Consultation Leader	Phillipa Upton	CCC
Transport Planner	Adam Taylor	CCC
Area Engineer	Edwin Tiong	CCC
Signals Engineer	Bill Sissons	Advance Traffic Solutions
CTOC	Jeff Owen	CCC
Transport Modeller	Bevan Wilmshurst	TDG
Economic Evaluation	Bevan Wilmshurst	TDG
Cost Estimator	Paul Kitto	GHD
Landscape Design	Denis Preston	CCC
Safety Auditor	Andrew Fergus & Stephen Wright	GHD & Beca

2 BACKGROUND

2.1 The need for the project

The need for each of the capital project is discussed below and summarises the Project Initiation Briefs. The Brief is attached in

Appendix A .

This intersection has an identified safety issue and has been ranked using the safer systems approach. A safer system contributes to network efficiency, saves lives and reduces injuries. Specifically through safer roads and roadsides.

Using the safer systems approach, this project will provide roads that by their design, reflect function and place to make them safer, particularly for pedestrians and cyclists. Safety improvements are targeted at hot spots, particularly intersections where significant safety issues exist. This proposal will:

- Reduce the number of fatal and serious injuries at the Ilam/ Middleton/ Riccarton intersection.
- Reduce the number of crashes involving pedestrians or cyclists at the Ilam/ Middleton/ Riccarton intersection.
- Maintain network efficiency for public transport along Riccarton Rd.

2.2 Strategic Transport Context

2.2.1 Introduction

The current strategic direction of land transport in New Zealand at the national, regional and local levels have consistent themes of improving travel choice, affordability, environmental sustainability, efficiency of the transport network and improving safety. The CTSP was developed in the strategic context of relevant national, regional and city council plans and therefore maintains consistency with other plans and strategies as shown in **Figure 2**.

Figure 2 diagrammatically shows the relevant national and regional strategies (on the right) that inform and influence local transport strategy, the Christchurch Transport Strategic Plan (CTSP). **Figure 2** also shows the local pans which should inform and be consistent with the CTSP. The CTSP has a key relationship with the Greater Christchurch Transport Statement; both of these documents are described below in more detail.

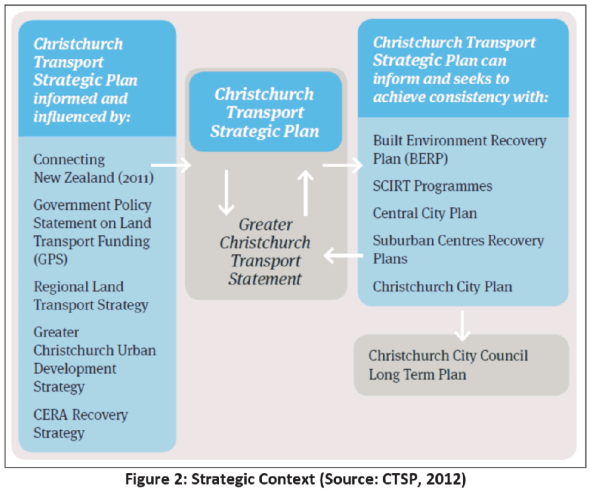


Figure 2: Strategic Context (Source: CTSP, 2012)

2.2.2 National Strategies

Government Policy Statement 2012:

The GPS seeks to develop a land transport system that supports economic growth and productivity, improves road safety and provides value for money.

NZTA Statement of Intent

The NZTA Statement of Intent has the following goals:

- Integrate one effective and resilient network for customers.
- Shape smart, efficient, safe and responsible transport choices.
- Maximise effective, efficient and strategic returns for New Zealand.

2.2.3 Regional Strategies

Canterbury Regional Land Transport Strategy – (RLTS 2012-2042)

The RLTS seeks that Canterbury has an accessible, affordable, integrated, safe, resilient and sustainable transport system by achieving the following goals:

- Ensure a resilient, environmentally sustainable and integrated transport system
- Increase transport safety for all users
- Protect and promote public health
- Assist economic development
- Improve levels of accessibility for all
- Reduced greenhouse gas emissions from use of the domestic transport system

The Greater Christchurch Transport Statement

The GCTS set an overarching framework for transport in the Greater Christchurch area with a specific objective to "*Provide more options for people to walk, cycle and use public transport*". Alongside the framework of the GCTS, the CCC has developed the Christchurch Transport Strategic Plan (CTSP) 2012 which establishes the goals, objectives and activities to be undertaken to support the recovery of Christchurch, with the vision "*To keep Christchurch moving forward by providing transport choices to connect people and places*".

Figure 3 shows the Transport outcomes sought by the GCTS and the associated objectives. The GCTS seeks a transport system will support economic and social well-being by connecting people, goods and services with places, while minimising the environmental impacts and creating liveable communities.

Transport Outcomes		Objectives
Journey Links between people & places	Connectedness	Integrate land-use activities with transport solutions, enabling ease of movement between places
	Resilience, reliability and efficiency	Optimise the use of existing transport assets through managing travel demand and networks
		Provide safe, efficient and resilient links to connect people and places
		Ensure efficient and predictable travel time between key places
	Travel choice	Provide more options for people to walk, cycle and use public transport
Safety	Safe journeys	Minimise the severity and social cost of crashes
		Improve personal security
Environment	Liveable communities	Support place-making, and 'active travel' and public transport, reducing emissions and improving public and environmental health
	Low environmental impacts	

Figure 3: Greater Christchurch Transport Statement

Urban Development Strategy for Greater Christchurch and Land Use Recovery Plan (UDS/LURP)

The UDS and LURP seek to develop a transport system that meets the changed needs of people and businesses and enables accessible, sustainable, affordable and safe travel choices.

2.2.4 Local Strategies

The Christchurch Transport Strategic Plan

The CSTP is a non-statutory Plan that updates Christchurch's local transport policy in relation to relevant statutory plans, in particular the Canterbury Regional Land Transport Strategy, Regional Policy Statement, Greater Christchurch Urban Development Strategy and Regional Public Transport Plan, placing a strong emphasis on travel choice by establishing strong networks for all transport options during the next 30 years.

The CTSP seeks to provide transport choices to connect people and places, with goals to:

- Improve access and choice
- Create safe, healthy and liveable communities
- Support economic vitality
- Create opportunities for environmental enhancements

Christchurch Central Recovery Plan – An Accessible City

The Accessible City chapter of the Recovery Plans recognises the opportunity through recovery to enhance travel choice through central city.

2.3 Land Use Environment

2.3.1 Description

The surrounding land use is mixed, as shown in Figure 4below. There are several medical uses, including a Chiropractor, Physiotherapist, nursing home, sexual health clinic and veterinarian, as well six motels, and a large amount of residential units.

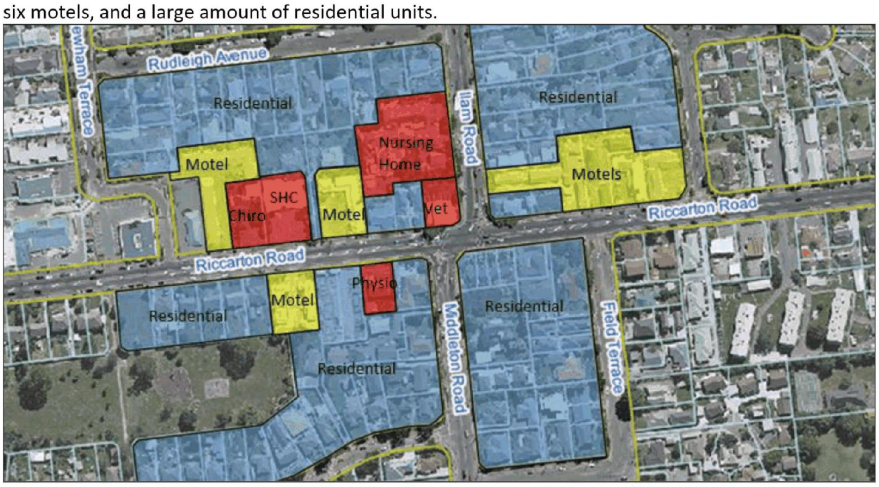


Figure 4: Overview of adjacent land use

2.3.2 City Plan Zoning

The City Plan zones are shown in **Figure** 5 below. The land adjacent to the road is zoned Residential Suburban Zone. The Residential Suburban Zone provides for the traditional type of housing in New Zealand in the form of single or two storeyed predominantly detached or semi detached houses.

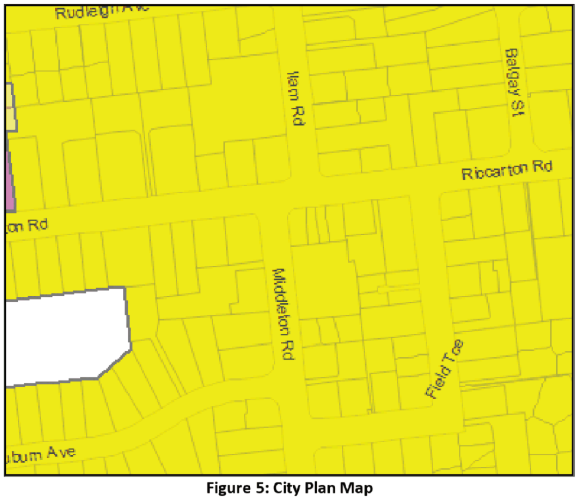


Figure 5: City Plan Map

2.4 Transport environment

This section provides a description of the existing transport environment including an outline of the crash history and the road users. The project is within a 50km/hr speed limit area.

The CSTP outlines a series of network maps that define each roads role in the overall network. These roles and priorities are explored in sections 2.4.1 to 2.4.5 below. **Figure 6** shows the Strategic Road Network, as outline in the District Plan, Riccarton Road is a Minor Arterial road in the District Plan.

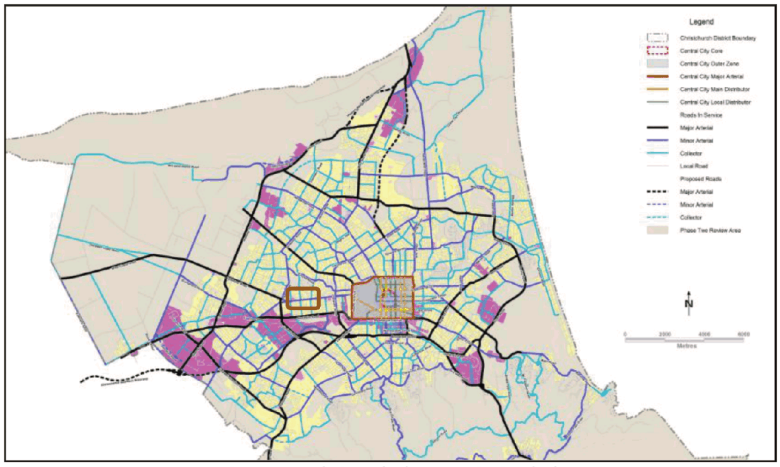


Figure 6: Road Hierarchy (Source: District Plan)

2.4.1 Pedestrians

Figure 6 shows the walking network. This section of Riccarton Road is not part of the walking network. However it does provide an important link to the university.

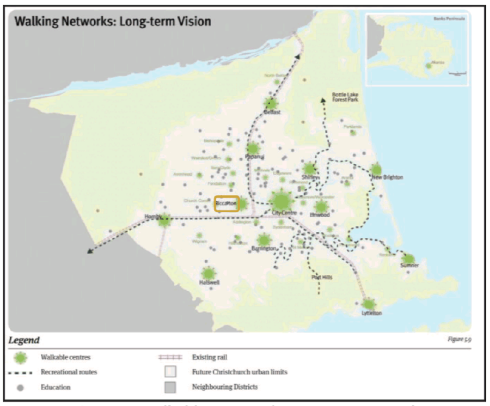


Figure 6: Walkable Centres (Source: CTSP, 2012)

2.4.2 Cycling

Figure 7 shows the Local and Recreational cycleways, Riccarton Road is a local cycleway. A local cycleway will provide safe connections for people who want to access the major cycle routes and will offer most school pupils in Christchurch a safe environment in which to travel. It is intended that they will be either off-road paths, on-road cycle lanes or follow quiet local streets.

