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Christchurch City Council

FENDALTON/WAIMAIRI COMMUNITY BOARD

WORKS, TRAFFIC AND ENVIRONMENT COMMITTEE AGENDA

MONDAY 26 MAY 2008

8.00 AM

IN THE BOARDROOM
FENDALTON SERVICE CENTRE
CORNER JEFFREYS AND CLYDE ROADS

Committee: Cheryl Colley (Chairperson), Sally Buck, Faimeh Burke, Val Carter, Jamie Gough, Mike Wall and Andrew Yoon

Acting Community Board Adviser
Graham Sutherland
Phone 941 6728 DDI
Email: graham.sutherland@ccc.govt.nz

INDEX **PG NO**

1. APOLOGIES

Sally Buck.

2. DEPUTATIONS BY APPOINTMENT

2.1 TIM FREER – WAI-ITI STREAM PROJECT

Tim Freer will be in attendance to discuss a potential project for Wai-iti Stream.

3. STAFF BRIEFINGS

3.1 CORINGA RESERVE

Tara Smith, Consultation Leader – Greenspace and Kevin Williams, Project Leader will be in attendance to present the draft plans for Coringa Reserve so that the project can go out for consultation.

3.2 BISHOPDALE TOILETS

Tara Smith, Consultation Leader – Greenspace and Brent Smith, Capital Project Team Manager will be in attendance to present the plans for upgrade of Bishopdale Toilets to enable a start work notice to be circulated.

3.3 POUND ROAD/RYANS ROAD INTERSECTION

Philippa Upton, Consultation Leader – Transport will be in attendance to update the Committee and answer questions in relation to the **attached** memo.

ATTACHMENT TO CLAUSE 3.3

Christchurch City Council
Capital Programme Group

Memorandum

Date: 8 May 2008

From: **PHILIPPA UPTON**

To: **FENDALTON/WAIMAIRI COMMUNITY BOARD**

RE: POUND ROAD/RYANS ROAD INTERSECTION SAFETY IMPROVEMENT

The purpose of this memo is to advise the Fendalton/Waimairi Community Board of the proposed Safety Improvement at the Pound Road/Ryans Road intersection. The Safety Improvement is about to proceed to final design, tender, and construction.

Board members may recall presentation of a seminar at the Fendalton/Waimairi Works, Traffic and Environment Committee on 25 February, 2008, outlining the background and reasons for the project. To summarise:

The Pound/Ryans Safety Improvement was initiated owing to a number of accidents at the involving traffic failing to stop while approaching Pound Road from Ryans Road. During planning consideration was given to possible future developments and changes in traffic flow that could affect the intersection.

Project objectives are to:
- Improve safety for all road users at the intersection,
- Improve the visibility of the road junction to road users on all approaches,
- Develop an appropriate remedial measure which is suitable for the hierarchy of both roads.

Key features of the plan include:
- 18 metre long, one metre wide traffic islands
- Painted islands replacing the existing chevron
- New large stop signs on the road leading to the intersection, and on the island
- New large stop signs 100 metres before the intersection
- Keep left signs at either end of the islands
- Lighting upgrade - replacement of existing single pole with two new poles on the left of each side of the intersection
- Redefinition and slight widening of intersection as shown on plan

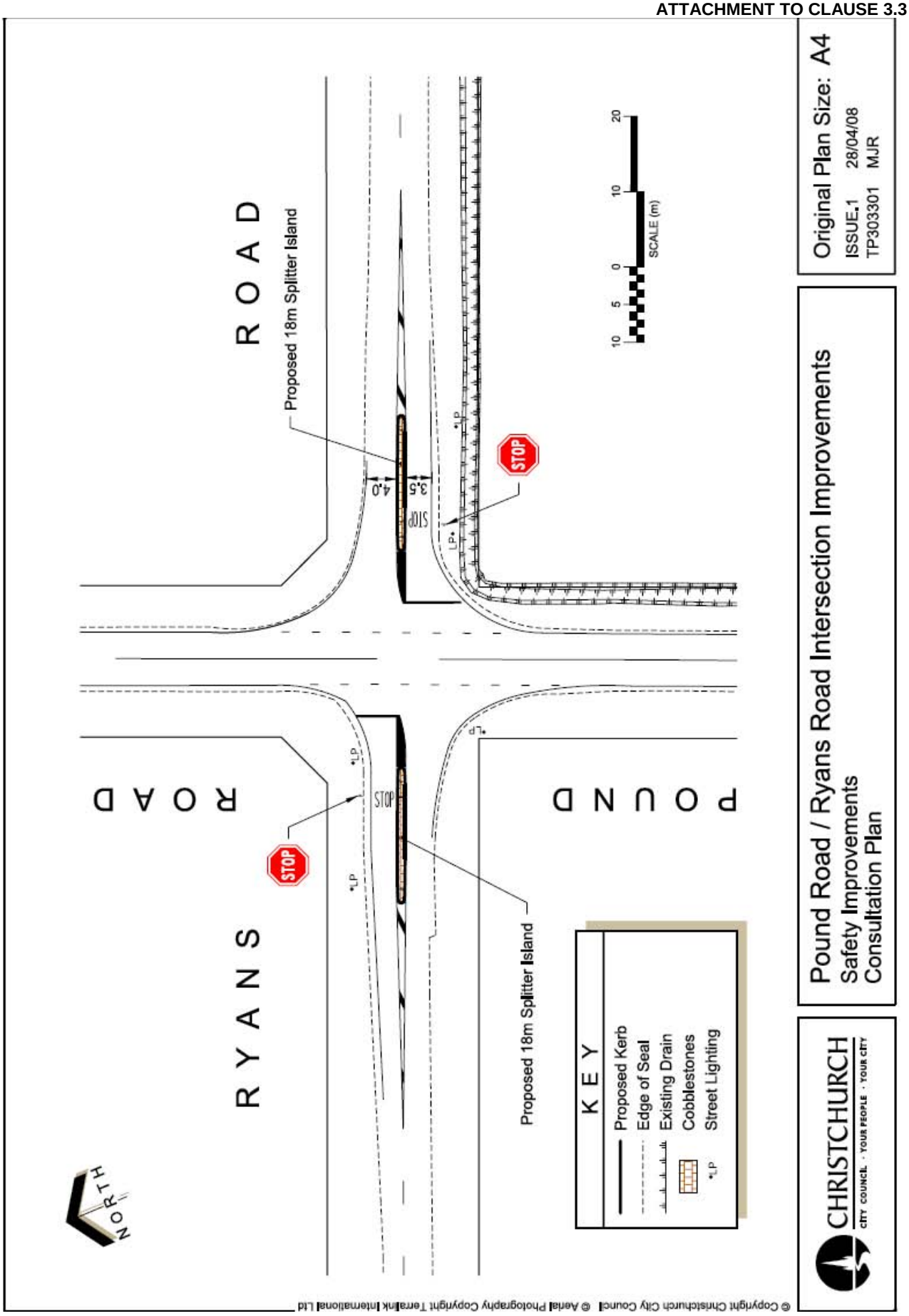
Airways New Zealand was consulted on the plan via Christchurch Airport. This resulted in an adjustment to the height of the proposed lighting poles to comply with Airways standards. A letter with enclosed plan was sent to adjacent property owners and key stakeholders informing them of key aspects of the project, and of the proposed Safety Improvements

The Safety Improvement for Pound/Ryans intersection is programmed in the LTCCP for implementation in the 2008-09 financial year the transport and the Greenspace Unit has estimated the project to cost $90,000. There are no legal issues associated with this project, which aligns with the LTCCP, and it is consistent with the Christchurch Road Safety Strategy.

As there is no change to the intersection priority or road hierarchy required for this safety improvement, it is proposed that the Safety Improvement for the Pound Road/Ryans Road intersection proceeds to final design, tender and construction.

Philippa Upton
Consultation Leader
Capital Programme Group
Phone 941 8808
Email philippa.upton@ccc.govt.nz

ATTACHMENT TO CLAUSE 3.3



4. 10 WAIWETU STREET - DISPOSAL OF SURPLUS ROAD LAND

General Manager responsible:	General Manager City Environment, DDI 9416401
Officer responsible:	Acting Unit Manager, Transport and Greenspace
Author:	Neera Vishnubhatla, Engineer (Information)

PURPOSE OF REPORT

1. The purpose of this report is to obtain the Board's recommendation to Council to declare small parcels of road land occupied by adjoining owner's surplus to the Council's requirements and commence Road Stopping outside 10 Waiwetu Street pursuant to Section 116 of the Public Works Act 1981. The parcels of road land to be declared surplus are as shown on the **attached** plan.

EXECUTIVE SUMMARY

2. Staff have received a request from the owner of 10 Waiwetu Street to purchase land parcel identified as "Sec 3" in the **attached** plan.

3. This parcel of land, along with other parcels identified on the plan are occupied by the adjoining owners and are not publicly recognised as road space.

4. Waiwetu Street is classified as a local road. It was reconstructed in 2002 with flat kerb and channel generally 9 metres wide with a very much improved street environment, berms, shrubs and trees.

5. A previous request was received from the owner of 4 Waiwetu Street to purchase road land in front of his property and this request was granted and the parcel of road land was stopped in 2001.

6. Waiwetu Street is a cul-de-sac and has little significance to the road network system. The street has been upgraded in 2002 and the expected life of the road is 80 years.

7. The sale of the identified parcels of land will create a uniform property boundary along Waiwetu Street.

8. Approval to proceed with the disposal of all parcels identified on the attached plan as "Sec 1 – 5", will allow staff to proceed with requests from adjoining owners as and when they arise.

9. The other option is to resume the road land requiring occupier to shift the fence, thus enabling the road users to enjoy the public space.

FINANCIAL IMPLICATIONS

10. There is no cost to the Council.

11. The cost of disposal along with the associated fees for the road stopping process will be recovered from the applicant along with the income generated from the sale, which will accrue to Council.

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

12. Yes.

LEGAL CONSIDERATIONS

13. ***Section 116 Public Works Act 1981 – Stopping road***

This section states that subject to the consent in writing of the territorial authority and the owner(s) of the land adjoining the road proposed, then the road can be declared formally stopped by notice in the Gazette.