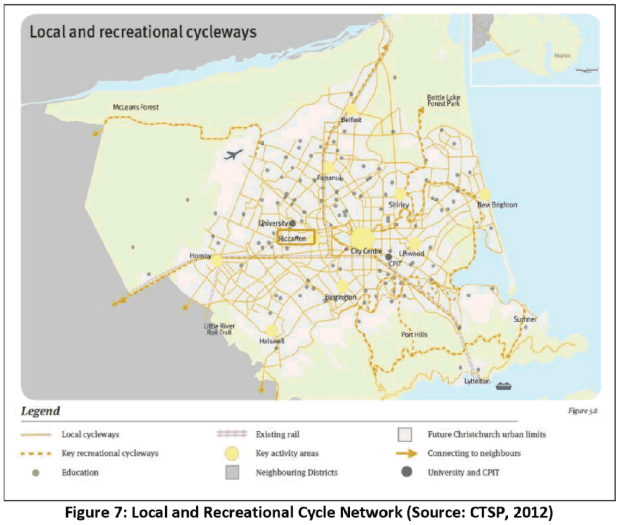


Figure 7: Local and Recreational Cycle Network (Source: CTSP, 2012)

It is currently proposed that the Nor'west arc Major Cycleway will also intersect Riccarton Road at this intersection, crossing from Middleton Road to Ilam Road. Major Cycleways are designed for the

interested but concerned cycle group and should provide safe cycling facilities for use by people 10 years old and up. The interface with this Major Cycleway is explored more in **section 2.6.**

2.4.3 Public Transport Facilities and Routes

Figure 8 shows the Core Public Transport network, Riccarton Road is shown a Core Public Transport Corridor. The aim of the Core Public Transport routes are to ensure direct connections to the Central City.

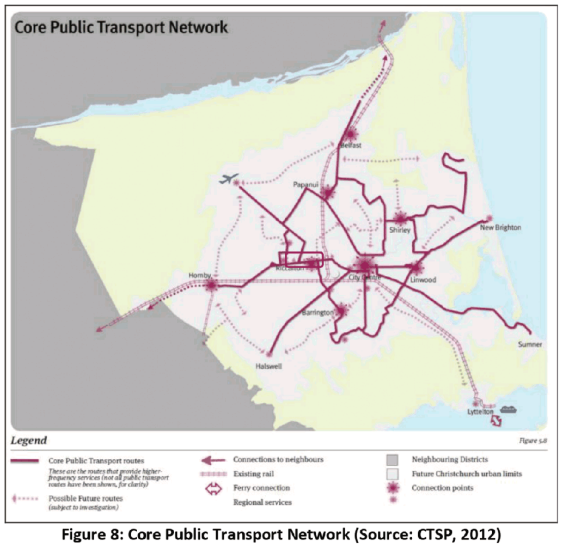


Figure 8: Core Public Transport Network (Source: CTSP, 2012)

There are currently no bus lanes on this section of Riccarton Road however there is funding in the LTP to provide these in the future.

Figure 9 shows the existing bus routes which use Riccarton Road, with their frequency summarised in **Table 5** below.

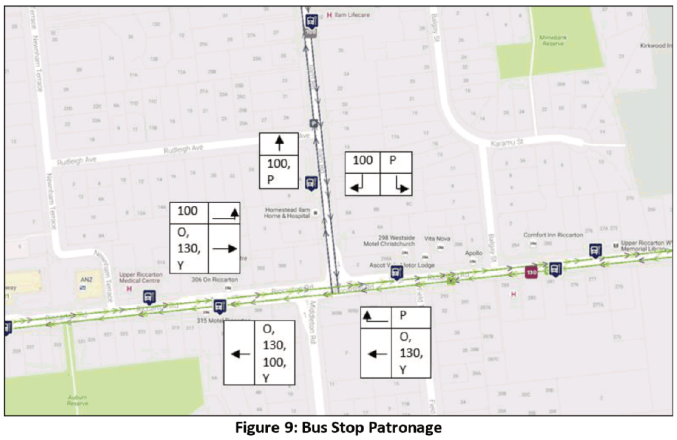


Figure 9: Bus Stop Patronage

Table 5: Bus Frequency

Route	Frequency		Number	
	Peak	Inter Peak	Peak	Inter Peak
Orbiter	10 min	10 min	6	6
Purple Line	15 min	15 min	4	4
Yellow Line	15 min	15 min	4	4
130	20 min	30 min	3	2
100	15 min	30 min	4	2
Total			21	18

A separate project will provide bus priority on Riccarton Road in the future. This interface is explored further in section **2.6**

2.4.4 Road Network

Riccarton Road is designated as a minor arterial road in the CTSP and the District Plan, as shown in Figure 7. Minor Arterial Roads provide connections between major arterial roads and the major rural, suburban and industrial areas and commercial centres.

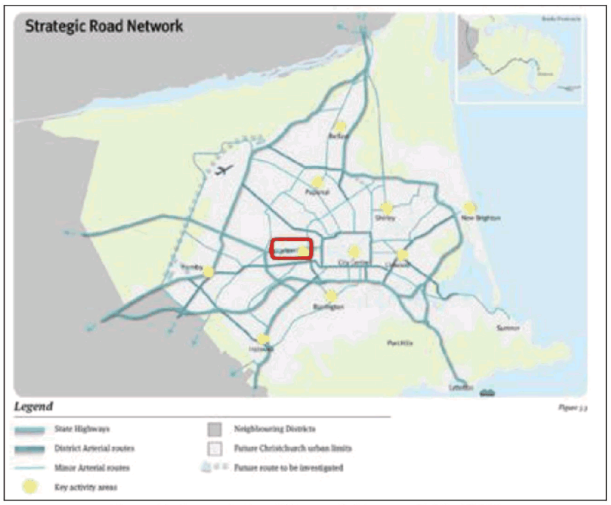


Figure 7: Strategic Road Network (Source: CTSP, 2012)

2.4.5 Freight network

Figure 15 shows the Strategic Freight Network, Riccarton Road does not form part of this network.

Figure 8: Strategic Freight Network (Source: CTSP, 2012)

Riccarton Road is not part of the NZTA Over Dimension route as shown in **Figure 9.**

Figure 9: Over Dimension Vehicle Routes

2.4.6 Geometry

Riccarton Road

The Riccarton Road western approach has three lanes leading into the intersection, with dedicate left, through and right turn lanes. These lanes are 3 metres, 3.2 metres and 2.6 metres respectively. There is a single exit lane which is 5.5 metres in width.

The Riccarton Road eastern approach has two lanes leading into the intersection, with a dedicated right turn lane and a shared through and left lane. The right turn lane is 2.6 metres wide and the shared through and left lane is 5 metres.

There are foot paths on either side of Riccarton Road which are 1.7 metres wide and there are pedestrian crossings on both Riccarton Road approaches.

There are no cycle or bus lanes on Riccarton Road.

Ilam Road

Ilam Road has two approach lanes, a left turn slip lane and a shared through and right lane which forms part of the signalised intersection.

The left turn slip lane is separated from the intersection by a small island. This island has an area of approximately 27 metres squared. There is no pedestrian crossing facility across this left turn lane to reach the island. The left turn lane is 3.5 metres wide.

The combine through and right turn lane is 3.3 metres wide. The exit lane on Middleton Road, which the through lane leads into, is offset by approximately 14 metre to the east.

There are footpaths on either side of Ilam Road which measure approximately 1.8 metres wide. However on the eastern side where Ilam Road meets Riccarton Road there is a pinch point where the footpath narrows due to the boundary fence. This also creates poor visibility. This is shown in **Photo 1** and **Photo 2**, which show the view from the footpaths on Riccarton Road and Ilam Road respectively.

Photo 1: Footpath on Riccarton Road

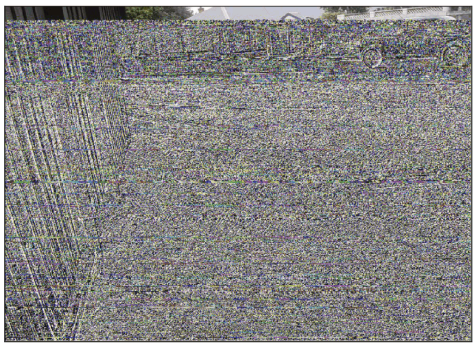


Photo 2: Footpath on Ilam Road

There are no cycle or bus lanes on Ilam Road

Middleton Road

Middleton Road has two approach lanes, comprising of a left turn slip lane and a shared through and right turn lane.

The left turn slip lane is separated from the intersection by a small island. This island has an area of approximately 20 metres squared. There is no pedestrian crossing facility across the left turn slip lane to this island. The lane is four metres wide.

The combined through and right turn lane is approximately 3.5 metres wide and is offset from the exit lane on Ilam Road, which the through movement uses, by a distance of 14.5 metres.

There are footpaths on either side of Ilam Road. Which are 1.8 metres wide on the western side and approximately 1.4 metres wide on the eastern side. The footpath narrows where it intersects with Riccarton Road on the eastern side. Although less prominent an issue than on the opposite side of the road, this still causes limited visibility and a 1.1 metre wide pinch point as shown in **Photo 3** below.

Photo 3: Footpath on Middleton Road

There are no cycle lanes or bus lanes on Middleton Road

2.4.7 The intersection movement volumes

Vehicles

Turning counts were last undertaken on the 21st June 2016 and are attached in **Appendix B.** Queue data was also recorded and is attached in Appendix C**.**

These counts show that Riccarton Road is busy in either direction during the peak hours. Middleton Road also take a lot of movements with a peak of 102 left turning and 222 going straight through in the AM peak. There are also a significant number of through movements from Ilam to Middleton, with a peak of 227 in the AM peak. There is also a significant demand in the PM peak with approximately 300 vehicles travelling northbound. This suggests that the north – south route is quite popular and could be related to the university which is situated on Ilam Road.

Cyclists

Cycle movements are fairly well balanced between Riccarton Road and the Ilam Road Middleton Road corridor. There are peak of 75 cyclists and typically around 60 - 70 cyclists in the peak hours. These are mainly through movements on the two corridors.

Pedestrians

Pedestrian counts have been completed and are included in Appendix D. These show that there are a peak of 151 pedestrians over a one hour period. Due to the layout of the intersection all pedestrians have to cross one of the slip lanes. The north east slip lane is the busiest, with 90 pedestrians crossing this in an hour.

2.4.8 Signal Plan

Figure 10 shows the traffic signal plan and phasing diagram, a scale version of this is included in **Appendix E**. This intersection operates as two phases, A phase is Riccarton Road and B phase is the Ilam Road / Middleton Road corridor

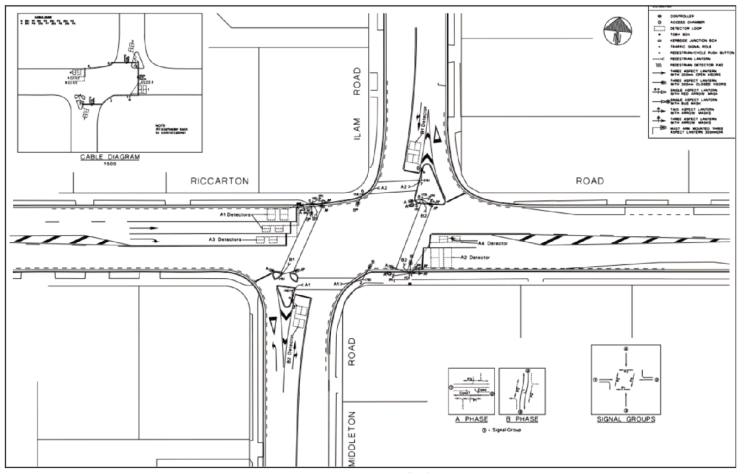


Figure 10: Signal Plan

2.4.9 Site Visit

The Lead Designer has completed a number of site visits at different times throughout the day. On site observations noted:

- High pedestrian flows particularly north – south bound. Although these were less during the inter peak there was still a reasonably significant demand.
- Pedestrians experience difficulty crossing the slip lane, with vehicles not being required to give way to pedestrians and queuing over the location where the cut down is situated.
- Through and right turning movements from the north and south approach create confusion, due to the offset of the two roads. Through movement is often driving around waiting right turning vehicle which results in reduce visibility for opposing right turning vehicle.
- Some right turning vehicles from Riccarton Road into Ilam Road tried to race through before the through vehicle in the opposing direction. The right turners are closer to the exit lane than the opposing through or left turn lane which is encouraging this. It was noted on site

that when the pedestrian phase on Ilam Road was called it created a delays start for drivers with the use of a red right turn arrow. This behaviour was not noted when the right turners were held by this red arrow.

2.4.10 Safe Systems and crash history

Safer Journeys and the Safe System approach, is the Government's strategy to guide improvements in road safety over the period 2010–2020.

The Safe System approach works on the principle that it is not acceptable for a road user to be killed or seriously injured if they make a mistake. The Safe System approach aims to create a forgiving road system based on these four principles:

1. People make mistakes

People make mistakes and some crashes are inevitable.

2. People are vulnerable

Our bodies have a limited ability to withstand crash forces without being seriously injured or killed.

3. We need to share responsibility

System designers and people who use the roads must all share responsibility for creating a road system where crash forces do not result in death or serious injury.

4. We need to strengthen all parts of the system

We need to improve the safety of all parts of the system – roads and roadsides, speeds, vehicles, and road use so that if one part fails, other parts will still protect the people involved.

To get to a Safe System (**Figure 11**), the following need to be achieved:

- safe roads and roadsides that are predictable and forgiving of mistakes – their design should encourage appropriate road user behaviour and safe speeds
- safe speeds that suit the function and level of safety of the road – road users understand and comply with speed limits and drive to the conditions
- safe vehicles that help prevent crashes and protect road users from crash forces that cause death or serious injury
- safe road use, ensuring that road users are skilled and competent, alert and unimpaired, and that people comply with road rules, choose safer vehicles, take steps to improve safety and demand safety improvements.

A Safe System is greater than the sum of its parts. Even slight improvements across roads, speeds, vehicles and users will lead to proportionally greater safety outcomes. System designers need to investigate and understand the connections between the above components if we are to achieve the Safe System.

It is important to note that some of these objectives are outside of hard engineering elements, however the Engineer must be cognisant of these elements, and ensure that the design does not conflict with the elements.

In regards to the network improvement project there are two of the four principles that can be influenced. These are safe roads/roadsides and safe speeds, which is really important as the schemes will have wider benefits for all road users if speeds are reduced.

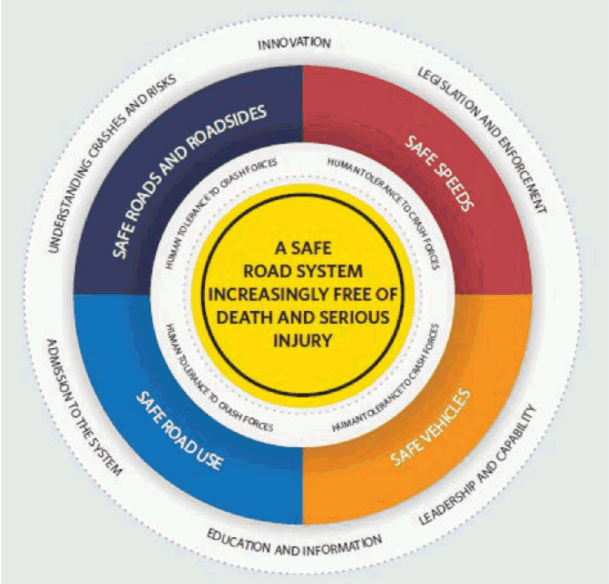


Figure 11: Safe System Approach

Source: NZTA, 2012 (Embedding the Safe System Approach to Road Safety)

2.4.11 Risk Mapping

Risk Mapping uses historical traffic and crash data to produce colour-coded maps to illustrate the relative level of risk on sections of the road network. NZTA define collective risk as a measure of the risk of deaths and serious injuries within 50 metres of an intersection in a crash period. The personal risk is calculated from the collective risk divided by a measure of traffic volume.

The risk map produced by Abley Transportation Consultants is summarised in **Table 6** below.

Table 6: Risk Mapping Summary

	Collective	Personal
Intersection	Medium High	Medium High
Ilam Road (north approach)	Medium	Medium
Riccarton Road (east approach)	High	Medium
Middleton Road (southern approach)	Low/Medium	Medium
Riccarton Road (west approach)	High	Medium

2.4.12 Crash Analysis

A CAS analysis has been undertaken for the 5 year period 2011 – 2015. The CAS diagram is shown in Figure 12

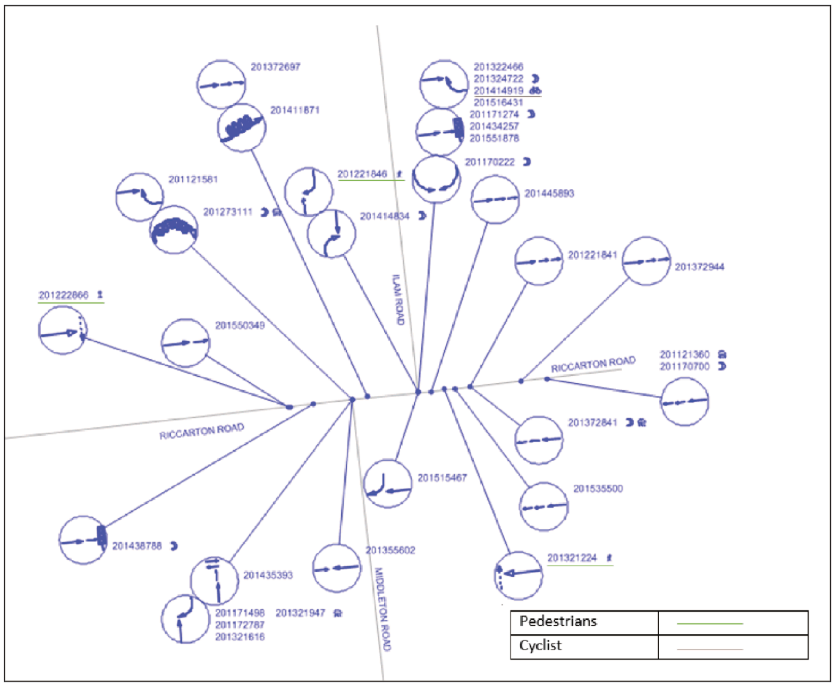


Figure 12: CAS Diagram (Source: NZTA Crash Analysis System)

The number and severity of crashes have varied over the years ranging from 4 to 9 crashes per year. There was one serious injury, 15 minor injury and 15 non-injury crashes were recorded in the study area over the five year period. There were no fatal crashes during the study period (**Figure 13**).

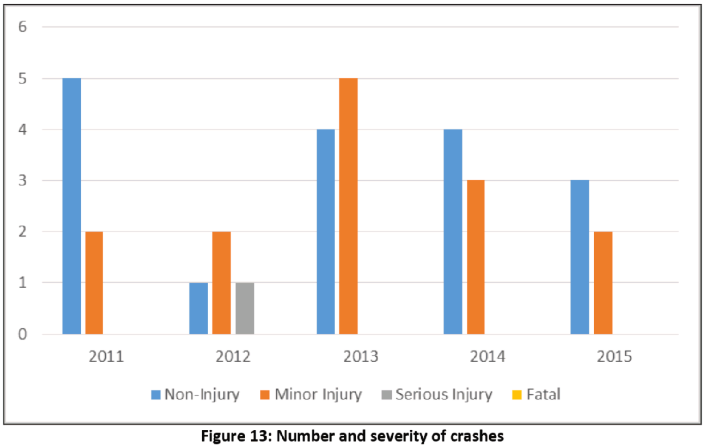


Figure 13: Number and severity of crashes

Pedestrians

There were three pedestrian crashes during the study period.

Two of the crashes involved pedestrians crossing between cars and who were not using the designated crossing. One of these was to the east of the intersection the other to the west. Both resulted in minor injury crashes. One of these occurred during the peak hour, the other during the inter peak (14:00).

The other pedestrian crash involved a pedestrian who crossed during the red pedestrian signal, on the western crossing, and was hit by a right turner from Ilam Road. This resulted in a minor injury crash and occurred just before the peak period started (15:00).

Cyclists

There was one cyclist crash during the study period. This involved an east bound cyclist who was hit by a vehicle right turning from Riccarton Road into Ilam Road. The right turning vehicle failed to check / notice the cyclist and did not give way when required to. This resulted in a minor injury.

Vehicle

There were 28 recorded crashes involving only vehicles. 10 of these were right turn against crashes at the intersection.

Five of these involved vehicles right turning from Ilam Road into Riccarton Road and being hit by Northbound Vehicles from Middleton Road. These occurred throughout the day and were not a peak hour trend. They occurred in typically dry and bright or dry and over cast conditions. Three of these crashes resulted in Minor Injuries.

One right turn against crash involved a vehicle right turning from Middleton Road and being hit by a through vehicle from Ilam Road. This crash occurred at 20:30, during winter, and resulted in 2 minor injuries.

The other four right turn against crashes involved vehicles right turning from Riccarton Road into Ilam Road. Two of these crashes involved vehicles travelling eastbound running yellow or red lights. All four crashes resulted in minor injuries.

There were 14 rear end / obstruction crashes during the study period. All of these occurred on Riccarton Road. Four involved vehicles queuing for the intersection on the eastern approach and four involved vehicles queuing for the intersection on the western approach. The remaining six involved vehicles queuing outside of the intersection, while not explicitly stated this is likely to involve the queuing for subsequent intersections.

The rear end crashes occurred throughout the day, occurring between 7 am and 9 pm. There are no clear trends with regards to the times at which these occurred. One of the rear end crashes resulted in a minor injury and one in a serious injury.

There were 4 loss of control crashes during the study period. One of these involved a vehicle turning left into Ilam Road which swung wide, hitting a vehicle queuing on Ilam Road for the intersection. This was a non injury crash. One involved an eastbound moped on Riccarton Road who lost control when braking and hit the kerb, this was a minor injury crash.

One involved a vehicle right turning from Riccarton Road who lost control while turning. Alcohol test was refused / above limit. The other loss of control crash involved a vehicle travelling westbound, travelling to far right and driving into a vehicle waiting to turn right. Neither of these crashes resulted in injuries.

2.4.13 Network Management Plan (Interim June 2013)

A Network Management Plan (NMP) has been developed for Christchurch. The Plan establishes the key operational principles considering priority of modes, levels of service and land use. These principles, when applied to the transport network identify network deficiencies and inform the type of operational options that can mitigate current and potential congestion and inefficiency issues.

The network management plan establishes priorities on the Road Network. Table 7 summarises these priorities. There are no differences by time of day. Public Transport has the highest priority on Riccarton Rd and Ilam Rd (both Metro Lines), while cyclists have the highest priority on Ilam and Middleton (Major Cycleway), with moderate priority on Riccarton (Local Cycleway). General Traffic, i.e. cars, have low priority on Ilam-Middleton (as a Collector). Everything else is neutral.

Table 7: Network Management Plan Mode/Place/Time of Day Status

PRIORITY TABLE	Mode	Walking	Cycling		Public Transport		Freight	General Traffic	
	Network	III	I	II	I	III	III	III	IV
Place	Time	Other	1. Major Cycleways	2. Local Cycleways	1. Metro Lines	3. Other	3. Other	3a. Minor Arterial	4a. Collector
4. Outside Centres	AM	1.0	2.0	1.5	2.0	1.0	1.0	1.0	0.5
	IP	1.0	2.0	1.5	2.0	1.0	1.0	1.0	0.5
	PM	1.0	2.0	1.5	2.0	1.0	1.0	1.0	0.5
	OP	1.0	2.0	1.5	2.0	1.0	1.0	1.0	0.5
	Road	All	Middleton Ilam	Riccarton	Riccarton Ilam	Middleton	All	Riccarton	Middleton Ilam

The Network Management Plan also identifies where there are gaps in the network. This is shown in Figure 14: Network Management Plan Operating Gaps. The plan identifies that the gaps are most significant for public transport at this intersection, however cyclists become increasingly significant

by 2041 due to the increase in cycle numbers. Interestingly General Traffic has the second highest gap, which does not correlate to the priorities for this corridor which place general traffic as a neutral priority. However the size of the bubbles showing the gaps is determined by the delay x volume x priority, therefore although the general traffic has a large operating gap that does not mean it should necessarily be a focus of this project as it is unreasonably skewed by the high traffic flows.

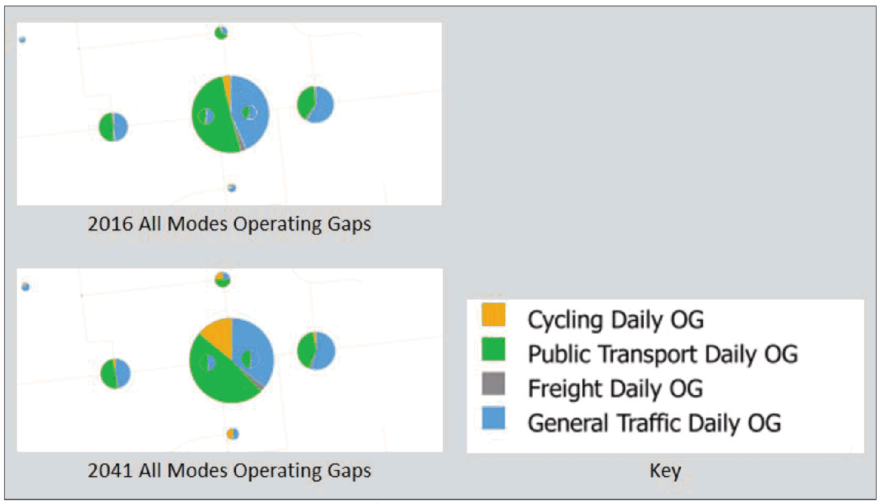


Figure 14: Network Management Plan Operating Gaps

2.5 Design Guidance

At a local level the Infrastructure Design Standard (IDS) (CCC, 2010) provides street design guidance however this is generally high level.