4. Cont'd

14. The public rights of pass and repass is not affected in this case.

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

15 Yes.

ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

16. LTCCP page 152 "Streets and Transport Objectives" – to provide a sustainable network of streets.

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

17. Yes.

ALIGNMENT WITH STRATEGIES

18. This action is consistent with traffic objectives stated in the City Plan.

Do the recommendations align with the Council's strategies?

19. Yes.

CONSULTATION FULFILMENT

20. Not required.

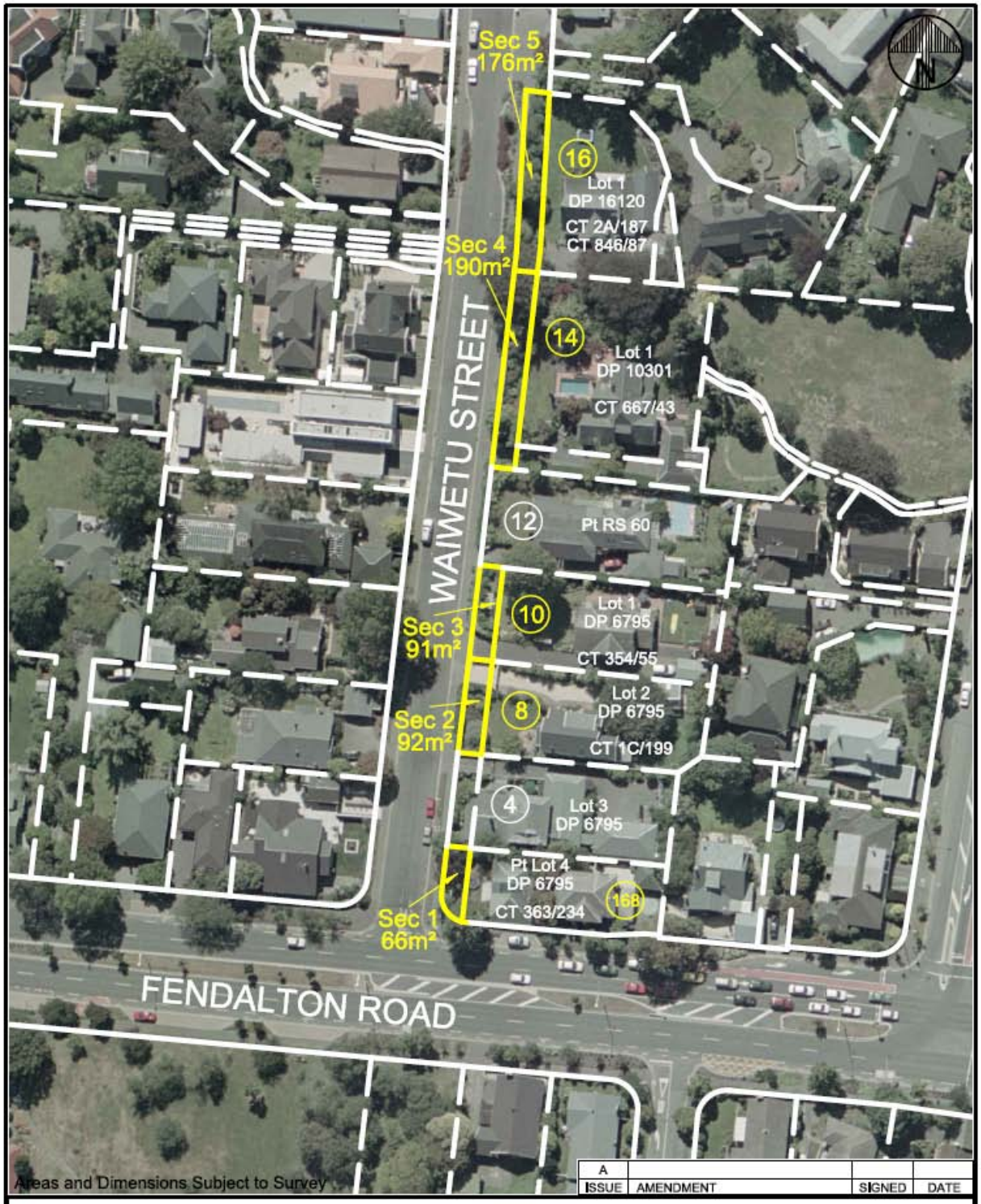
STAFF RECOMMENDATION

It is recommended that the Committee recommend that the Board recommend to Council:

(a) That the parcel of the road land identified as "Sec 3" on the attached plan, be declared as surplus to road requirements pursuant to Section 116 of the Public Works Act 1981, be stopped and disposed of to the adjoining land owner.

(b) That the remaining parcels identified as "Secs 1, 2, 4 and 5" be declared surplus to road requirements thus enabling staff to advise future applicants on the purchase of these parcels of road land with certainty.

ATTACHMENT TO CLAUSE 4



ISSUE	AMENDMENT	SIGNED	DATE
A			

ROAD TO BE STOPPED

CHRISTCHURCH CITY COUNCIL · YOUR PEOPLE · YOUR CITY

SURVEYED	
DRAWN	J Anderson
DATE	03/2008

DRAWING NUMBER 500790-01	ORIGINAL SHEET SIZE A4	SCALES 1:1000	
FILE REFERENCE 500790			
PROJECT NUMBER 542/137/1/3		SHEET 1 OF	

5. RAY BLANK PARK TREE REPLACEMENT PLANTING PLAN

General Manager responsible:	General Manager City Environment Group, DDI 941-8656
Officer responsible:	Acting Transport and Greenspace Manager
Author:	Rod Whearty, Consultation Team Leader

PURPOSE OF REPORT

1. The purpose of this report is to approve the Tree Replacement Planting Plan for Ray Blank Park following consultation with the local community.

EXECUTIVE SUMMARY

2. Board members will recall that the concept plan for the Major Tree Replacement Planting Programme on Ray Blank Park was presented to the Works, Traffic and Environment Committee on 25 February 2008, prior to carrying out consultation with the local community.

3. The proposed plan utilises a broad range of native and exotic tree species and this aspect of the plan was well received and supported by many of the respondents. We also received a small number of site-specific comments related to the proposed replanting which were primarily related to properties that bounded the park. These comments generally related to maintaining existing views into the park and mitigating the potential for boundary encroachment or adverse winter shade. A number of respondents commented positively on the tree removal programme addressing the issue of unsuitable tree species.

4. The consultation also identified a number of minor maintenance or operational matters unrelated to or outside of the scope of the replanting programme. The respondents identified the need for some remedial pruning in a number of areas in the existing shrub borders to deter dumping of rubbish, concealment opportunities and overhanging foliage.

5. All of these matters are being attended to as operational items through the Council's Customer Service Request (CSR) system and data base (see **attached** Consultation Feedback). Maintenance staff are currently working through these items and issuing instructions to the contractor to carry out remedial work where required.

6. In recognition of the resident's feedback, the Capital Programme Group proposes to make a number of minor changes to the original plan that was circulated to residents (see **attached** plan). The proposed changes will address the issues highlighted by the residents in their feedback. Staff have been very conscious of shade related issues and the need to maintain good sightlines and visibility when considering species selection for specific areas within the plan. The changes primarily address these issues by either deleting the proposed tree off the plan or relocating it to another area of the park.

7. **Proposed Changes**

   (a) Deletion of five proposed trees in the south east corner of the park (adjacent to 5 Farnham Place to maintain an open vista and sightlines into the park). Stopping the proposed shrub border on the southern boundary of the park near the boundary of numbers 3 and 5 Farnham Place to maintain the existing open vista and sightlines into the park.

   (b) Deletion of proposed trees near the boundaries of 177 and 177a Ilam Road, 16, 19b, and 22 Swanleigh Place, 10 and 12 Gothic Place and 70 Maidstone Road to reduce any adverse effects such as excessive shade, overhanging foliage, root invasion into garden or paved areas and maintain sightlines to allow casual observation of the park and users.

   (c) Reducing the number of "Avenue" trees adjacent to the pedestrian/cycle path, while still maintaining the avenue appearance. Using flowering cherry trees as the "Avenue" species adjacent to the pedestrian/cycle path and various points along the Maidstone Road frontage for continuity with the existing cherry trees in other parts of Maidstone Road and to promote the existing flowering cherry tree theme in the wider Fendalton/ Waimairi area.

5. Cont'd

8. The amended plan has undergone an internal peer review based around general Crime Prevention Through Environmental Design (CPTED) principles and practices. Staff are confident the proposed plan does not create any issues around park user safety or potential for an unacceptable level of property shading. Maintaining good sightlines and opportunities for casual observation of the park and users from the neighbouring properties is an important component of CPTED principles and practice.

9. There are still a number of remaining poplar and gum trees to be removed as part of the overall tree removal programme. These are the medium priority trees in the removal programme and are scheduled for removal over the coming summer period (November 2008-February 2009). This will complete the tree removal aspect of this project. The current replanting plan takes these removals into consideration and provides for their replacement.

FINANCIAL IMPLICATIONS

10. The felling of the High Priority removals has already been completed in the current 2007/08 financial year. The budget estimate for the remaining work to complete this project is $100,000. This includes the remaining Medium Priority tree removals and all the replacement planting costs to complete this project.

11. The intention is to split the remainder of this work equally over the next two financial years ($50,000 per annum) as shown below.

2008/09 $50,000	Felling Medium Priority trees and commence some replanting.
2009/10 $50,000	Completion of the replanting programme.

12. The current Greenspace Capital Works Programme has funding to undertake the proposed replanting plan for Ray Blank Park. The source of funding for this project is shown below.

Transport and Greenspace Capital Programme

2008/09 $660,000	Major Park Tree Replacements
2009/10 $660,000	Major Park Tree Replacements

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

13. Yes. Funding is provided from within the Transport and Greenspace Capital Programme in the 2006-16 LTCCP.

LEGAL CONSIDERATIONS

14. There are no legal considerations that would have a direct impact on this proposal. None of the trees identified for removal is listed in the City Plan as Protected or Notable Trees. Removing the unsuitable trees will reduce the Council's risk and exposure to damage claims from neighbouring properties in the future.

ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

15. **LTCCP 2006-2016**

(a) **Parks, Open Spaces and Waterways – Page 123**

(i) Recreation – By offering a range of active and passive recreation and leisure opportunities.
(ii) Health – By providing areas for people to engage in healthy activities.