CCC are currently reviewing the District Plan, the updated Plan will include the road classification in the recently released CTSP to recognise the multiple function of a road (link and place). In preparation for the transition, the CCC have prepared a discussion document, New Road Classification, Draft Street Design Standards that outlines proposed widths of each cross sectional elements. At a local level the Infrastructure Design Standard (IDS) provides street design guidance however this is very high level.

At the national level NZ traffic engineering practitioners often refer to the Austroads guidance in the 'Guide to Road Design Series Parts 1 to 9'. For example Part 3, Geometric Design (Austroads, 2009) provides guidance on traffic lane widths. The Draft Street Design Standards put these into the Christchurch Context.

In addition to these documents, the CCC has various urban design guidance that supports the delivery of high quality safe cycling environments, through the interface between public and private property.

2.6 Interface with other projects

There are two other major projects which intersect with this scheme. The Riccarton Road Bus Priority project and the Nor'west Arc Major Cycleway.

2.6.1 Riccarton Road bus Priority

The Riccarton Road Bus Priority project extends from the edge of the City Centre to Main South Road. The first phase of the project has already been consulted on and extends between Deans Avenue and Matipo Street. A transitional scheme was introduced in 2016 and is due to be replaced with the approved scheme in financial year 2017 / 2018.

The second phase will extend from Matipo street and continue westwards, travelling through the Ilam / Middleton / Riccarton intersection. This second phase is currently unfunded in the LTP.

2.6.2 Nor'west Arc Major Cycleway

The Nor'west Arc Major Cycleway is currently going through the design process. The preferred route is to use Middleton Road and then Ilam Road to travel north / south. At the time of writing this report, the preferred facility was a bi directional cycleway on Middleton Road changing to two mono directional cycle lanes on Ilam Road. However it is noted that there is an option for a bi directional on Ilam Road. Both of these options will have protected cycle phases.

3 OBJECTIVES

Based on the 'need for the project' and consideration of the background information the aim and objectives of the intersection project are to:

- Reduce the number of fatal and serious injuries at the Ilam/ Middleton/ Riccarton intersection.
- Reduce the number of crashes involving pedestrians or cyclists at the Ilam/ Middleton/ Riccarton intersection.
- Maintain network efficiency for public transport along Riccarton Rd.
- Integrate with the future bus priority project
- Integrate with the MCR

These objectives will be used to assess the options developed in Section 4. The assessment will be supplemented with a strategic alignment assessment.

4 OPTION ASSESSMENT

This section outlines the options considered for project. The assessment of options is undertaken against the project objectives and strategic alignment. The assessment is informed by transport modelling where appropriate.

4.1 Options Assessment Stage 1

4.1.1 Options

A number of options were developed as follows:

Do-nothing

The do nothing option maintains the existing intersection with no changes as part of this scheme. It should be noted that this intersection would be looked at as part of the MCR project and as part of the Bus Priority project, which is currently unfunded.

Option 1

As shown in Appendix F. Option restricts Middleton Road to left in left out, with Riccarton Road and Ilam Road then forming a T intersection. Bus priority is provided in either direction on Riccarton Road with dedicated lanes. MCR is provided for through a signalised crossing from a shared path on Middleton Road to mono directional separated cycle facilities on Ilam Road.

Option 2

As shown in Appendix G. Option restricts Middleton Road to left out, with Riccarton Road and Ilam Road then forming a T intersection. Bus priority is provided in either direction on Riccarton Road with dedicated lanes. MCR is provided for through a signalised crossing from a shared path on Middleton Road to mono directional separated cycle facilities on Ilam Road.

Option 3

As shown in Appendix H. Option restricts Middleton Road to left in left out, with Riccarton Road and Ilam Road then forming a T intersection. Bus priority is provided in either direction on Riccarton Road with dedicated lanes. MCR is provided for through a signalised crossing from a shared path on Middleton Road to a bi-directional separated cycle facility on the west side of Ilam Road.

Option 4

As shown in **Appendix I.** Option restricts Middleton Road to left out, with Riccarton Road and Ilam Road then forming a T intersection. Bus priority is provided in either direction on Riccarton Road with dedicated lanes. MCR is provided for through a signalised crossing from a shared path on Middleton Road to a bi-directional separated cycle facility on the west side of Ilam Road.

Option 5

Option creates a split phase for Ilam Road and Middleton Road, with a separated cycle facility being provided.

4.1.2 Modelling

The modelling report is included in Appendix J. This only looks at the left out only options, option 3 and option 4. These were considered to have the most significant impact on the network and

provide the safest layout. The impacts of this modelling report are briefly explored in the Options Assessment Matrix which is attached in **Appendix K** and summarised in **Table 9**.

4.1.3 Options Assessment Matrix

These options have been considered against the objectives of the project in **Appendix K** and is summarised in **Table 9.** To allow the options to be compared, each of the options has been ranked based on how well they contribute to meeting the objectives. This ranking mechanism is explained in Table 8 below.

Table 8: Option Assessment Key

✓✓	Strongly contributes to the desired objectives
✓	Contributes to the desired objective
-	Could detract from the desired objective but can be managed through design
x	Detracts from the desired objective
xx	Strongly detracts from the desired objective

Table 9: Options Assessment Matrix Summary

Objective	Do Nothing	Option 1	Option 2	Option 2	Option 4	Option 5
Reduce the number of fatal and serious injuries at the Ilam/ Middleton/ Riccarton intersection. (The three main crash types have been considered below)						
Right Turn against – Riccarton to Ilam	X	✓	✓	✓✓	✓✓	x
Right Turn against – Ilam to Riccarton	X	✓✓	✓✓	✓✓	✓✓	✓
Rear end	X	-	-	-	-	x
Reduce the number of crashes involving pedestrians or cyclists at the Ilam/ Middleton/ Riccarton intersection.						
Pedestrians	X	✓	✓	✓	✓	x
Cyclists	X	✓✓	✓✓	-	-	✓✓
Maintain network efficiency for public transport along Riccarton Rd.	✓	N/A	N/A	xx	xx	xx
Integrate with the future bus priority project	x	✓✓	✓✓	✓✓	✓✓	x
Integrate with the MCR	x	✓✓	✓✓	✓✓	✓✓	✓✓

4.1.4 Discussion

The Project Team met on the 14th December 2016 to discuss the options assessment and the modelling report provided by TDG. The minutes for this meeting are included in **Appendix LError! Reference source not found.**. The meeting predominantly focused on the modelling results and it was broadly agreed that the delay shown in the modelling was unacceptable. The project team therefore decided to look at ways to resolve this delay and the way forward as outlined below.

1. Left in left out would be modelled for both MCR options. A summary table with the existing operation, option 1 and 2 (left-in only) and then option 3 and 4 (left in left out) should be produced to clearly be able to see the changes across the network.
2. Left in left out at Field Terrace to be modelled in all options.
3. Right turn into Ilam Road from Riccarton Road would also be modelled for both separated cycleway options (left in left out and left out only).
4. Options to be optimised for the Ilam / Riccarton intersection
    a. If this makes a significant difference then corridor is to be optimised in the Base modelled
5. Modelling report is to identify right turn queue lengths.
6. Cycleway to be removed to identify impact.

The project team will meet again following completion of this modelling to review the results and determine any further changes to the design, i.e. additional right turn lane capacity.

4.2 Options Assessment Stage 2

4.2.1 Scope

The primary issue is around the impacts of the proposal on the capacity of the road network. The initial modelling report identified additional delays of up to 8 minutes on the road network. The project team determined to expand the model to look at several different scenarios. The modelling is the key part of this stage of the assessment and the SoW agreed with the modeller is included in **Appendix M.**

4.2.2 Options

Several options for increasing capacity were identified, these are outlined below.

Field Terrace closed – the initial modelling report identified that the additional vehicles trying to 'rat run' through Field Terrace caused a problem. The queuing associated with this movement resulted in additional delays to Riccarton road.

Right turn phase included – the modelling also showed that when a right turn phase into Ilam Road was introduced at the intersection, this improved overall travel times on Riccarton Road. The restrictions on movements at Middleton Road results in traffic diverting through surrounding intersections. The inclusion of the right turn phase attracts some of them back to this intersection, although on a different approach.

In addition to these the Left in left out option are to be modelled.

This has resulted in the options as shown in **Table 10**.

Table 10: Stage 2 Options

Name	Separated Cycleway Treatment		Middleton Road Treatment		Adjacent Network Adjustments	Riccarton Road Right Turn
	Uni Directional **(UD)**	Bi Directional **(BD)**	Left In Left Out **(LILO)**	Left Out only **(LO)**	Field Terrace Closed **(FTC)**	Dedicated Right Turn Phase **(RTP)**
1a (UD, LILO)	UD		LILO			
1b (UD, LILO, FTC)	UD		LILO		FTC	
1c (UD, LILO, FTC, RTP)	UD		LILO		FTC	RTP
1d (UD, LILO, RTP)	UD		LILO			RTP
2a (UD, LO)	UD			LO		
2b (UD, LO, FTC)	UD			LO	FTC	
2c (UD, LO, FTC, RTP)	UD			LO	FTC	RTP
2d (UD, LO, RTP)	UD			LO		RTP
3a (BD, LILO)		BD	LILO			
3b (BD, LILO, FTC)		BD	LILO		FTC	
3c (BD, LILO, FTC, RTP)		BD	LILO		FTC	RTP
3d (BD, LILO, RTP)		BD	LILO			RTP
4a (BD, LO)		BD		LO		
4b (BD, LO, FTC)		BD		LO	FTC	
4c (BD, LO, FTC, RTP)		BD		LO	FTC	RTP
4d (BD, LO, RTP)		BD		LO		RTP

4.2.3 Outcomes

The Modelling report is attached in **Appendix N** and some of the key information is outlined below.

Key Information

The modelling report identified that Option 1c and Option 3c have the least detrimental impact on the road network and these were optimised through the Paramics programme. These changes included signal timing and phasing changes at the following intersections:

- Clyde Road / Wharenui Road / Riccarton Road
- Wharenui Road / Acheron Drive / Blenheim Road
- Annex Road / Blenheim Road
- Hansons Lane / Blenheim Road
- Ilam Road / Riccarton Road

Some more significant modifications involving adding signal phases are included in the optimisation. Altering signal phases were made to the Clyde Road / Wharenui Road / Riccarton Road intersection. Notable this involved introducing a short dedicated right turn phase from Riccarton Road into Wharenui Road. These changes are shown in more detail in Appendix A of the modelling report.

These two options have a negligible impact on the Network Average Travel Times, with very minor increases in most situations (1-2%). There is a slight increase by approximately 10 seconds in the PM

peak in 2031. With regard to the Network Average Travel Distance, there is a benefit in both the AM and IP peaks for 2016 and 2031 but a small dis-benefit in the PM peak.

However when Riccarton Road is looked at by itself, the dis-benefits of the two options are more apparent. This is summarised in the **Table 11**.

Table 11: Riccarton Road travel times

	Direction	Option	AM				IP				PM			
			2016		2031		2016		2031		2016		2031	
			Travel Time	% change	Travel Time	% Change	Travel Time	% Change	Travel Time	% Change	Travel Time	% Change	Travel Time	% Change
General Traffic	East bound	Base	3.2		3		3.2		3.1		3.6		3.4	
		1c	3.5	9%	3.4	11%	3.2	2%	3.3	7%	3.9	11%	3.8	15%
		3c	3.5	9%	3.4	10%	3.2	2%	3.3	9%	4	11%	3.8	12%
	Westbound	Base	2.7		2.9		2.9		2.9		3.5		3.9	
		1c	3.4	25%	3.2	10%	3.2	8%	3.3	13%	3.9	13%	5.4	38%
		3c	3.3	20%	3.3	17%	3.2	7%	3.4	15%	4	15%	5.4	39%
Passenger Transport	East bound	Base	4.9		4.9		4.5		4.6		5		5.1	
		1c	4.9	-1%	4.9	0%	4.6	2%	4.6	1%	5	-1%	5.1	1%
		3c	4.9	0%	4.9	0%	4.6	2%	4.5	0%	5	0%	5.1	0%
	Westbound	Base	4.7		5.2		4.4		4.6		5.2		5.9	
		1c	5	5%	4.9	-6%	4.5	1%	4.7	2%	5.2	1%	6.9	16%
		3c	4.9	4%	5.3	2%	4.4	0%	4.7	2%	5.3	3%	6.9	18%

Part of the brief was to look at the right turn lanes at surrounding intersections to determine whether these had a detrimental impact on the travel times. The modelling found that in several locations these extended out of the lane by a considerable amount, in some instances by up to 100 metres. However the length by which they extend out of the turning lane does need to be taken with a degree of caution, as where the through movement becomes stuck behind the turning movement, they get counted in the queue length.

Summary

The Modelling report identifies key outcomes, are outlined below.

Relative to the other options assessed, the following elements demonstrated clear benefits:

- *Left in left out access on Middleton Road (as opposed to left out only);*
- *A dedicated right turn phase from Riccarton Road onto Ilam Road; and*
- *Restricting access to Field Terrace.*

When a dedicated right turn phase from Riccarton Road into Ilam Road is provided, the separated and bi- directional cycleways layouts show similar outcomes and performance.

Restricting movements at the key intersection results in changes in traffic routes and patterns through the adjacent local network. This includes increases in right turn volumes at several key intersection. Generally this results in dis-benefits in network efficiency and performance. However with the inclusion of the adjacent network improvements and minor levels of optimisation these dis-benefits are limited, particularly in the AM and IP peaks. The PM peak is more sensitive to these changes.

Lengthening several right turn bays to prevent right turn queues blocking through traffic movements may result in further benefits.

4.2.4 Discussion

A project team meeting was held on the 16th March 2017. The minutes of this meeting are attached in **Appendix O.**

The Major Cycleway team provided an update on their proposal to the project team. Their scheme is currently at consultation showing mono-direction separated cycle lanes. There is no objection to the loss of parking from this by local residents at this stage. As such the project team decided to drop the bi directional cycle lane options.

The project team decided to take forward option 1c, which is the left in left out option, with mono direction separate cycle lanes, a right turn phase into Ilam Road from Riccarton Road and the restriction of Field Terrace to left in left out.

The modelling report had identified a number of intersections where improvements could be made to the right turn lane lengths. The report identified 6 right turn bays that needed extending. The project team agreed that where possible it would be beneficial to extend these bays, however that this work should be contained to line marking only to stay within the project budget. The six bays are identified in **Table 12** below along with the type of work required to complete the extensions, the right turn bays which are to be extended as part of this project are identified in bold.

Table 12: Right turn bay extensions

Intersection	Approach	Line Marking / Civil
Hansons / Riccarton / Waimairi	**Eastern**	**Line Marking only**
Hansons / Riccarton / Waimairi	Western	Civil works required to change raised median
Riccarton / Ilam / Middleton	**Eastern**	**Line Marking only**
Clyde / Riccarton / Wharenui	**Eastern**	**Line Marking only**
Clyde / Riccarton / Wharenui	**Western**	**Line Marking Only**
Blenheim / Wharenui	Eastern	Civil Works required to change raised median

5 PREFERRED OPTION

5.1 Introduction

The preferred option is Option 1c. This has been investigated further and refined to include the following features at the intersection of Ilam Road / Middleton Road and Riccarton Road:

- Ilam Road / Riccarton intersection changed to a T intersection with Middleton Road taken out of the intersection.
- Middleton Road has been restricted to left in left out. This is self-enforcing with an island on Riccarton Road and within the Middleton road approach.
- The pinch points in the footpath, where Middleton Road intersects with Riccarton Road, has been removed as Middleton Road has been narrowed.
- Left turn slip lane has been removed from Ilam Road into Riccarton Road. The removal of this slip lane improves pedestrian safety and removes the pinch point on the footpath where Ilam Road and Riccarton Road intersect.
- For westbound buses the bus lane will operate as a through lane for cyclists and buses but a left turn lane for vehicles wanting to turn left into Middleton Road after the intersection. This lane will be signed 'left lane left turn only except buses and cyclists'.
- For eastbound buses the left turn lane has been designed to allow the through buses to use it as well, allowing them to jump the queue. This lane will be signed 'left lane left turn only except buses and cyclists'
- A cycle crossing has been provided from a bi directional Facility on Middleton Road to uni direction facilities on Riccarton Road.
- A cycle crossing has been included on Middleton Road to provide a safe crossing facility for cyclists, who need to cross Middleton Road
- Pedestrian Refuge has been added on Middleton Road to replace the signalised crossing which is removed as a result of Middleton Road no longer being part of the intersection.

The scheme includes the following features at the intersection of Field Terrace / Riccarton Road:

- Field Terrace is restricted to left in left out at Riccarton Road with the use of an island on Field Terrace. This is shown in **Appendix P**.

The scheme includes the following features at the intersection of Clyde Road / Riccarton Road / Wharenui Road:

- The eastern approach right turn lane for Riccarton Road into Clyde Road, has been extended from the existing 15 metres to 55 metres. This has included the removal of five parking spaces on the south side of Riccarton Road.
- The western approach has been changed from what is currently a through lane and shared through and right turn lane to a through lane and a dedicated right turn lane. There has also been additional 44 metres of no stopping restrictions provided on the western approach lane, which has resulted in four parking spaces being removed. This allows right turners to queue in their own lane, something which already effectively happens as through vehicles do not tend to queue behind the right turning vehicles.

The scheme includes the following features at the intersection of Hansons Lane / Riccarton Road / Waimairi Road

- The right turn bay into Waimairi Road from Riccarton Road has been extended to 48 metres from the existing 30 metres.

5.2 Scheme Modelling

5.2.1 Traffic Modelling

Traffic modelling has been undertaken as part of this project. This modelling was used to inform the options assessment and is explored in more detail in that section. This modelling has been continued to see the impact of extending the right turn lanes at adjacent intersections, as agreed in the project team meeting on the 16th March 2017.

The below table compares the base which the preferred option, including the extended right turn lanes at adjacent intersections. It should be noted that changes have been made to the base model in the updated reports and therefore the percentage difference has changed to what was shown in Table 11.

	Riccarton Road Travel Times					
	AM Peak		Inter Peak		PM Peak	
	2016	2031	2016	2031	2016	2031
General Traffic - Eastbound Travel Time (s)						
Base	194	180	182	180	215	200
Scheme	200	188	167	171	192	183
Change	3.2%	4.9%	-8.5%	-5.3%	-10.7%	-8.9%
General Traffic - Westbound Travel Time (s)						
Base	168	168	187	182	220	221
Scheme	165	172	152	147	186	209
Change	-2.0%	2.5%	**-19.0%**	**-18.9%**	-15.4%	-5.6%
Public Transport - Eastbound Travel Time (s)						
Base	295	291	273	272	306	307
Scheme	309	301	299	299	300	297
Change	4.7%	3.4%	9.8%	**10.2%**	-2.0%	-3.3%
Public Transport - Westbound Travel Time (s)						
Base	284	294	264	277	307	323
Scheme	321	299	280	278	323	340
Change	**13.1%**	1.7%	6.2%	0.6%	5.0%	5.4%

5.3 Traffic Signals

5.3.1 Traffic Signal Phasing

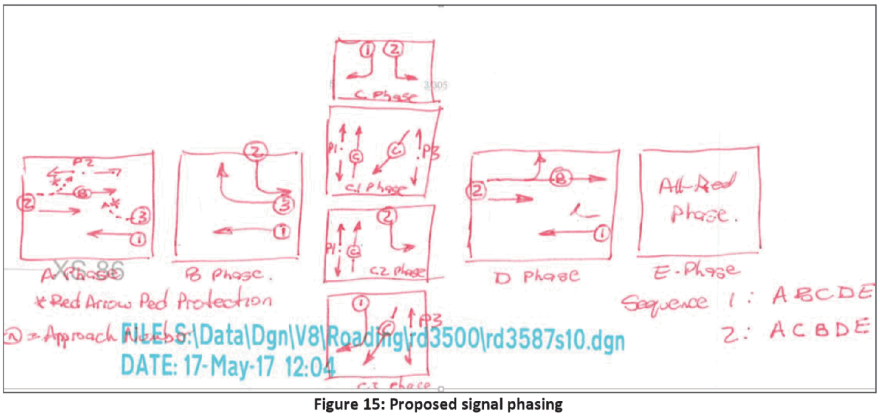


Figure 15: Proposed signal phasing

5.3.2 Christchurch Transport Operations Centre

CTOC have been represented as part of the project team. CTOC will sign off the signal plan as part of the detailed design stage.

5.4 Best Practice Design

5.4.1 Lane widths

Minimum lane widths are 3 metres for a through lane, 2.6 metres for a right turning lane and 3 metres for a left turning lane.

Bus lanes are 4.2 metres wide apart from on the eastern approach to the intersection where it reduces to 3 metres wide.

5.4.2 All Markings in Place

The proposal shows all centre lines, lane lines and limit lines. The no stopping is shown as required.

5.4.3 All Signs, Chevrons and Controls in Place

The proposal shows all control and warning signs required to comply with current best practise and standards. State what additional signs have been included or removed from the proposal.

5.4.4 Kerb cut-downs and tactile pavers

Kerb cut downs have been included at all pedestrians, as well as tactile paving.

5.4.5 Parking

There is no loss of parking on either Riccarton Road or Ilam Road at the Ilam / Middleton / Riccarton Intersection. Although technically there is a decrease in parking on these roads, this was consulted on and removed as part of the MCR project. However there is a loss of eight parking spaces on Middleton Road due to the need for cyclists to cross the road.

There is no loss of parking at the intersection Hansons Road / Riccarton Road / Waimairi Road. Although the plans show some parking removed outside Bush Inn, this has already been consulted on and approved by the Traffic Operations Team.

Parking has been removed on the north side of Riccarton Road to the west of its intersection with Clyde Road and Wharenui Road. This is a total of four spaces outside the Kirkwood Intermediate School. On the south side of the road, to the east of this intersection, there are a total of four car parks removed.

5.5 Consistency with Other Council Plans

5.5.1 Other Plans Identified

The project team are aware of the Nor'west Arc Major Cycleway and the Riccarton Road bus priority project, which also intersect with this intersection. Representatives from both of those teams have been part of the safety improvement project team meetings and have had input into the design.

The proposal provides a safe cycle crossing, which integrates with the Major Cycle way scheme, across Riccarton Road. This crossing goes from a bi – directional cycleway on Middleton Road to uni direction facilities on Riccarton Road and provides full cyclist protection. A cycle crossing has also been provided on Middleton Road to cross the MCR bi directional facility form the western side to the eastern side.

Bus lanes have also been provided on the lead up to the intersection. The bus lanes only extend for approximately 25 – 30 metres out from the intersection. Although this will have limited benefit to bus travel times due to the short length of the lanes, it will enable the bus priority to link in with the intersection without having to complete any additional work at this intersection. All kerb alignment changes and signal changes will be completed as part of this project.

5.6 Asset management Considerations

5.6.1 Storm water

The proposal does require changes to the storm water, four options have been proposed which are outlined in **Appendix T.**

5.6.2 Wastewater

The proposal does not include any upgrades to the wastewater services.

5.6.3 Water supply

The proposal does not include any upgrades to the water supply services.

5.6.4 Street lighting

A Lighting Assessment has been prepared by Connetics. The results of the assessment are provided in **Appendix Q** and identify that the current lighting meets standards, however the existing luminaires will need replacing in the next medium to short term with only two years until the end of their economic life. Replacing the luminaires will cost $35,115.

5.6.5 Existing Underground Services

Underground services currently exist at the intersection including stormwater, Telecom and Orion cables. Further investigation is required into the location of services during detailed design and any service conflicts are to be addressed.

5.6.6 Undergrounding Overhead Services

There are no overhead services in this location.

5.6.7 Landscape & Trees

The landscaping design has been completed by the Major Cycleway team and is attached in Appendix U. This includes using paving for the shared path sections of footpath, to clearly identify the change in use, as well as additional landscaping and trees.

5.6.8 Asset Management Shortfalls

There are no known asset management shortfalls.

5.6.9 Asset Maintenance

Explain ongoing maintenance considerations

The scheme includes efficient design for drainage and landscaping to provide easy cleaning and maintenance during the design life.

Landscaping and berms will need to be maintained. Trees would need to be trimmed to maintain maximum visibility of the traffic signals.

The traffic signals will require ongoing maintenance, however this should be no greater than existing levels of maintenance.

5.7 Considerations

5.7.1 Land ownership

The scheme is provided within the existing road corridors and no land is required to provide the changes to the network.

5.7.2 Consent Issues - Trees

The consent review has identified a Scarlet Oak in the heritage setting at 7 Middleton Road, as a significant tree and may require a Restricted Discretionary Consent if works are within the dripline of the tree.

5.7.3 Consent Issues - Buildings

There is one Heritage building within the project extent. This is Midway located at 7 Middleton Road. The dwelling and setting are considered to be significant. The proposed works are outside the heritage setting and therefore no consent will be required.

5.7.4 Consent Issues - Transport

There are no transport related consent issues.

5.7.5 Consent Issues – Regional Consents

Riccarton Stream is open where it meets Middleton Road. It appears that stormwater discharge is into this stream, which need to have very robust erosion and sediment control plans to avoid discharges entering stream waters.