5. Cont'd

(b) **Recreation and Leisure – Page 131**

(i) Recreation – By encouraging more people to participate in leisure, physical and sporting activities

(c) **Parks and Open Spaces Activity Management Plan**

ALIGNMENT WITH STRATEGIES

16. Social Wellbeing and Youth Strategy and Safer Parks Policy.

CONSULTATION FULFILMENT

17. Extensive consultation has been undertaken will the local community via a letterbox drop and comment form resulting in feedback from interested stakeholders (see **attachment**). The plan was circulated to approximately 550 residential properties within the general catchment area of Ray Blank Park including absentee property owners within the consultation area.

18. There was a very good response from the local community with a total of seventy one (71) individual residents returning the comment form providing feedback on the proposed plan (see **attached** comments). This equates to a 13 per cent response rate. Overall the response from the local community was very positive and supportive with 62 respondents (or 87.5 per cent) expressing support for the proposed plan, while three (or 4 per cent) did not indicate a preference either way and six (or 8.5 per cent) indicated they did not support the proposed plan.

19. There was a late response received from the Avon United Football Club who have playing fields and a floodlit training area on the park. The club raised concerns around the proximity of proposed trees to some sports fields and existing training lights. The Consultation Leader met a club representative on-site on Monday 28 April 2008, and some amendments have been made to the proposed replanting plan to address these concerns.

20. All respondents have been sent a final reply letter thanking them for their input, including an A3 colour copy of the finalised plan. The letter informed respondents when the plan would be presented to the Board for approval. Details of the meeting (time, date, venue etc) were also provided so that any interested people could attend or address the Board prior to the decision being made.

STAFF RECOMMENDATION

That the Committee recommend that the Board:

(a) Approve the Ray Blank Park Major Tree Replacement Planting Plan.

(b) Approve the Capital Programme Group to commence implementation of the approved plan.

ATTACHMENT TO CLAUSE 5

Ray Blank Park Major Tree Replacement Planting Programme

Support Plan	Ref	Summary Description	Project Team Response
Yes	1	Ray Blank Park is a precious local amenity which adds value to the neighbourhood. We are content to watch the changes without further notice.	No Action Required
Yes	2	I totally support the plan. For your information, 19b Swanleigh Place is currently unoccupied so you are unlikely to receive a response from there.	No Action Required
Yes	3	I support the plan.	No Action Required
Yes	4	Great plan. Glad to see it being actioned.	No Action Required
Yes	5	The use of a variety of trees including natives will enhance the park.	No Action Required
Yes	6	I've watched the trees in Ray Blank Park grow from little, newly planted trees in the late 1960's to the huge trees they are today. I've been thinking lately they need to be removed, so am whole heartedly in favour of your re-planting plans. Thank you.	No Action Required
Yes	7	Fully approve this programme. Will add to an already valuable district asset.	No Action Required
No (only as far as it impacts on our property)	8	We specifically have one objection. That is to the shrubbery plan to plant outside our property at 7 Farnham Place. We have just spent $1000 re-fencing with metal fencing. The intent of this was to provide us with a quality fence, a view to the park and a match to the higher value properties off Swanleigh Place – we note there is no shrubbery to be planted on their boundaries despite the sudden exposure of 23 Swanleigh into the park with the 2 big trees felled. We are in the corner and barely intrude into the park. We have no objection to the shrubbery for 5 Maidstone Road (garage backs, old fences, and no fences) but believe our small frontage should be excluded. Further, we have provided a gate – if the shrubbery is across our boundary it will get trampled on by our gate. Again we note the other metal fences have gates unobscured by shrubs.	Stop the proposed shrub border at the boundary of number 3 and 5 Farnham Place. Reduce the number of proposed trees in this corner of the park from 6 down to 3. This change will address the residents' concerns and maintain the existing open vista. This will maintain opportunities for casual observation from neighbouring properties which will promote safety for park users and adjoining properties.
Yes	9	All in favour of replanting programme. However, my concern is with the large Silver Birch trees outside the community centre on Waimairi Road. I have asthma and these trees together with one in 183 Waimairi Road are truly a problem for me. I would like to see the replanting programme extended to the community centre as well.	This is outside the scope of the project. RFS 90792130 has been sent to Community Facilities Team to follow up.

ATTACHMENT TO CLAUSE 5

Support Plan	Ref	Summary Description	Project Team Response
Yes	10	• A path crossing over from the Swanleigh entrance to the existing changing sheds and toilets would be nice when the grass is wet in winter, as this is a short cut to the Waimairi Road shops. • The oak trees in Swanleigh Place are unsuitable as they grow too large and they also drop acorns which grow in our gardens and are very hard to dig out! Some trees at the end of Swanleigh Place need renewing too. They are dying and scraggy.	This is outside the scope of the project. No strong desire line on the park indicating that this is a common route. It is still possible to walk to the toilets all on sealed paths, but not a direct route. No action required. Outside the scope of the project. RFS 90792149 has been sent to the Arboricultural Team to investigate and respond to submitter.
Yes	11	Thank you for caring for our park.	No Action Required
Yes	12	We support the plan.	No Action Required
Yes	13	I love trees and shrubs, the more the better.	No Action Required
Yes	14	• I fully support this programme. The present poplars and gums just do not "look right". The only concern I have is that the two soccer pitches are not encroached on. I am sure you will have this in mind. The fields are used all weekends and are an important facility. • Why do the removal in two removals? Why not tackle the whole removal in one go – 1st and 2nd priorities together – then no second thoughts.	Proposed plantings will maintain adequate separation from the sports fields and within current industry standards and practices. Tree removal programme has been managed based on risk and available budget. Stage two removals (Medium Priority) will be completed between November 2008 and February 2009. No change to the original removal programme is proposed.
Yes	15	Sounds good to us.	No Action Required
Yes	16	Boundary tennis fence, no. 16 Swanleigh seems over planted with trees on top of each other. Can one of two be taken out? Thank you for your plan. Looks great.	Delete middle proposed tree.
Yes	17	I support the plan.	No Action Required

ATTACHMENT TO CLAUSE 5

Support Plan	Ref	Summary Description	Project Team Response
Yes	18	I have strong reservations about the impractical proposal for a "single row of specimen trees adjacent to the pedestrian/cycle path to create an avenue effect". The dictionary* definition of a park is "a piece of open land" not a series of enclosed spaces. I consider the proposed 'avenue' of trees would seriously detract from the functionality of the park for the following reasons: 1) Surrounding the eastern end of the park containing the pedestrian/cycle path with trees would seriously limit the access of sunlight to this area. After rain, and in autumn and winter, the path would often be wet underfoot, and in autumn particularly, leaves adhering to the surface would create a serious hazard for pedestrians, especially elderly people. 2) I am concerned that enclosing the area containing the path would impinge upon the personal safety of cyclists and pedestrians. One established, the suggested plantings would provide myriad opportunities for concealment, and mean using the path, even in broad daylight would be a hazardous experience. I support the proposed plantings on the periphery of the park. * Collins Concise Dictionary, 1999.	Reduce the number of "Avenue" trees and use flowering cherry as the preferred species. The trees will be located on the western side of the path and are not considered to be a large or densely foliated tree. This will allow morning sun onto the path following rain or winter frosts. As trees develop their canopies would be lifted to maintain open vistas and good sightlines. No change to avenue of trees is proposed.
Yes	19	• I am really thrilled that this is taking place. The poplars have been a danger for years. • I like the mix of trees, especially the predominant specimen and avenue trees. • When you remove the trees by the alleyway in Swanleigh Place, please could you do something about the roots that have gone into the apartment on the eastern edge of the alleyway, this is currently empty, but the roots have been going along the alleyway fence for years. • Is it possible to water the trees until they are established? The park gets very dry (wind & weather). The planting in the corner, north of the changing sheds and along the fence towards the playground didn't do well because nothing was watered.	Tree stumps will be poisoned to kill all lateral roots prior to stump removal. If necessary roots can be severed at the boundary. Arborist will investigate at the time of stump removal. RFS 90792163 has been sent to the Arborist requesting investigation at time of stump removal. This is a standard requirement in tree planting and establishment contract.
Yes	20	I support the plan.	No Action Required

ATTACHMENT TO CLAUSE 5

Support Plan	Ref	Summary Description	Project Team Response
Yes	21	We are most impressed with the tree programme as drafted. As frequent visitors to the park each day with grandchildren, retriever and labrador dogs and extended family, we appreciate that many of the trees have outgrown their aesthetic potential and are unsafe as was proved recently. Your choice of replacement trees is great and we look forward to the future development of your scheme plan. I am sure that local residents who live near and use the park will be very supportive. The present walkway/cycle track is frequently used by school children and University students. Congratulations on another great cultural gathering in the park last week! Best wishes Rod.	No Action Required
Didn't indicate support/non-support	22	1) Not too many specimen tree varieties. A few varieties only. 2) Not a good place for precious native birds as there are too many children around – and dogs and cats.	Tree species list is "indicative". However there are good reasons for providing a broad range of species to provide diversity of colour, shape and form to enhance the park landscape as it changes over the seasons. In addition to this it also provides a range of potential habitats for bird species.
Yes	23	I support the plan.	No Action Required
Yes	24	I go for a walk every day. I really enjoy walking around the park. I support the plans you want. On my view, if there were some more places to sit, like bench. It would be perfect. I know it is not easy because the soccer ground for game. If we could share the people like us and player, we all be happy. Thank you.	Outside the scope of the project. Parks Contract Manager to identify some additional seat locations and plan for inclusion of these in future seating contracts.
Yes	25	I particularly like the idea of an avenue of trees along the walk/cycle way. Children using the park will greatly enjoy blossom trees in Spring.	No Action Required