If required the **CRC146620** Waterways consent can be used. Based on advice in-house that this is actually a natural waterway, works can be covered under the global consent. The proposed activity meets condition 1 g. the removal, definition and maintenance of road and footpath seals on waterway banks

Storm water will be covered under the interim global stormwater consent **CRC090292**. Apply for authorisation under this consent from stormwater team 4th floor. No increase in hard surfacing increase pervious surfaces and not a HAIL site.

We have a new global for excavation and fill over aquifers and within 50 metres of a waterway. **CRC173830.** The requirement to use this consent will depend on whether the excavation is likely to be over 100m^3 and within 50metres of the waterbody, and within 1m of aquifer. Consent Issues – Any other Consent requirements

5.7.6 Bylaw Changes and Traffic Controls

The cycle lanes and bus lanes will need to be added to the register of Special Vehicle Lanes in the Christchurch Traffic and Parking Bylaw.

5.8 Cost Estimates

The estimates for the project are broken down as follows:

Cost Estimate Summary	
Ilam / Middleton Riccarton	
Civil	$1,019,548.19
Traffic Signal	$251,008.00
Lighting	$35,115.00
Total	$1,305,671.19
Hansons / Riccarton / Waimairi	
Civil	$4,390.00
Clyde / Riccarton / Wharenui	
Civil	$13,030.00
Scheme Total	$1,323,091.19

The cost estimate is included in **Appendix W.**

The budget in the brief is $1,048,917. The project cost is more than the budget, however it should be noted that some of this expense comes from installing the MCR crossing and completing all of the work required for Bus Priority at this intersection.

5.9 NZTA Subsidy

This project will potentially receive NZTA funding therefore applications for funding will need to be submitted at appropriate stages of the project. The application for funding will need to be submitted prior to detailed design and construction stage.

The economic review for the project has been undertaken as part of the report and is summarised in Figure 16. Applying the standard 6% discount, the project achieves a BCR of 4.3

		40 Year Economic Assessment		
		Low Sensitivity 4% Discount	**Standard 6% Discount**	**High Sensitivity 8% Discount**
Benefits	General Traffic VOT	$ 17,140,000.00	$ 5,600,000.00	-$ 370,000.00
	Public Transport VOT	-$ 3,360,000.00	-$ 2,390,000.00	-$ 1,780,000.00
	VOC	-$ 810,000.00	-$ 780,000.00	-$ 720,000.00
	Safety	$ 2,510,000.00	$ 1,880,000.00	$ 1,470,000.00
	Total Benefits	**$ 15,470,000.00**	**$ 4,310,000.00**	**-$ 1,400,000.00**
Costs	Initial Scheme	$ 1,230,000.00	$ 1,180,000.00	$ 1,140,000.00
	Maintenance	$ 480,000.00	$ 350,000.00	$ 270,000.00
	Total Costs	**$ 1,710,000.00**	**$ 1,530,000.00**	**$ 1,410,000.00**
Assessment Outcome	Net Present Value	$ 18,400,000.00	$ 5,100,000.00	-$ 1,700,000.00
	Benefit / Cost Ratio	11.8	4.3	-0.2

Figure 16: Benefit to Cost Ratio

The Infrastructure Funding Manager is to be informed on the outcome of the economic review and relevant information for the project to prepare the application for NZTA funding.

5.10 Safety Audit

A scheme stage audit has been carried out on drawings RD3587S10 – Ilam / Middleton / Riccarton intersection, RD3587S10-004 – Hansons / Riccarton / Waimairi intersection and RD3587S10-005 – Clyde / Riccarton / Wharenui intersections. The designer's responses have been sent back to the Audit Team.

A copy of the safety audit including the designer's responses is provided in **Appendix X**. The designer's responses are provided in blue text. There were no disagreements with the safety auditor.

6 CONSULTATION OUTCOMES

6.1 Consultation undertaken

6.2 Submission responses

7 RECOMMMENDED OPTION

7.1 Changes following consultation

The following changes have been made to the proposed plan in response to consultation feedback, resulting in the final plan for approval. The final plans are provided in **Appendix X**.

7.2 Further Scheme Design Investigations & Safety Audit

xxx

7.3 Resolutions

Appendix A – Project Initiation Brief (16/573044)

Appendix B – Turning Counts (17/814013)

Attachment B Item 11

Attachment C Item 8

Appendix C – Queue Data (17/814009)

Appendix D – Pedestrian Counts

Appendix E – Signal Plan (17/608632)

Appendix F – Option 1 Plan (16/1369729)

Appendix G – Option 2 Plan (16/1369734)

Appendix H – Option 3 Plan (16/1369718)

Appendix I – Option 4 Plan (16/1415394)

Appendix J – Modelling Report Options Assessment Stage 1 (17/355501)

Appendix K– Options Assessment Matrix

Objective	Do Nothing		Option 1		Option 2		Option 3		Option 4		Option 5	
Reduce the number of fatal and serious injuries at the Ilam/ Middleton/ Riccarton intersection. (The three main crash types have been considered below)												
Right Turn against – Riccarton to Ilam	x	No Change	✓	Right turn movement is not protected however the visibility of opposing vehicles has been increased by the removal of the right turn into Middleton Road. By making the intersection smaller, the right turners are also less likely to try to rush through in the gap before the through movement.	✓	Right turn movement is not protected however the visibility of opposing vehicles has been increased by the removal of the right turn into Middleton Road. By making the intersection smaller, the right turners are also less likely to try to rush through in the gap before the through movement.	✓✓	Right turn movement can be protected in this option as it can run at the same time as the cycle movement.	✓✓	Right turn movement can be protected in this option as it can run at the same time as the cycle movement.	x	No Change
Right Turn against – Ilam to Riccarton	x	No Change	✓✓	Right turn movement is now protected through the left in left out restriction on Middleton Road.	✓✓	Right turn movement is now protected through the left in left out restriction on Middleton Road.	✓✓	Right turn movement is now protected through the left in left out restriction on Middleton Road.	✓✓	Right turn movement is now protected through the left in left out restriction on Middleton Road.	✓	Right turn movement no longer in conflict with other vehicles
Rear end	x	No Change	-	The number of rear end collisions should in theory reduce due to the increased visibility of the intersection through the proposed works. However any drop in crashes of this type would depend on the queueing at this and subsequent intersection. This will be considered further once more detailed modelling has been completed.	-	The number of rear end collisions should in theory reduce due to the increased visibility of the intersection through the proposed works. However any drop in crashes of this type would depend on the queueing at this and subsequent intersection. This will be considered further once more detailed modelling has been completed.	-	The number of rear end collisions should in theory reduce due to the increased visibility of the intersection through the proposed works. However any drop in crashes of this type would depend on the queueing at this and subsequent intersection. This will be considered further once more detailed modelling has been completed.	-	The number of rear end collisions should in theory reduce due to the increased visibility of the intersection through the proposed works. However any drop in crashes of this type would depend on the queueing at this and subsequent intersection. This will be considered further once more detailed modelling has been completed.	x	No Change
Reduce the number of crashes involving pedestrians or cyclists at the Ilam/ Middleton/ Riccarton intersection.												
Pedestrians	x	No Change	✓	The proposal will improve pedestrian safety. The pinch points on the footpath have been resolved and the pedestrians will now have increased pedestrian protection at the traffic signals, although not full protection.	✓	The proposal will improve pedestrian safety. The pinch points on the footpath have been resolved and the pedestrians will now have increased pedestrian protection at the traffic signals, although not full protection. Pedestrians using the south side of Riccarton Road will only have to cross the left out for Middleton, compared with option 1 and 3 which require pedestrians to cross the left in left out arrangement.	✓	The proposal will improve pedestrian safety. The pinch points on the footpath have been resolved and the pedestrians will now have increased pedestrian protection at the traffic signals, although not full protection.	✓	The proposal will improve pedestrian safety. The pinch points on the footpath have been resolved and the pedestrians will now have increased pedestrian protection at the traffic signals, although not full protection. Pedestrians using the south side of Riccarton Road will only have to cross the left out for Middleton, compared with option 1 and 3 which require pedestrians to cross the left in left out arrangement.	x	No Change
Cyclists	x	No Change	✓✓	Provision of bus lanes on Riccarton Road and the signalised crossing for cyclists will improve their safety.	✓✓	Provision of bus lanes on Riccarton Road and the signalised crossing for cyclists will improve their safety.	-	Provision of bus lanes on Riccarton Road and the signalised crossing for cyclists will improve their safety. There are concerns within the project team over the safety of the bi directional facility as it travels further up Ilam Road due to high intensity accesses, however this is a matter for the MCR team and can be addressed through their design process. Within the extent of this scheme there is the Veterinary Surgery which is likely to have a high turnover. Measures would need to be consider to ensure drivers using this access could do so safely.	-	Provision of bus lanes on Riccarton Road and the signalised crossing for cyclists will improve their safety. There are concerns within the project team over the safety of the bi directional facility as it travels further up Ilam Road due to high intensity accesses, however this is a matter for the MCR team and can be addressed through their design process. Within the extent of this scheme there is the Veterinary Surgery which is likely to have a high turnover. Measures would need to be consider to ensure drivers using this access could do so safely.	✓	No Change for cyclists on Riccarton Road. Cyclists on Ilam or Middleton would have a separate cycle phase.
Maintain network efficiency for public transport along Riccarton Rd.	✓	No Change	Left in Left out was not modelled. Only the left out only options (Option 3 and Option 4) were at this stage. Left out only would provide a safer option and would be a worst case scenario with regard to the impact on the capacity of the intersection.				xx	Option has a minor detrimental impact in the AM peak hour. However during the PM peak hour the impact is significant. Eastbound vehicles are delayed by 3 -4 minutes per vehicles and buses have a delay of 6 – 7 minutes. Westbound vehicles and buses each have a delay of between 7 and 8 minutes.	xx	Option has a minor detrimental impact in the AM peak hour. However during the PM peak hour the impact is more significant although less so then in Option 3. Eastbound and westbound vehicles and buses are delayed by 1 – 1.5 minutes per vehicle.	xx	Split phasing is likely to result in additional congestion on Riccarton Road.
Integrate with the future bus priority project	x	Proposal does not integrate with bus priority.	✓✓	Proposal includes bus lanes on Riccarton Road. West bound buses have a dedicate lane up to the intersection. Eastbound buses have a shared lane with left turning vehicles however this will still offer benefits to bus travel times and is consistent with similar treatments throughout Christchurch.	✓✓	Proposal includes bus lanes on Riccarton Road. West bound buses have a dedicate lane up to the intersection. Eastbound buses have a shared lane with left turning vehicles however this will still offer benefits to bus travel times and is consistent with similar treatments throughout Christchurch.	✓✓	Proposal includes bus lanes on Riccarton Road. West bound buses have a dedicate lane up to the intersection. Eastbound buses have a shared lane with left turning vehicles however this will still offer benefits to bus travel times and is consistent with similar treatments throughout Christchurch.	✓✓	Proposal includes bus lanes on Riccarton Road. West bound buses have a dedicate lane up to the intersection. Eastbound buses have a shared lane with left turning vehicles however this will still offer benefits to bus travel times and is consistent with similar treatments throughout Christchurch.	x	Proposal does not provide bus priority. The split phasing is likely to have a material detrimental impact on travel times on Riccarton Road
Integrate with the MCR	x	Proposal does not integrate with MCR.	✓✓	Scheme provides a signalised crossing from a shared path on Middleton Road to separated mono directional facilities on Ilam Road	✓✓	Scheme provides a signalised crossing from a shared path on Middleton Road to separated on road cycle facilities on Ilam Road	✓✓	Scheme provides a signalised crossing from a shared path on Middleton Road to separated bi directional facility on Ilam Road.	✓✓	Scheme provides a signalised crossing from a shared path on Middleton Road to separated bi directional facility on Ilam Road.	✓	Option would include a separate cycle phase.