ATTACHMENT TO CLAUSE 5

Support Plan	Ref	Summary Description	Project Team Response
No	26	I agree that large trees close to houses and roads etc that could either blow over or lose limbs, in either a southerly or norwester should be removed. However, many mature trees you have marked are not endangering properties or roads etc. Why not let nature do its work with these and let them "be". The old pine trees is one of these. The trees in this park on the whole are lovely, that is because in a large degree they are mature. Please reassess the number, especially in the 2nd stage of removal that you plan to remove.	Tree removal programme to remain unchanged. Some remedial pruning required on large pine to remove deadwood (RFS /… to Arborist to action). Large pine will be managed to achieve maximum serviceable life. While it has been identified for future potential removal, at this point there are no immediate concerns regarding its structural integrity or safety. Remaining life span is difficult to predict as this can be radically influenced by tree health and disease resistance, environmental factors such as strong winds, heavy rainfall or snow events etc or a combination of both.
Yes	27	1) Please ensure security is provided for especially in an "avenue" planting. 2) Please consider flowering gums for variety – perfume – evergreen presence and colour. Plus, <u>please</u> provide better/more rubbish bins.	Canopies to be lifted as trees mature to maintain open vistas and sightlines. Plan currently provides a wide range of species. RFS 90792174 sent to Parks Contract Manager to investigate and action if necessary.
Yes	28	I support the plan.	No Action Required
Yes	29	The plan looks fine and I look forward to the changes. Thank you and good luck.	No Action Required
Yes	30	I support the plan.	No Action Required
Yes	31	Dear Sir, How are you? I'm the house holder of 22 Swanleigh Place, Ilam. I'm really happy to agree with this new planting programme and may I ask about new planting trees (please see my another copy print) – *copy of planting programme with notes attached to feedback form.* I hope those trees to be a bit away or just remove these three trees from my house because I'm worried after many years the tree's branch again will fall down to our house. I would be very appreciated if these things are accepted. Thank you very much for CCC new planting programme. If it's possible, I would hope that the replanting trees beside house to be not too tall and high trees. Please consider our circumstance. Thank you very much.	Proposed trees will be shifted to provide greater boundary separation from the property. Tree species adjacent to this boundary to be restricted to smaller growing varieties such as Flowering Cherry or Maple.

ATTACHMENT TO CLAUSE 5

Support Plan	Ref	Summary Description	Project Team Response
Yes	32	Sounds like a great plan. Ray Blank Park is most used and enjoyed and this programme can only make it more attractive to all in this area and beyond.	No Action Required
Yes	33	Thank you for keeping us informed. I like the idea of your plan and appreciate your suggestion that consideration will be given to avoid excess shade on my property. There are some small trees right up against my wrought iron fence and I would be happy to talk to your arborist about the removal or trimming back of these. Thank you.	RFS 90792195 sent to Parks Contract Manager to investigate and action pruning of overhanging shrubs in the existing shrub border adjacent to this property.
Yes	34	The toilet block is used a lot and I think it's important that there are not too many trees, shrubs, planted around it – a place for "dodgy" people to loiter. Like the idea of avenues of trees to.	Four trees to be removed from around the toilet block (two high priority, two medium priority) as part of the tree removal programme. One new proposed tree near the toilet block has been deleted from the plan. Staff are comfortable the current proposal does not create any safety issues for users of this facility. An upgrade of this toilet block is programmed for the 2010/2011 financial year.
Yes	35	More than happy to leave these improvements to the specialists. Would love to see 'flowering cherry' trees perhaps along the Maidstone Road edge! Keep up the good work.	Placement of Flowering Cherries along the pedestrian/cycle path and various locations along the Maidstone Road frontage is proposed in keeping with the existing Cherry Trees along other parts of Maidstone Road and the Fendalton Waimairi area.
Yes	36	I never linger in Ray Blank Park as it always seems a bit drafty – removing those big poplars will be an improvement. It would be nice if there were some little sheltered corners where families/groups could gather for picnics etc but I realise the planting of bushy trees etc isn't always compatible to security and safety. PS – I notice Pittosporum and Olearia are to be included but they seem to be left out of the plan key.	Perimeter planting already considered to be adequate on the park. In some areas some light thinning and lifting of shrub borders may be required to discourage undesirable behaviour or activity.
Yes	37	I am very pleased the poplar trees are to be removed, as they look unsafe. I think the planting of native trees is excellent, especially the evergreen ones. Thank you for the information you sent out.	No Action Required

ATTACHMENT TO CLAUSE 5

Support Plan	Ref	Summary Description	Project Team Response
Yes	38	I support plan with provision, that it is ok for security reasons. I got the impression with some other parks that undergrowth and sheltered areas were being cleared for safety. I wouldn't like to see a lot of trees planted and then have to be cleared because of undesirable characters frequenting the area. At present you can look around the park and see all the park without any hidden areas.	No Action Required
Yes	39	I support the plan.	No Action Required
Yes	40	Thank you for keeping me as a nearby resident informed with this graphic plan. The park is a great asset to my residency here, and I commend your proposal.	No Action Required
Yes	41	I support the plan.	No Action Required
Yes	42	I support the plan.	No Action Required
Yes	43	It's marvellous to know that care is involved in looking after the safety of neighbouring homes facing the park.	No Action Required
Yes	44	We live at 193b Ilam Road (see attached plan) and are very pleased with your plans to remove the trees as noted. However, we do note that two of the three trees adjacent to our property are only medium priority and we ask if all three tress could be made high priority.	No change in priority previously proposed. Medium priority trees will be removed between November 2008 and February 2009.
Didn't indicate support/non-support	45	I would like a tree planted outside my house – 17a Swanleigh Place as the one there at the moment is dead. Would you please look at the trees in the car park area – they look terrible.	Outside scope of the project. RFS 90792203 sent to Arboricultural Team to investigate and action.
Didn't indicate support/non-support	46	What is there to be said? You already started with your plan!	No Action Required

ATTACHMENT TO CLAUSE 5

Support Plan	Ref	Summary Description	Project Team Response
Yes	47	As indicated, I support your plan 100% but would like to add if I may, my concerns. The area in question being the south/west corner of the park along the fence line running north ward. I agree with the shrub lines to remain to soften the impact of the existing fence lines, "a great line" but no mention for any pruning or line topping for the remaining shrubs and trees. My real concern is fire, "fire hazard" with shrub/tree over hang into home sections, boarding the fence line further to this an on going pile up of dry leaves against the east side of the fence line, rubbish ie. paper, pizza and other food wrappings, newspapers etc etc disposed onto the ground in the area by night and day party goers, also the general public stopping to use the toilets. All it would take is a match, smoke butt dropped into the dry leaves etc, there could be a major disaster further fuelled by dry wooden fence lines running north ward to where the BP petrol station is located, so my request is for the remaining shrub lines and trees to be pruned and topped to your satisfaction. For your consideration for the sake of safety. Thank you. *Photo and plan highlighted in red enclosed with feedback form.*	RFS 90792207 to Parks Contract Manager to investigate and action accordingly.
Yes	48	I think it's great. I like the idea of a mix of trees – native and exotics. The exotics provide colour and change with the seasons, which is nice for a park. I live in Waimairi Road and wrote to you early Feb about the big trees behind us. Within a fortnight (I think), you were out in the park checking the trees I had spoken of. Now the dangerous ones are being removed. We're just so impressed! Thank you. Perhaps fence sized shrubs along our fence line would deter graffiti fans.	No Action Required RFS 90792214 sent to Parks Contract Manager to investigate and action as necessary.
Yes	49	Congratulations, I find the proposal is imaginative and practical. In the long term it will ensure the park is a beautiful and safe place for recreation. The proposal to attract native birds is praiseworthy, but I fear they will have a hard time against the large resident population magpies, blackbirds and thrushes. We live at number 8 Gothic Place. Some months ago I had dialogue with Tony Armstrong concerning the wildling plums growing in the park along our southern boundary. Their roots are severely impacting the garden, sucking out my good compost as fast as I apply it. Tony said they would be taken out later as part of other on going work. As far as I can establish from the plan, only two are identified, both for removal. There is a third one right in the corner! Its omission may well be due to the scale of the plan, but I would welcome your reassurance that all these invaders will be removed.	All three trees to be removed as part of the medium priority removals between November 2008 and February 2009.
Yes	50	I support the plan	No Action Required

ATTACHMENT TO CLAUSE 5

Support Plan	Ref	Summary Description	Project Team Response
Yes	51	1) The staff who produced this plan should be congratulated. 2) Local and other residents further a field certainly benefit from having such a pleasant haven in their area. 3) Selection of tree/shrub species for planting, with a bias given for those which would attract our native birds (presently being decimated by the swelling cat population) should meet with public approval. 4) Maximum protection against e.g. possums and vandals would be necessary when planting young specimens but Council would be well aware of these problems. Footnote: Ref 3 above – re: Cat Problem. I believe Council should seriously consider means to reduce the cat population in this city so that residents can pursue gardening without constant pollution and plant/vegetable damage by cats. We have legislation for dogs, why not cats? Thank you for this opportunity.	No Action Required
Yes	52	A good plan, well thought out, and will maintain the essential character of the Park as it exists presently (and works very successfully for individuals and community groups that use it). I would prefer to have the shrub border extended to front 20, 22, 23, 19b Swanleigh Place properties. Presently their appearance is about as stark as the Farnham Place properties. I question also why it is necessary to remove all the gums (unless they are dangerous). As evergreens, they have a place against the deciduous specimen trees in winter, and are of interest botanically.	Residents outside these properties have indicated they do not want any additional planting along their boundaries. Existing vegetation in this area of the park is already considered to be adequate.
Yes	53	I would prefer a graduated replanting plan to (ie over 2 – 5 years) to maintain the established feel to the park. This will enable the at risk trees to be removed and the beauty of the park to continue.	Budget provision does not allow for a 5 year planting programme. Historically resident's feedback has generally called for accelerated planting programmes to mitigate the large number of tree removals. No changes are proposed to the current replanting programme.
Yes	54	I support the plan.	No Action Required
No	55	Do not agree with proposal for avenue of trees along cycle track. Sports areas appear to be made smaller. Hope deciduous trees are not near residential boundaries. Not necessary to remove some of the existing trees designated.	Not in line with general feedback around the avenue of trees. Proposed planting does not encroach existing sports fields. Boundary separation is in line with current industry standards and practices.

ATTACHMENT TO CLAUSE 5

Support Plan	Ref	Summary Description	Project Team Response
Yes	56	We use the pathway twice daily. A concern is that the 'avenue of trees' may take away the openness and safety of the pathway.	Openness and sightlines will be maintained through reducing the number of trees along the path and lifting of the tree canopies.
No	57	Dear Sirs, On receiving the above plan, planting of the above plan – I was simply amazed. Even half the number of proposed trees would be excessive. Working rate-payers money by over planting to the above plan only to be cut down again in a few years is irresponsible. Further more they will keep the soccer fields wet in winter, and be a great hiding place for unsavoury behaviour which has not been a problem up till now. Planting trees by the park endangers to Gothic Place, with trucks, cars, bicycles, scooters and pushchairs using this path every day and watching for traffic on the bend of road is dangerous and without any thought of responsibility for safety. They will also shade the play area. Is this a bad joke?	Planting numbers are not considered to be excessive given the number of trees being removed (128). No Action Required
Yes	58	Most walkers/cyclists going between the Swanleigh Place alleyway and Gothic Place do not use this path. They cut in under the trees bordering numbers: 22 and 23 Swanleigh Place. This should be taken into consideration when planning the replanting of this area. Any trees replanted outside our home (23 Swanleigh) would preferably not have underground suckers or drop anything i.e chestnuts or acorns that can be thrown at the homes. They must also not grow too big or be too spreading in nature. Any of the smaller specimen trees suggested eg. maple, cherry, would be fine. We like the idea of an "avenue" effect along the pathway.	Closest tree to property boundary will be 10-15 metres away. Resident's comments will be taken on board. Species selection will aim to mitigate any adverse impacts on the adjoining property.
Yes	59	Re: phone call – 1 April 2008. Would you please trim down the bushes behind number 12. One bush is growing in the middle of another and the area is not children friendly.	RFS 90792218 sent to Parks Contract Manager to investigate and action accordingly.

Support Plan	Ref	Summary Description	Project Team Response
Most – I support most of the plan	60	Please see enclosed letter, picture and scan of area of concern. Of the 3 trees circled, the one closest to our boundary is of most concern. If someone with more knowledge of the trees to be planted could call on us, it would be appreciated. Letter: We approve of most of the plan for Ray Blank Park but are concerned about some aspects which we have detailed below. 1) Security, ours and the public: The proposed shrub border along the boundary to soften the impact of existing fence-lines. Please see the enclosed picture. We have no fence to the park and our neighbour has recently replaced his fence with one that allows them to see and be seen from the park as well. Any shrub will block our view of the park. We have assisted park users over the years when we have seen them in need of help. One of the problems we have experienced over the years is people sleeping or hiding in the shrubs along the North-east boundary. We have not experienced any security problems over the years as we are open to the park and users can see if others may be doing something wrong on our property. Please do not put a shrub boundary in front of our property, 5 Farnham Place or number 7 as it will be detrimental to ours and the park users security. 2) Sun: We are concerned that some of the new trees will block our morning sun. One tree in particular and two others that could be problematic are circled in the plan for you to have a closer look at. We have lived on the park boundary for eighteen years. We have enjoyed the park and been good neighbours to the park for that time. The small changes to the plan we have outlined should be helpful to both us and the park.	Comments in relation to respondent No 8 also apply here. Proposed change to the plan outlined below will address this residents concerns. Stop the proposed shrub border at the boundary of number 3 and 5 Farnham Place. Reduce the number of proposed trees in this corner of the park from 6 down 3. This change will address the residents concerns and maintain the existing open vista. This will maintain opportunities for casual observation from neighbouring properties which will promote safety for park users and adjoining properties.
Yes	61	We are not too pleased to see two large trees being planted between the street (Gothic Place) and the playground. Everything else looks good.	Trees will be lifted to maintain openness and sightlines. Proposed trees between the playground and road will be assessed in terms of species, location and spacing.
Yes	62	I support the plan.	No Action Required

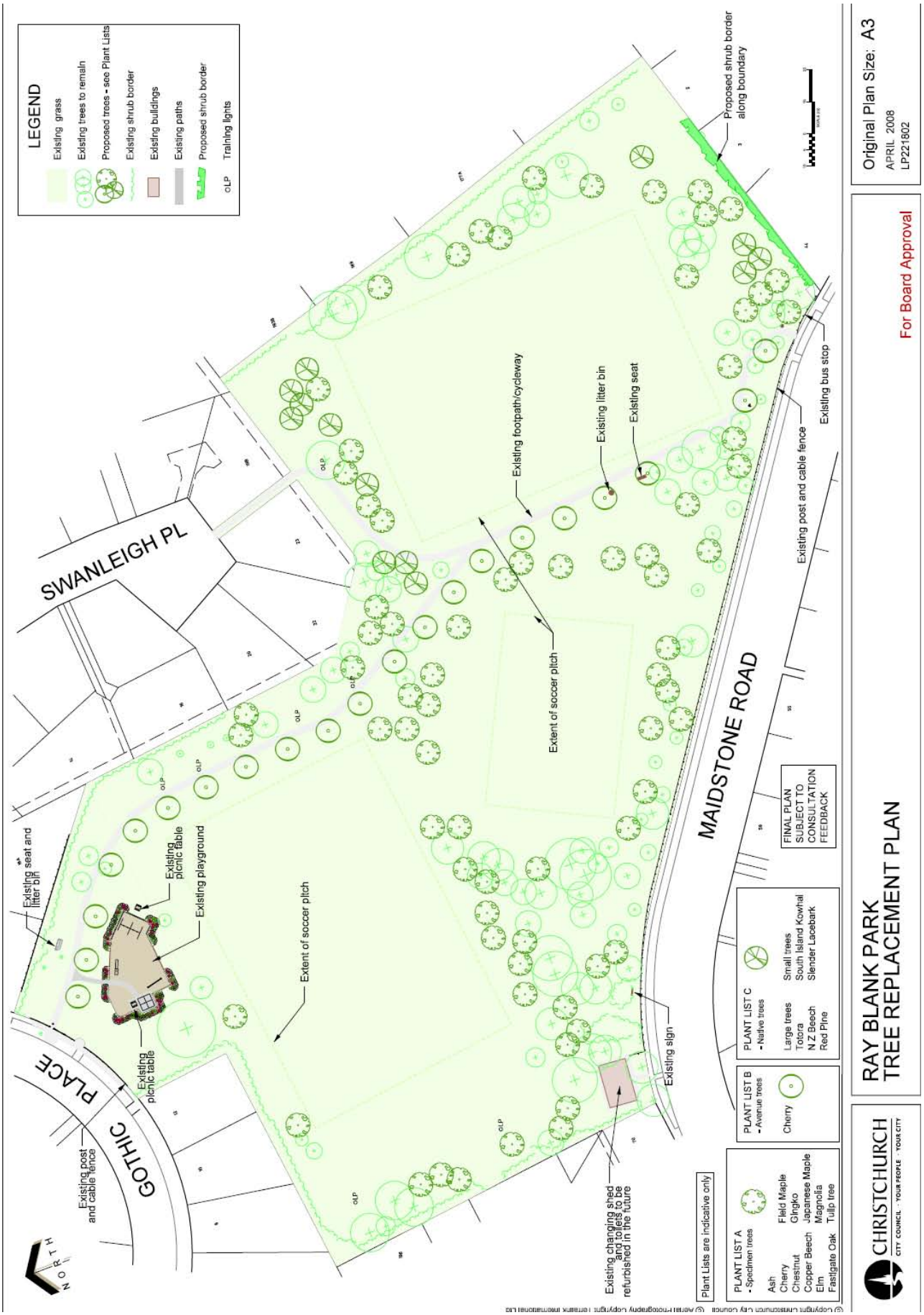
Support Plan	Ref	Summary Description	Project Team Response
Yes *(apart from 1 variety of Gingko)*	63	All suggested trees are ok except the Gingko. Please do not plant the variety which bears fruit as this smells disgusting when it is ripe and falls.	Only male trees to be used.
Support Plan	**Ref**	**Summary Description**	**Project Team Response**
Yes *(if these are satisfactory)* → No *(exactly as it stands because of these concerns)* →	64	It would have been helpful to have had this information earlier. It was a shock to see so many trees being removed. Do so many have to go? I have never heard of the intended replacement plan before. There are many trees to be felled but planting doesn't start until May 2009. Will there be enough trees for the current bird population? Will the trees by the path be of a type that won't shade the path in winter? Dampness and/or ice could be a problem.	All trees being removed are to address health and safety concerns identified with those trees. The impact of tree removal is not anticipated to have any significant long term impact on the local bird population. Removals have been programmed well outside the main nesting period and there is substantial vegetation located on private properties in the surrounding neighbourhood and nearby University Of Canterbury grounds.
Yes	65	I would like you to consider planting a deciduous shade tree near the existing seats at the playground if the avenue trees can't provide shade. I also think new trees are subject to vandals so you should put the most mature around all the seating areas as they are most likely targeted. Otherwise I am very pleased with the plan. Thank you.	Parks Contract Manager to investigate relocating the existing seat or alternatively planting an additional tree near the seat to provide shade.