Appendix L– Project Team Minutes 14th December 2016 (16/1458809)

Appendix M – Modelling SoW (17/354778)

Appendix N – Modelling Report Options Assessment Part 2 (17/355477)

Appendix O – Project Team Minutes 16th March 2017 (17/288673)

Appendix P – Preferred Design (17/587090 & 17/586995 & 17/586973)

Appendix Q – Street Lighting Assessment (17/798184)

Appendix R – Final Modelling Report and Economic Evaluation (17/798997 & 17/799009 & 17/799018)

Appendix S – Signal Plan and Phasing (17/798349)

Appendix T – Drainage Design (17/798202)

Appendix U – Landscape Design (17/798224)

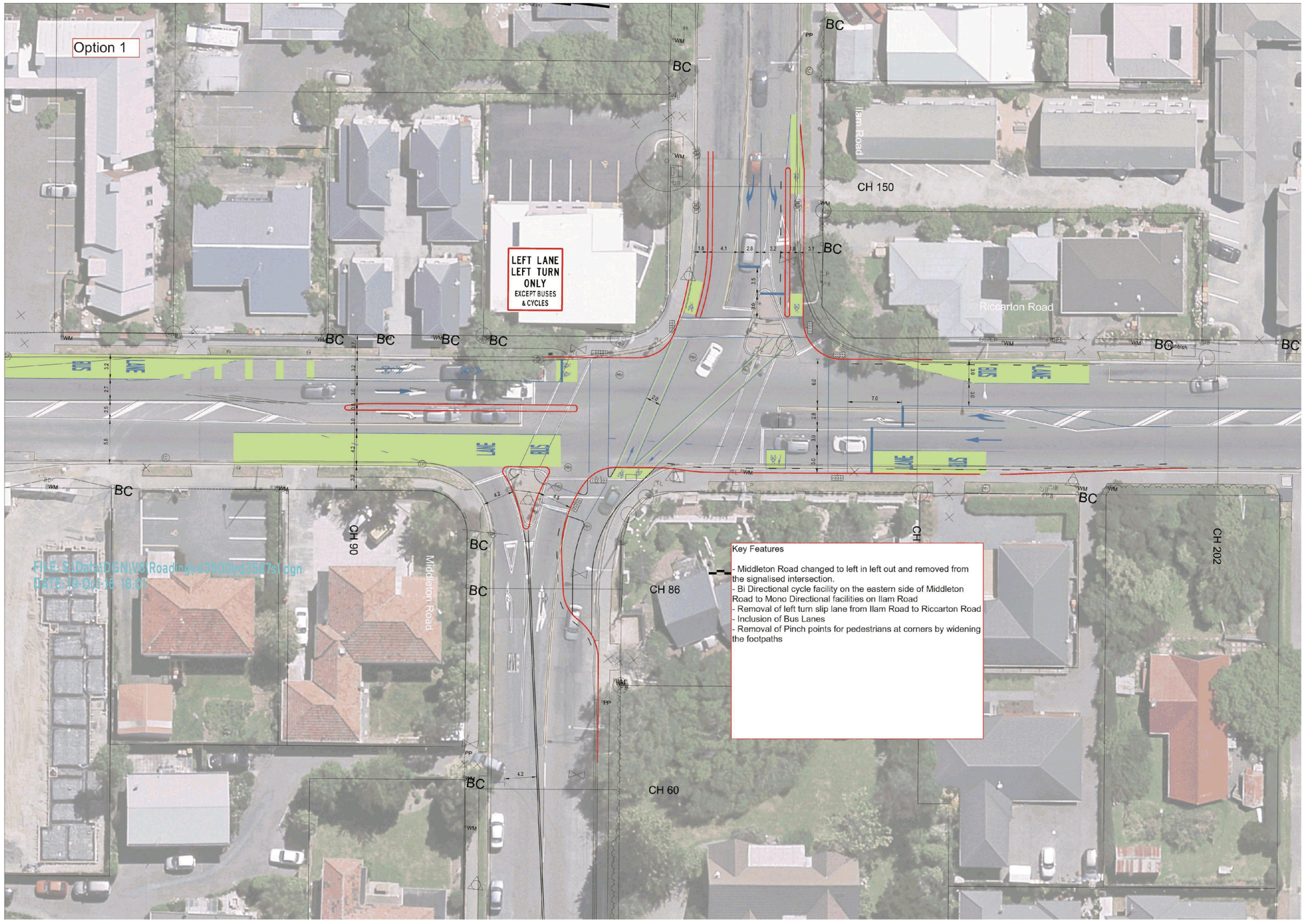
Appendix V – Consent Review (17/798227)

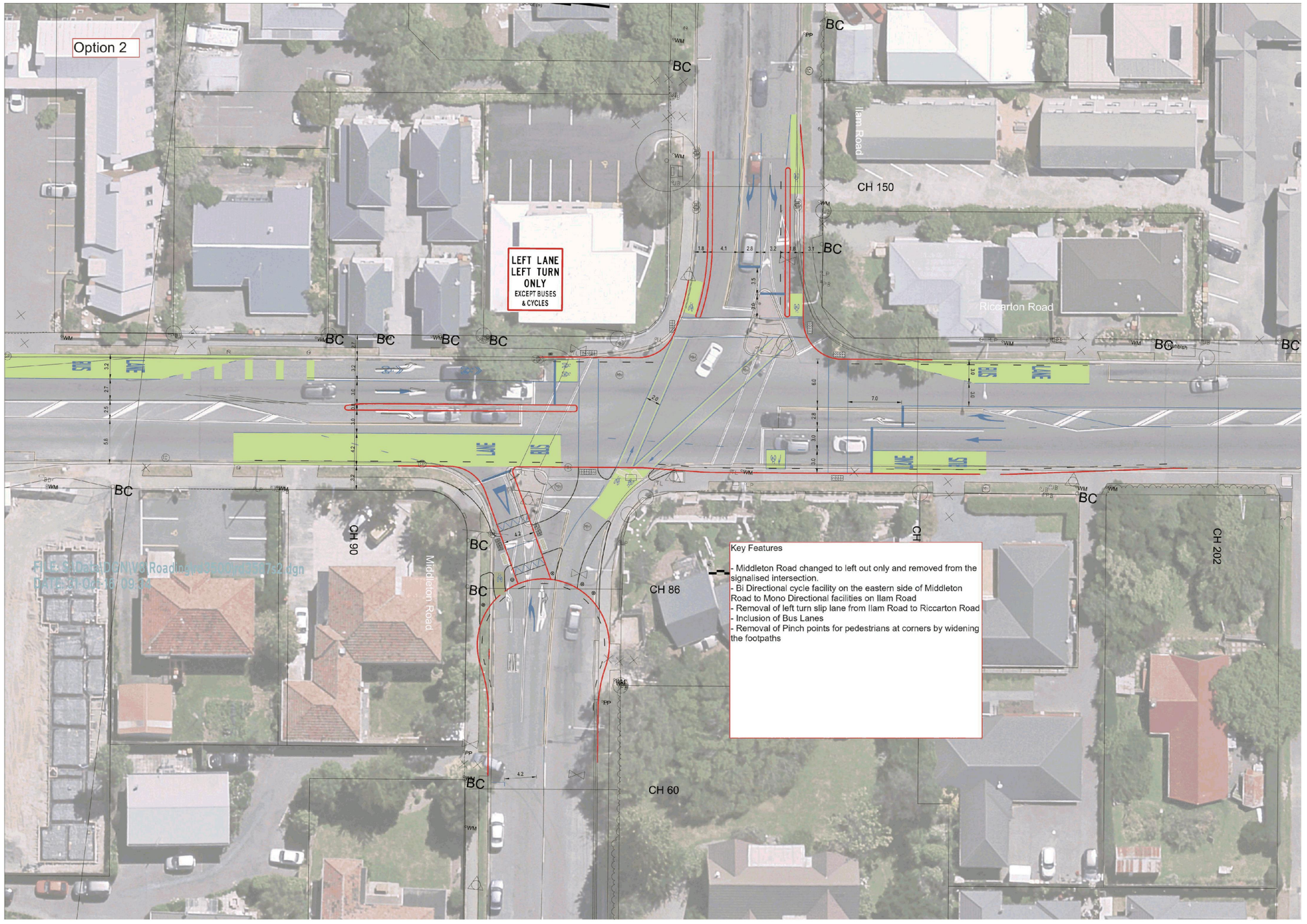
Appendix W – Cost Estimate (17/798246)

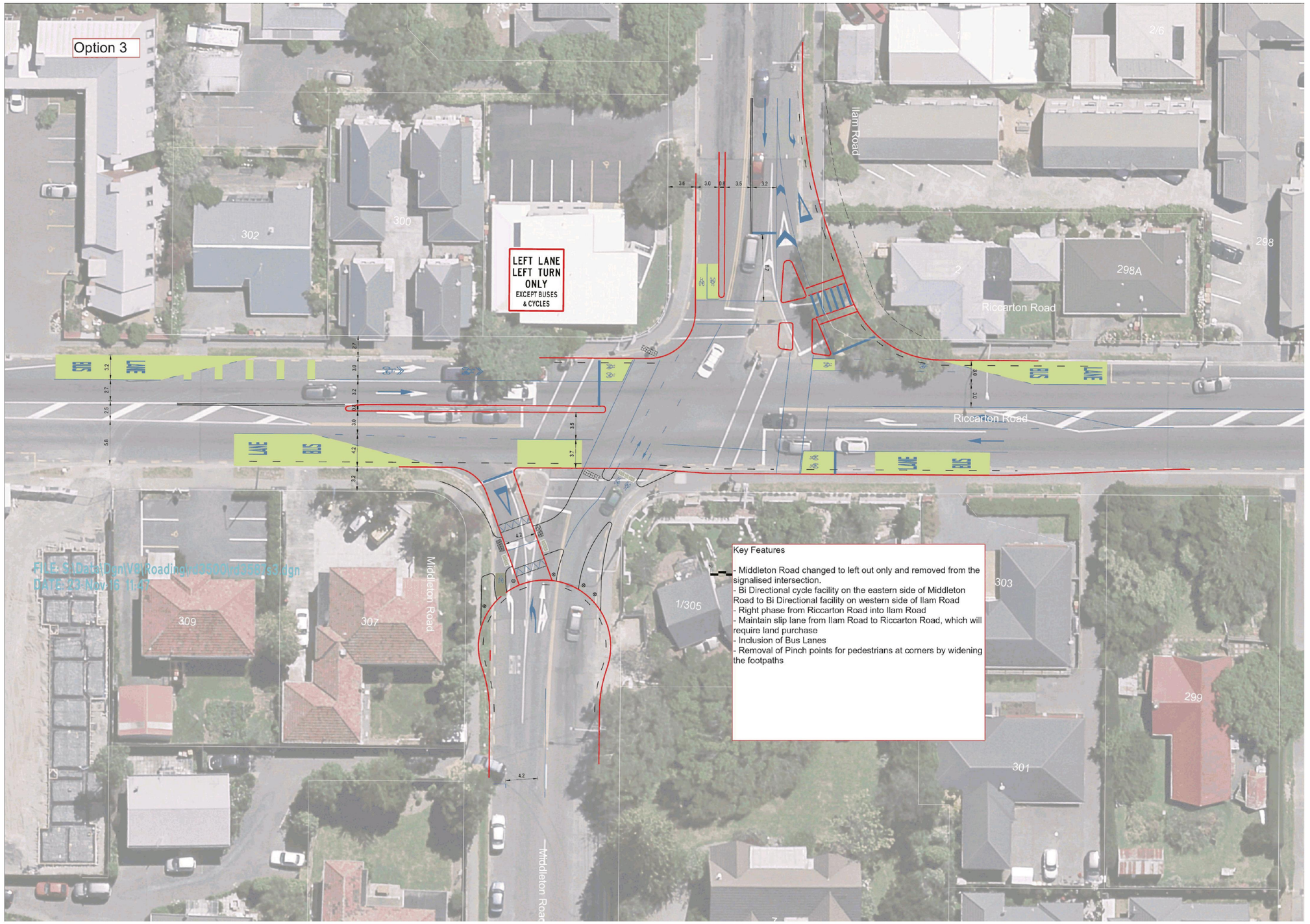
Appendix X – Safety Audit (17/798128)