Support Plan	Ref	Summary Description	Project Team Response
Partially	66	While we see the need to manage trees in Ray Blank Park we also appreciate an opportunity to contribute. Across the road from 67 Maidstone Road, the poplar trees make a great rustling leaves noise. Please can we have trees which give leaf rustle. Thanks, it helps cope with the traffic. Problem with trees by path: 1) Open feel is enjoyable. 2) Open field useful at time like Culture Festival in March. 3) Trees on path potential safety risk at night, from leaves getting wet and shade. What about Cherry trees to fit others in Christchurch?	The wide range of proposed species will provide interest and diversity within the landscape, including the noise of wind moving thru the tree canopies. Path safety and openness will be maintained thru reducing the number of trees along the path as well as pruning and lifting tree canopies. Project Team does not anticipate any adverse impact on the existing Culture Galore Festival as a result of the replanting programme. Placement of Flowering Cherries adjacent to the pathway and various locations along the Maidstone Road frontage is proposed in keeping with the existing Cherry Trees along other parts of Maidstone Road and the Fendalton Waimairi area.
Yes	67	Support plan as long as the number of new trees to be planted is not less than the number of trees being removed.	No Action Required

Support Plan	Ref	Summary Description	Project Team Response
No	68	My husband and I own No. 177 (next to 177a), a vacant section at the moment while we have almost completed architectural plans for a proposed house. We will have a 20m lap pool, parallel to the fence separating us from the park. We would like the proposed trees closest to our section to be deleted from your proposed replanting plan. For water safety reasons, we will also require the existing trees and shrubs that are hard against our fence at the moment to be either removed or pruned well below fence height. Thank you. PS – please contact me today before 6.30pm if possible (I fly to Auckland at 7pm) – just a little query – what is the scale of the plan sent out so that I can calculate how far the proposed trees are going to be from my boundary. *Diagram drawn on feedback form.*	Proposed tree closest to the boundary identified by the resident will be deleted or relocated. Landscape Architect will re-look at the planting in this part of the park. RFS 90792221 sent to the Parks Contract Manager to investigate boundary encroachment and planting density in the existing shrub border adjacent to this property. Rod, contacted resident as requested and discussed concerns. These will be addressed thru proposed changes to the plan.
No	69	It is difficult to be objective when the symbols on the replanting plan can represent anything from a small to a very large tree but the overall impression is too many trees for such a small park. I wish to draw your attention to the Gothic Place petition presented in January, for which there was overwhelming support, for no trees between the children's play area and the road. It appears that the large spreading eucalyptus (the largest in the park) almost overhanging No.12, and which has caused us so much trouble, is not to be removed, this despite the ongoing trimming requirements (which only partly solves the problem) and it's very long boughs extending close to both our property and the children's play area. We request removal of the eucalyptus and shifting the tree depicted on the southeast corner No.12 to 5m to the east (there is already a 5m tree at about the position depicted). The two trees adjacent to No. 10 and 12 are too close, we request they be relocated to another site and that any trees planted in this area are of the slender type and do not have a spreading root system (we have had problems in the past with root systems which broke up our garage floor, this has been relayed once trees were removed). We would appreciate an onsite meeting to discuss our concerns.	No proposal to remove this Eucalyptus tree at this stage. Relocate proposed tree on plan. Two proposed trees closest to this boundary to be relocated or deleted from the plan. Rod advised resident of proposed change. Resident was happy with proposed changes and confirmed there was no longer any need to meet staff on site.
Yes	70	Please get rid of the Silver Birches! They are so messy and can cause allergy problems for a significant number of people. Please do not plant any Silver Birches!	No proposal to remove existing birches. No Silver Birches are proposed in the current replanting plan.
Yes	71	I love the park in any form.	No Action Required

Support Plan	Ref	Summary Description	Project Team Response
Didn't indicate support/non-support	72	Hi Rod and Tania, I have posted some feedback to you today on the tree replanting at Ray Blank Park. On the whole it's good that the big trees are going as we have a lot of trouble in the winter with bark and leaves on the pitch and also many of the trees are so big that they now limit our floodlight and cause some bad shadows at night. With the replanting there are a number of concerns: **New trees that are too close to the pitches** • They limit our off pitch training areas. We use the grounds to run laps around the outside of the pitch. The new plan shows a small forest behind the East goal on S1 and other trees really close to the pitch. Ideally there should be no trees within 8 metres of any side of the pitch. By placing trees too close it limits our ability to use off pitch areas which congests the park with more players and also causes extra wear on the pitch. • Trees close by are also a safety hazard as it's easy in a match to slide or collide with someone and end up 3 or so metres off the pitch, stopping yourself on a small tree is not good. **Blocking of Floodlights** • Trees that are too close block our floodlights. Typically on a winter evening we can have 4 or 5 teams jostling for space in the floodlit area. The plan shows a number of trees that will block our floodlights and we oppose this. We are finding that coaches are training teams later and later as people can't leave work early, so every spare metre of floodlit pitch is important. • You should also consider the final height of the new trees and shrubs as in 5 or 10 years time small trees become big trees and can then block large areas of a floodlight. We find it quite hard to get permission to trim trees so it's better to plan it now and avoid the problem in future. • Currently it is possible to play a night game on the park under floodlights. With the line of trees proposed behind the goal on S1 this will never be possible again. Note – thanks for your phone call just now. I do apologise for the late feedback, I wanted to bring this up at our committee meeting in April and didn't realize the deadline was so tight until I checked after. I confirm I am available for a meeting Monday at 10am at the park. Regards **Nick Williams - Avon Utd President**	Reduce the number of "Avenue" trees and use Flowering Cherry as the preferred species. This will address enclosure and floodlight issues.

ATTACHMENT TO CLAUSE 5



6. SIGNALISED CROSSINGS - BISHOPDALE AND WESTBURN PRIMARY SCHOOLS

General Manager responsible:	General Manager City Environment, DDI 941-8656
Officer responsible:	Transport and Greenspace Acting Unit Manager
Author:	Michael Thomson, Network Operations and Transport Systems

PURPOSE OF REPORT

1. The purpose of this report is to inform the Committee of the outcome of the feasibility study for providing signalised pedestrian crossing facilities at Bishopdale and Westburn Schools and the costs, budget provision and priority implications for proceeding with the recommended works.

EXECUTIVE SUMMARY

2. Both Bishopdale and Westburn School communities have over several years raised concerns about the safety implications for their students crossing busy arterial roads to access the schools.

3. The Board allocated $10,000 from its 2007/08 Project Funds to carry out an investigation study into the feasibility of installing a signalised pedestrian crossing facility outside Bishopdale and Westburn Primary Schools.

4. The Transport and Greenspace Networks Operation Team engaged ViaStrada (Traffic Engineering and Planning Consultants) to carry out the investigative study and the report for each location is attached (**Attachments** 1 and 2).

5. ViaStrada has carried out the feasibility studies purely from a technical perspective and the recommendations are those that will provide the most benefits to the school and the wider community.

6. To implement the recommended facilities outlined in the ViaStrada reports will require an estimated budget of approximately $500,000.

7. Neither of these projects is included in the LTCCP 2006-16. They have not been prioritised with other city-wide pedestrian and schools safety works, and funding has not been allocated to them from the $350,000 per annum that is provided from the combined pedestrian and schools safety budget.

FINANCIAL IMPLICATIONS

8. The cost of the feasibility study ($10,000) was funded from the Fendalton/Waimairi 2007/08 Project Funds. The recommendations of the feasibility study are estimated to cost $500,000 and no funding has been allocated to undertake the work.

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

9. Budget for these projects has not been allocated and therefore this work does not align with the 2006-16 LTCCP Budget.

LEGAL CONSIDERATIONS

10. The Land Transport Rules provide for the installation of traffic signals and signalised pedestrian crossings.

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

11. As above.

ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

12. Aligns with the Streets and Transport activities by contributing to the Council's Community outcomes - Community and Safety.

6. Cont'd

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

13. This contributes to improve the level of service for pedestrian safety.

ALIGNMENT WITH STRATEGIES

14. The recommendations align with the Council's Road Safety and Pedestrian Strategies.

Do the recommendations align with the Council's strategies?

15. As above.

CONSULTATION FULFILMENT

16. Until budget has been allocated and this becomes part of the capital programme, no consultation will be undertaken.

STAFF RECOMMENDATION

It is recommended that the Fendalton/Waimairi Works, Traffic and Environment Committee:

(a) Receive the information.

(b) Recommend that the Board recommend to Council that funding be increased to upgrade school crossing facilities citywide in the 2009-19 Long Term Council Community Plan.

6. Cont'd

BACKGROUND

Bishopdale Primary School

17. Bishopdale School is located on Greers Road, a minor arterial road, and the school is currently accessed via a zebra crossing with a school patrol.

18. It is within a 40km/h school zone. This was one of the first 40km/h school speed zones in Christchurch and was implemented in January 2000. The school principal feels that many motorists ignore this speed limit.

19. There is no reported crash history for the site but conflicts have been reported by the school community.

20. Following suggestions from the Board, liaison with the school, research, surveys of pedestrian, cycle and traffic movements, and traffic engineering knowledge, three options were considered in the ViaStrada feasibility study. Full details of each option are in the report. (**Attachment** 1)

21. The recommendation and the most viable option in terms of safety and efficiency is to remove the zebra crossing and provide a signalised mid block crossing.

22. Operation of a signalised crossing is similar to that of a school patrol in terms of timing and it is considered unlikely that the queues experienced by motorists would be any greater with a signalised crossing than the current school patrol.

23. Removal of the zebra crossing should improve safety of pedestrians using the crossing point outside of school times.

Westburn Primary School

24. Westburn School is located on Waimairi Road, a minor arterial road, and the school is currently accessed via a zebra crossing with a school patrol.

25. It is within a 40km/h school zone which was implemented in October 2005. The school principal feels that many motorists ignore this speed limit.

26. There is no reported crash history for the site but conflicts have been reported by the school community.

27. Following suggestions from the Board, liaison with the school, research, surveys of pedestrian, cycle and traffic movements, and traffic engineering knowledge, four options were considered in the ViaStrada feasibility study. Full details of each option are in the report. (**Attachment** 2)

28. The recommendation and the most viable option in terms of safety and efficiency is to remove the zebra crossing and signalise the Greers/Waimairi Road intersection.

29. The signalisation of the intersection will provide pedestrians with a safe and efficient means of crossing the intersection and access to the school. It will benefit Westburn Primary School pupils and Burnside High School students, as well as the wider community.

FUNDING AND PRIORITISING IMPLICATIONS

30. At present these two projects are not included in the 2006-2016 LTCCP and there is no funding allocated for implementing the recommendations for the new crossing facilities at Bishopdale and Westburn Primary Schools.

6. Cont'd

31. The estimated cost of signalising the Greers Road/Waimairi Road intersection and a mid block signalised pedestrian crossing on Greers Road at Bishopdale Primary School is approximately $500,000. This estimate is based on the design, supervision and project management of the supply and installation of the signal equipment, realignment of the kerbs and the removal of the existing facilities.

32. The Council currently provides approximately $350,000 per annum for pedestrian and school safety works. These safety works are categorised as pedestrian safety initiatives, road safety at the school gate, safe routes to school implementations, and new footpaths.

33. Approximately three projects are completed each year with the $350,000 budget provided.

34. From time to time other pedestrian safety works have been undertaken with funding from the Community Board's discretionary funds.

35. The value of new pedestrian safety requests received each year exceeds the value of pedestrian facilities that can be provided from the allocated funding.

36. The current citywide data base for pedestrian safety works requests has 196 listed projects and the estimated cost of implementing these projects is approximately $10 million.

37. A formal priority process has been developed for implementing the 40km/h school zones and these are funded from a separate budget. Both Bishopdale and Westburn Primary Schools have a 40km/h school zone.

38. New footpath requests also have a formal priority process in place but there is no formal process for prioritising road crossing facilities.

39. Currently, pedestrian/school road crossing facility related projects that maximise pedestrian and school safety objectives are recommended for funding.

40. There are 165 schools in Christchurch City with frontage to 290 roads.

41. Forty-one of these schools, including both Bishopdale and Westburn Primary Schools, have frontage to an arterial road where the volume of traffic is in excess of 10,000 vehicles per day. This figure does not include schools that have a signalised crossing facility.

42. To accurately prioritise which school frontage should have upgraded crossing facilities would require a similar analysis for all schools on busy arterials to that carried out at Bishopdale and Westburn Primary Schools.

VIASTRADA

TRAFFIC ENGINEERING AND PLANNING

BISHOPDALE SCHOOL PEDESTRIAN CROSSING FEASIBILITY STUDY

Report prepared for

Christchurch City Council

ViaStrada Ltd

April 2008

www.viastrada.co.nz

This document has been prepared for the benefit of Christchurch City Council. No liability is accepted by ViaStrada Ltd, or any of its employees or sub-consultants with respect to its use by any other person.

Quality Assurance Statement			
			Date
ViaStrada Ltd Level 6, The Link Centre 152 Hereford St PO Box 22 458 Christchurch New Zealand Phone: (03) 366-7605 Fax: (03) 366-7603 www.viastrada.co.nz	Project Manager: Jeanette Ward		8/04/08
	Prepared by: Megan Fowler		8/04/08
	Reviewed by: Jeanette Ward		8/04/08
Project Number:	243		
Project Name:	Bishopdale school pedestrian crossing feasibility study		
Status	Final report after feedback from CCC		
Date:	April 2008		

Date last saved 08 / Apr / 08 05:33:00

Summary

ViaStrada has been commissioned by the Christchurch City Council to assess the current zebra crossing and school patrol operation at Bishopdale School. The school and local community board consider that the current crossing provision could be improved.

Alternatives to the current provisions, such as physical treatments to the crossing and replacing the crossing with a signalised crossing have been considered, based on data collected, literature reviewed and modelling analysis.

It was decided that the most viable option, in terms of safety and efficiency is to provide a signalised midblock crossing.

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1 Introduction

ViaStrada has been commissioned by Christchurch City Council (CCC) to undertake a feasibility study to an alternative of the Bishopdale School pedestrian crossing on Greers Road. The current arrangement of a school crossing patrol operating on a zebra crossing has been identified by the school and the local community board as undesirable. The community board has suggested that a signalised midblock crossing may improve safety.

The aim of this study is to investigate the current crossing provision compared with alternative options and from this recommend a course of action for CCC.

2 Current Situation

2.1 Bishopdale School

Bishopdale School is a primary school in Christchurch, located in the suburb of Bishopdale. It is situated on Greers Road, just north of the Langdons Road and Reynolds Avenue and immediately south of Paprika Place, as shown in Figure 1.

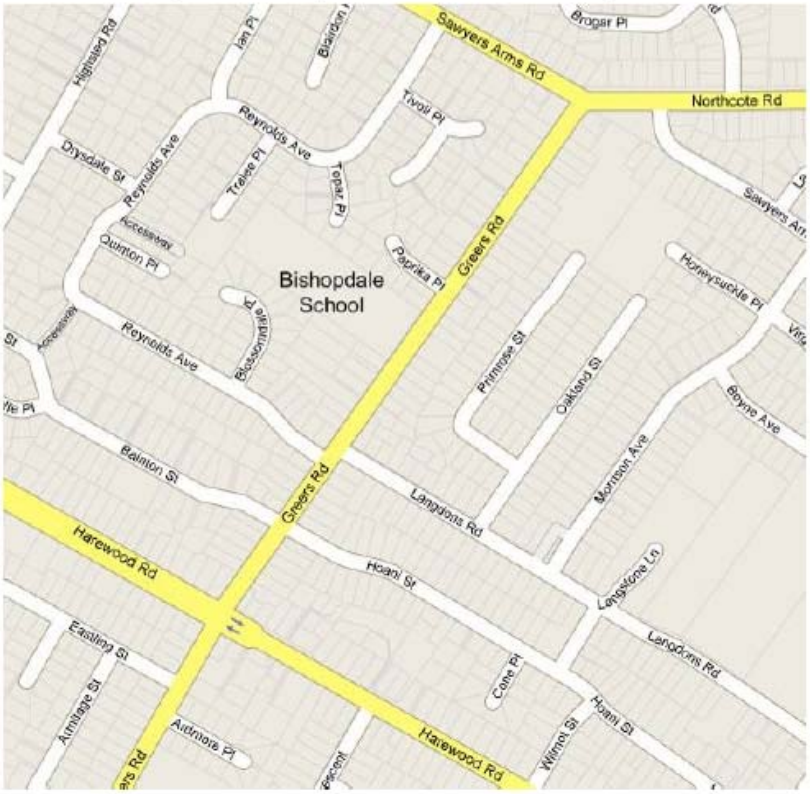

Figure 1: Bishopdale School location

As of July 2007 the school role was 157 students. It is understood that mid-year role numbers are generally slightly higher than start of year role numbers.

The main access to Bishopdale School is from Greers Road, where two vehicle entries and two pedestrian only entries are located. A secondary entrance to the school is connected to a reserve at the end of Tupelo Place, as shown in Figure 2. This entrance does not have vehicle access and, as Tupelo Place is a local street, it would not accommodate many vehicles parking to drop off or pick up school children.

Figure 2: Secondary entrance from Tupelo Place

Greers Road, in the vicinity of the school, is classified under the city plan as a minor arterial road (meaning its function is mainly for traffic distribution rather than property access) and forms part of the Christchurch city "ring route". Greers Road has an average daily traffic volume of around 17,600 vehicles in the vicinity of the school. The posted speed limit of Greers Road is 50 km/h although school zone speed signs operate at the start and end of school days to reduce the legal speed limit to 40 km/h.

Parking is provided on both sides of Greers Road in the vicinity of the school without restriction. Cycle lanes are provided on both sides of Greers Road. The school requires students cycling to school to complete a cycle safety course and have written permission from their parents but does not take responsibility for children who chose to cycle.

Langdons Road, a collector road forms a give-way controlled T-junction at its intersection with Greers Road. It carries approximately 8,500 vehicles per day. Reynolds Avenue and Paprika Place are both classified as local roads and are also give-way controlled at their intersections with Greers Road.

The area surrounding the school is mainly residential. Northlands Mall, a major traffic generator in the area, is situated at the opposite end of Langdons Road (approximately 1.5 km from the Greers Road intersection). Papanui High School is located approximately 800 m along Langdons Road. A pedestrian crossing island is provided on Greers Road north of its intersection with Langdons Road.

2.2 School Patrol

A zebra crossing is located outside of Bishopdale School on Greers Road. The crossing has kerb extensions which serve to reduce the crossing distance and increase visibility. Legally, all vehicles must stop for any pedestrian on a zebra crossing.

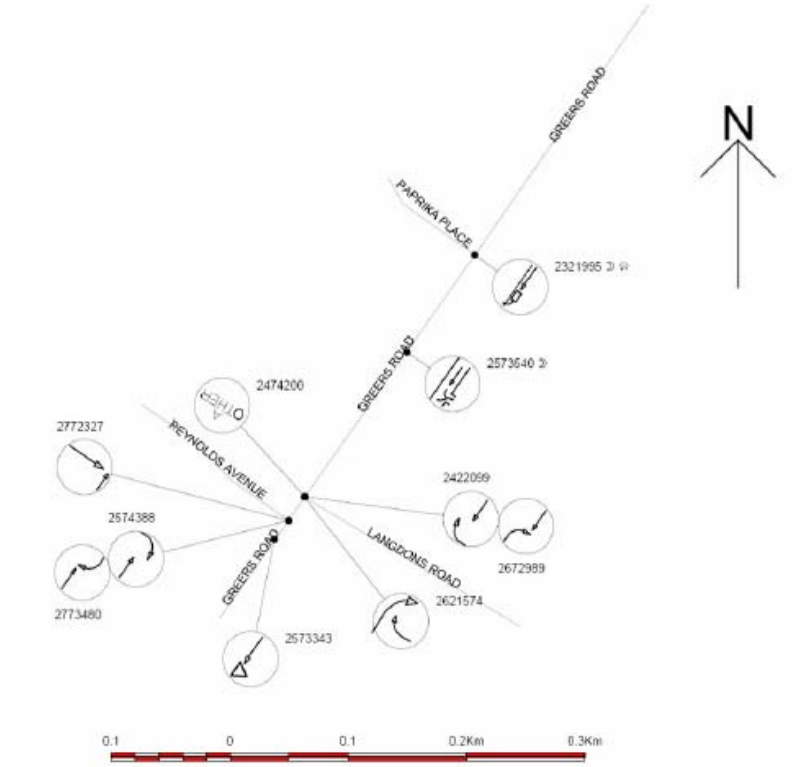

Figure 4: Crash diagram (2003 - 2007)

While the reported crash history seems to suggest that the school crossing has a good safety record it should be noted that reporting rates for pedestrian crashes and conflicts are notoriously lower than for typical vehicle-only crashes. This fact has been confirmed by conversations with the school's principal, who stated that conflicts at the crossing occur quite regularly. The school often reports such conflicts to the Police and, in some cases; fines are issued to offending drivers. This biggest problem appears to be U-turning drivers who manoeuvre when the crossing is operating. The principal said that the volume of traffic and lack of sufficient gaps makes it very difficult for the patrol operators to extend the stop signs; sometimes teachers resort to stepping out onto the carriageway to get the signs out. At other times, when parents driving past the crossing have stopped to allow the operators a chance to put the signs out, other motorists have tooted in annoyance at them.

The principal noted that the speed of traffic passing the crossing is another safety issue; she feels that many motorists ignore the 40 km/h school zone limit (or do not notice the sign). The proportion of heavy traffic along the road is also a concern to the school. Count data from the Greers / Harewood intersection indicates that the heavy traffic on the school's leg of Greers Road makes up about 3% of the total volume (which is reasonably indicative of city wide heavy vehicle volumes) however it is likely that this percentage is greater in the vicinity of the school due to contributions from Langdons Road. Cyclists in the vicinity are also seen as a concern as, when stopped by the school crossing, many cyclists will choose to cycle on the footpath which brings them into conflict with pedestrians. The school has addressed this issue by liaising with the local high schools in the area whose students were noted as the main instigators.