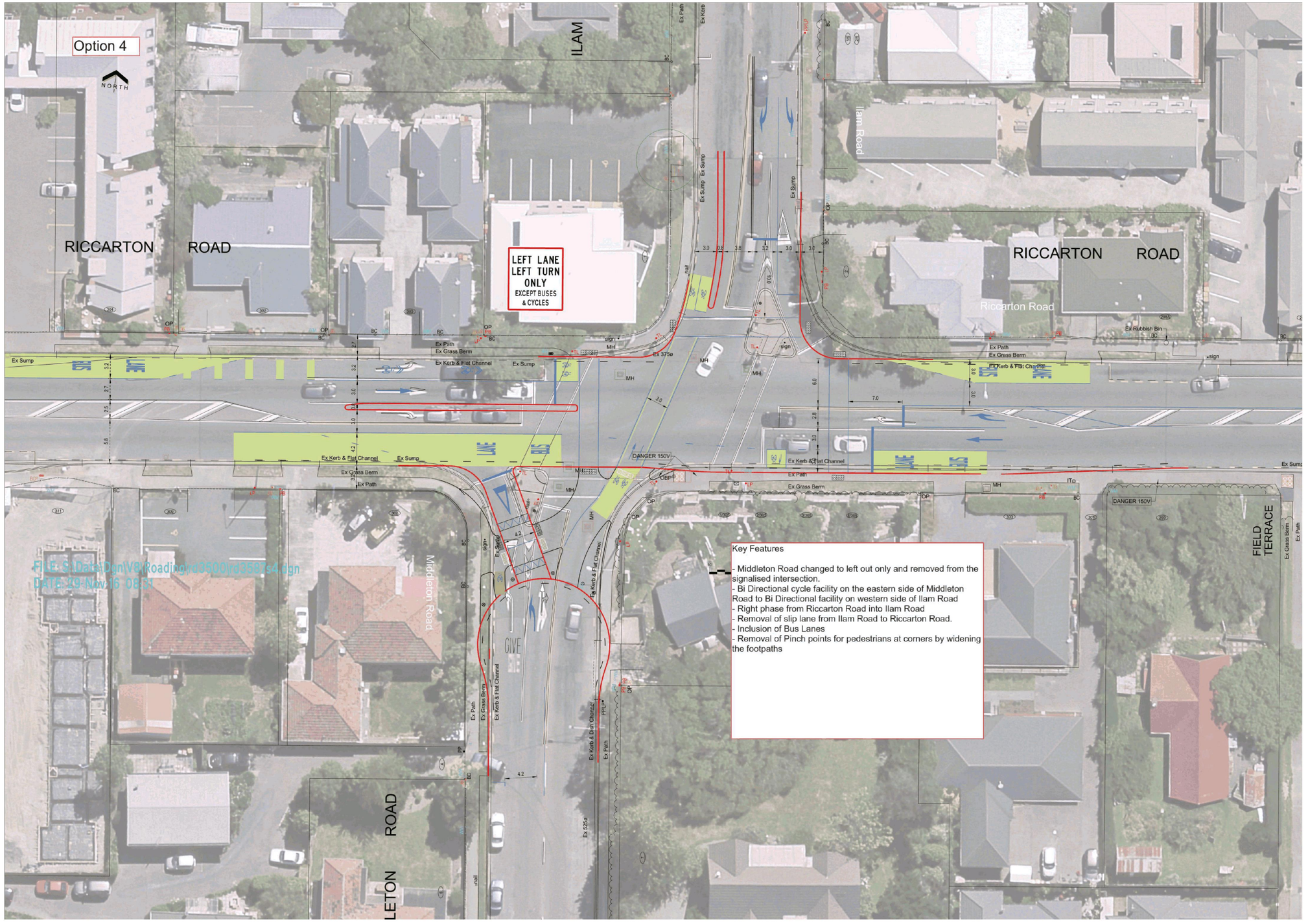
Options Assessment Matrix

Objective	Do Nothing		Option 1		Option 2		Option 3		Option 4		Option 5	
Reduce the number of fatal and serious injuries at the Ilam/ Middleton/ Riccarton intersection. (The three main crash types have been considered below)												
Right Turn against – Riccarton to Ilam	x	No Change	✓	Right turn movement is not protected however the visibility of opposing vehicles has been increased by the removal of the right turn into Middleton Road. By making the intersection smaller, the right turners are also less likely to try to rush through in the gap before the through movement.	✓	Right turn movement is not protected however the visibility of opposing vehicles has been increased by the removal of the right turn into Middleton Road. By making the intersection smaller, the right turners are also less likely to try to rush through in the gap before the through movement.	✓✓	Right turn movement can be protected in this option as it can run at the same time as the cycle movement.	✓✓	Right turn movement can be protected in this option as it can run at the same time as the cycle movement.	x	No Change
Right Turn against – Ilam to Riccarton	x	No Change	✓✓	Right turn movement is now protected through the left in left out restriction on Middleton Road.	✓✓	Right turn movement is now protected through the left in left out restriction on Middleton Road.	✓✓	Right turn movement is now protected through the left in left out restriction on Middleton Road.	✓✓	Right turn movement is now protected through the left in left out restriction on Middleton Road.	✓	Right turn movement no longer in conflict with other vehicles
Rear end	x	No Change	-	The number of rear end collisions should in theory reduce due to the increased visibility of the intersection through the proposed works. However any drop in crashes of this type would depend on the queueing at this and subsequent intersection. This will be considered further once more detailed modelling has been completed.	-	The number of rear end collisions should in theory reduce due to the increased visibility of the intersection through the proposed works. However any drop in crashes of this type would depend on the queueing at this and subsequent intersection. This will be considered further once more detailed modelling has been completed.	-	The number of rear end collisions should in theory reduce due to the increased visibility of the intersection through the proposed works. However any drop in crashes of this type would depend on the queueing at this and subsequent intersection. This will be considered further once more detailed modelling has been completed.	-	The number of rear end collisions should in theory reduce due to the increased visibility of the intersection through the proposed works. However any drop in crashes of this type would depend on the queueing at this and subsequent intersection. This will be considered further once more detailed modelling has been completed.	x	No Change
Reduce the number of crashes involving pedestrians or cyclists at the Ilam/ Middleton/ Riccarton intersection.												
Pedestrians	x	No Change	✓	The proposal will improve pedestrian safety. The pinch points on the footpath have been resolved and the pedestrians will now have increased pedestrian protection at the traffic signals, although not full protection.	✓	The proposal will improve pedestrian safety. The pinch points on the footpath have been resolved and the pedestrians will now have increased pedestrian protection at the traffic signals, although not full protection. Pedestrians using the south side of Riccarton Road will only have to cross the left out for Middleton, compared with option 1 and 3 which require pedestrians to cross the left in left out arrangement.	✓	The proposal will improve pedestrian safety. The pinch points on the footpath have been resolved and the pedestrians will now have increased pedestrian protection at the traffic signals, although not full protection.	✓	The proposal will improve pedestrian safety. The pinch points on the footpath have been resolved and the pedestrians will now have increased pedestrian protection at the traffic signals, although not full protection. Pedestrians using the south side of Riccarton Road will only have to cross the left out for Middleton, compared with option 1 and 3 which require pedestrians to cross the left in left out arrangement.	x	No Change
Cyclists	x	No Change	✓✓	Provision of bus lanes on Riccarton Road and the signalised crossing for cyclists will improve their safety.	✓✓	Provision of bus lanes on Riccarton Road and the signalised crossing for cyclists will improve their safety.	-	Provision of bus lanes on Riccarton Road and the signalised crossing for cyclists will improve their safety. There are concerns within the project team over the safety of the bi directional facility as it travels further up Ilam Road due to high intensity accesses, however this is a matter for the MCR team and can be addressed through their design process. Within the extent of this scheme there is the Veterinary Surgery which is likely to have a high turnover. Measures would need to be consider to ensure drivers using this access could do so safely.	-	Provision of bus lanes on Riccarton Road and the signalised crossing for cyclists will improve their safety. There are concerns within the project team over the safety of the bi directional facility as it travels further up Ilam Road due to high intensity accesses, however this is a matter for the MCR team and can be addressed through their design process. Within the extent of this scheme there is the Veterinary Surgery which is likely to have a high turnover. Measures would need to be consider to ensure drivers using this access could do so safely.	✓	No Change for cyclists on Riccarton Road. Cyclists on Ilam or Middleton would have a separate cycle phase.
Maintain network efficiency for public transport along Riccarton Rd.	✓	No Change	Left in Left out was not modelled. Only the left out only options (Option 3 and Option 4) were at this stage. Left out only would provide a safer option and would be a worst case scenario with regard to the impact on the capacity of the intersection.				xx	Option has a minor detrimental impact in the AM peak hour. However during the PM peak hour the impact is significant. Eastbound vehicles are delayed by 3 -4 minutes per vehicles and buses have a delay of 6 – 7 minutes. Westbound vehicles and buses each have a delay of between 7 and 8 minutes.	xx	Option has a minor detrimental impact in the AM peak hour. However during the PM peak hour the impact is more significant although less so then in Option 3. Eastbound and westbound vehicles and buses are delayed by 1 – 1.5 minutes per vehicle.	xx	Split phasing is likely to result in additional congestion on Riccarton Road.
Integrate with the future bus priority project	x	Proposal does not integrate with bus priority.	✓✓	Proposal includes bus lanes on Riccarton Road. West bound buses have a dedicate lane up to the intersection. Eastbound buses have a shared lane with left turning vehicles however this will still offer benefits to bus travel times and is consistent with similar treatments throughout Christchurch.	✓✓	Proposal includes bus lanes on Riccarton Road. West bound buses have a dedicate lane up to the intersection. Eastbound buses have a shared lane with left turning vehicles however this will still offer benefits to bus travel times and is consistent with similar treatments throughout Christchurch.	✓✓	Proposal includes bus lanes on Riccarton Road. West bound buses have a dedicate lane up to the intersection. Eastbound buses have a shared lane with left turning vehicles however this will still offer benefits to bus travel times and is consistent with similar treatments throughout Christchurch.	✓✓	Proposal includes bus lanes on Riccarton Road. West bound buses have a dedicate lane up to the intersection. Eastbound buses have a shared lane with left turning vehicles however this will still offer benefits to bus travel times and is consistent with similar treatments throughout Christchurch.	x	Proposal does not provide bus priority. The split phasing is likely to have a material detrimental impact on travel times on Riccarton Road
Integrate with the MCR	x	Proposal does not integrate with MCR.	✓✓	Scheme provides a signalised crossing from a shared path on Middleton Road to separated mono directional facilities on Ilam Road	✓✓	Scheme provides a signalised crossing from a shared path on Middleton Road to separated on road cycle facilities on Ilam Road	✓✓	Scheme provides a signalised crossing from a shared path on Middleton Road to separated bi directional facility on Ilam Road.	✓✓	Scheme provides a signalised crossing from a shared path on Middleton Road to separated bi directional facility on Ilam Road.	✓	Option would include a separate cycle phase.


Option 1
LEFT LANE
LEFT TURN
ONLY
EXCEPT BUSES
& CYCLES
Ilam Road
Riccarton Road
Middleton Road
CH 150
CH 90
CH 86
CH 60
CH 202
BC
BUS LANE
FILE: S:\Data\DGN\V8 Roading\rd3500\rd3587s1.dgn
DATE: 19-Oct-16 18:01
Key Features
- Middleton Road changed to left in left out and removed from the signalised intersection.
- Bi Directional cycle facility on the eastern side of Middleton Road to Mono Directional facilities on Ilam Road
- Removal of left turn slip lane from Ilam Road to Riccarton Road
- Inclusion of Bus Lanes
- Removal of Pinch points for pedestrians at corners by widening the footpaths


Option 2
LEFT LANE
LEFT TURN
ONLY
EXCEPT BUSES
& CYCLES
Ilam Road
Riccarton Road
Middleton Road
CH 150
CH 90
CH 86
CH 60
CH 202
BC
BUS LANE
Key Features
- Middleton Road changed to left out only and removed from the signalised intersection.
- Bi Directional cycle facility on the eastern side of Middleton Road to Mono Directional facilities on Ilam Road
- Removal of left turn slip lane from Ilam Road to Riccarton Road
- Inclusion of Bus Lanes
- Removal of Pinch points for pedestrians at corners by widening the footpaths


Option 3
LEFT LANE
LEFT TURN
ONLY
EXCEPT BUSES
& CYCLES
Ilam Road
Riccarton Road
Riccarton Road
Middleton Road
Middleton Road
302
300
298A
298
309
307
303
1/305
299
301
BUS LANE
LANE BUS
Key Features
- Middleton Road changed to left out only and removed from the signalised intersection.
- Bi Directional cycle facility on the eastern side of Middleton Road to Bi Directional facility on western side of Ilam Road
- Right phase from Riccarton Road into Ilam Road
- Maintain slip lane from Ilam Road to Riccarton Road, which will require land purchase
- Inclusion of Bus Lanes
- Removal of Pinch points for pedestrians at corners by widening the footpaths


Option 4
NORTH
RICCARTON ROAD
ILAM
Ilam Road
LEFT LANE
LEFT TURN
ONLY
EXCEPT BUSES
& CYCLES
RICCARTON ROAD
Riccarton Road
Middleton Road
MIDDLETON ROAD
FIELD TERRACE
GIVE
DANGER 150V
Ex Sump
Ex Grass Berm
Ex Path
Ex Kerb & Flat Channel
Ex Rubbish Bin
Ex 375ø
Ex 525ø
FILE: S:\Data\Dgn\V8\Roading\rd3500\rd3587s4.dgn
DATE: 29-Nov-16 08:51
Key Features
- Middleton Road changed to left out only and removed from the signalised intersection.
- Bi Directional cycle facility on the eastern side of Middleton Road to Bi Directional facility on western side of Ilam Road
- Right phase from Riccarton Road into Ilam Road
- Removal of slip lane from Ilam Road to Riccarton Road.
- Inclusion of Bus Lanes
- Removal of Pinch points for pedestrians at corners by widening the footpaths