3 Research

3.1 Literature Review

Significant research on the safety effects of different crossing types has been made worldwide. Elvik and Vaa (2004) conducted a meta-analysis of 30 studies and concluded that zebra crossings installed by themselves without the addition of raised platforms actually increase the crash risk to pedestrians by about 28%. This is generally attributed to a discrepancy between pedestrians' perceptions of the crossings and motorists' perceptions and physical limitations. For example some pedestrians, especially young children with limited cognitive ability, may perceive it to be completely safe to step onto a zebra crossing without considering the proximity and speed of approaching vehicles and the time it takes for drivers to react and stop their vehicles. Raised platforms, which force drivers to slow down by means of vertical deflection, have been shown to increase driver awareness of a site and decrease speeds. Conversely, school patrol crossings were shown to decrease pedestrian crashes by 35% and mid-block traffic signals were shown to decrease pedestrian crashes by 12%.

Thus the school patrol currently operated at Bishopdale School is predicted to have a much more beneficial effect than the zebra crossing and is even likely to be safer than a signalised crossing.

Land Transport New Zealand's (2008) Pedestrian Planning and Design Guide states that:

> *"The provision of a zebra crossing for a school patrol should be made on the basis of the use of the crossing away from school times. If there is little pedestrian use outside school times then a zebra crossing is likely to be dangerous at those times and is not appropriate. A kea crossing should be considered."*

Allowing motorists to pass by the zebra crossing without stopping for waiting pedestrians at times when a school patrol is in operation may enforce the message to motorists that they don't have to stop at zebra crossings. If individual motorists pass by the site often, it is likely that they will become complacent and forget to stop for waiting pedestrians at times when the school patrol is not in operation. Pedestrians, however, are still likely to expect motorists to stop and may step onto the zebra crossing assuming that it's safe to do so. This can be especially dangerous if few pedestrians use the crossing outside of school hours as there is little opposition to the message enforced by the school crossing. Thus it is extremely important that the pedestrian volumes outside of school times at the Bishopdale School crossing be considered also.

In terms of appropriate pedestrian volumes for zebra crossings, the guide states:

> *"Do not use zebra crossings for locations with fewer than 50 pedestrians per hour."*

In relation to raised platforms the guide states:

> *"Platforms are generally installed on local roads and sometimes on collector roads. They are not installed on arterial roads except in major shopping areas where the need for traffic calming and pedestrian assistance exceeds the arterial function."*

When assessing the relevance of installing signalised crossings for schools, the Pedestrian Planning and Design Guide states that:

> *"If the crossing is not likely to be well used outside school hours, signalising an intersection would be the preferred option. They should also be considered where traffic flows are very high, making school patrol operation difficult, and where pedestrians need to cross outside school crossing times."*

This reinforces the notion that the level of crossing demand outside of school time is important. If the school crossing were observed to face difficulties in operation traffic signals should be considered.

3.2 Surveys

A survey of pedestrians using the crossing was commissioned for this study. The survey took place on Friday 7 March 2008 for the periods of 8:00-10:00 am and 2:30-5:45 pm. These times were chosen so that the morning school arrival and afternoon school leaving periods were captured, as well as a significant length of time when any pedestrians using the crossing were likely to not be associated with the school. Cyclists using the crossing and passing though the site on the road and footpath were also counted. A summary of the survey results is shown in Table 1 and full results are given in Appendix 2. It should be noted that there are obvious crossing peaks in the periods of 8:15-9:00 am and 3:00-3:15 pm (highlighted) and outside of these times the usage of the crossing is much lower.

Table 1: Manual crossing survey summary

Observation Period	Number of people using crossing	Number of cyclists passing crossing
8:00-8:15	3	23
8:15-8:30	16	7
8:30-8:45	42	2
8:45-9:00	14	0
9:00-9:15	1	0
9:15-9:30	0	0
9:30-9:45	0	0
9:45-10:00	0	0
14:30-14:45	3	0
14:45-15:00	7	1
15:00-15:15	84	7
15:15-15:30	1	23
15:30-15:45	2	2
15:45-16:00	0	8
16:15-16:30	0	3
16:30-16:45	0	2
16:45-17:00	1	4
17:00-17:15	0	2
17:15-17:30	2	3
17:30-17:45	0	7

The numbers of people turning left or right after using the crossing, as well as whether they were walking, cycling or pushing a bicycle are shown in Figure 5. It can be seen that the majority of people crossing away from the school turn right (towards Langdons Road). People crossing towards the school almost always turn right, towards the school's main entrance.

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The survey indicates very little use of the crossing by cyclists, either riding or walking their cycles.

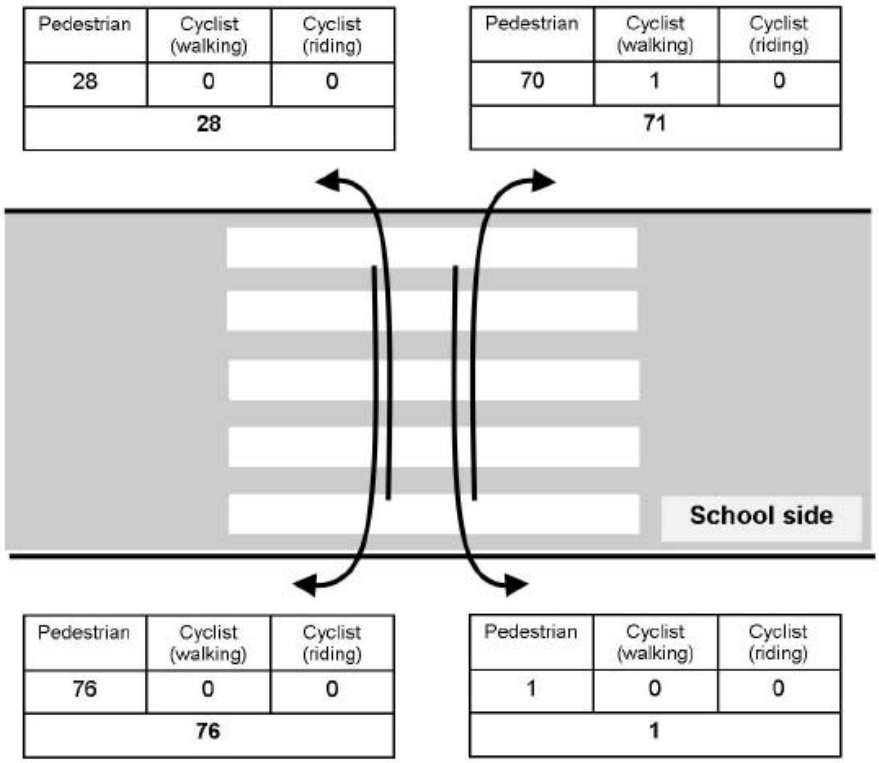

Figure 5: Directional and modal split for crossing users observed in survey

The surveyor did not notice any problems with the operation of the school crossing on the day of the manual survey. He did, however, note a visibility problem occurring in the morning peak when the sunlight made it difficult to see school pupils in their dark uniforms when crossing the road. Discussion with teachers indicated that this possibly also affected drivers' abilities to see the school zone variable speed signs. The manual counter observed that traffic speeds seemed quite high, definitely in excess of the 40 km/h speed limit during operation of the school patrol. He also noted that the placement of the patrol signs behind lamp posts resulted in the sign operators being hidden from view of oncoming motorists by the lamp posts.

Data were also obtained from CCC regarding vehicle counts on Greers Road near Bishopdale School. These were used in the modelling stages described later in this report.

3.3 Suggested Options

Based on suggestions from the community board, liaison with the school, research, surveys and general traffic engineering knowledge, three mutually exclusive options for the school crossing will be considered:

1. No change to the existing provisions;

2. Treatments to the existing zebra crossing / school patrol – for example, removal of the zebra crossing or physical works; and
3. Replacement of the zebra crossing and school crossing patrol with a signalised mid-block crossing

These three options will be considered in terms of safety and efficiency for both pedestrians and other road users.

Note that, while in some cases it may be seen as beneficial to signalise an adjacent intersection and include a pedestrian crossing phase, signalising the Greers Road / Langdons Road intersection has not been considered as an alternative to providing the school crossing, for the following reasons:

- The distance between the crossing and the intersection (approximately 130 m) means that people wishing to cross away from the school turn left (i.e. away from the Greers / Langdons intersection) would face a significant detour. It is likely that these people would choose to cross unsafely at an unassisted midblock location rather than cross via the intersection. While only about 30% of those crossing away from the school turned left this is still a reasonable number of people to consider.
- The proximity of Reynolds Avenue imposes several geometric restrictions on the ability to signalise the Greers Road / Langdons Road intersection.

4 Analysis

4.1 Pedestrian Planning and Design Guide

The Pedestrian Planning and Design Guide includes a spreadsheet that, based on relevant site information, suggests appropriate crossing treatments and the benefits associated with this.

The spreadsheet suggested that a level of service F (i.e. unsatisfactory) would be experienced by pedestrians if no facility were provided at the site. The spreadsheet also suggested that a platform, a median refuge, kerb extensions, a zebra crossing and traffic signals are all appropriate options for the crossing. This suggests that the current provision of a zebra crossing plus kerb extensions is appropriate.

However, the pedestrian planning and design guide spreadsheet does not take into account the variability of pedestrian volumes throughout the day. It is considered that the volume of pedestrians using the crossing outside of peak school periods is not high enough to warrant retaining the zebra crossing, as the average volume when not including those crossing during the school patrol operation times is much lower than the minimum 50 pedestrians per hour stated by the Pedestrian Planning and Design Guide. Therefore it seems more sensible to revert to an unmarked "kea" school crossing patrol operation rather than expose motorists to a zebra crossing that has very little use outside of the school crossing peaks.

Similarly, although the Pedestrian Planning and Design Guides spreadsheet indicates that addition of a platform may be a suitable measure this is superseded elsewhere in the guide. It is considered that adding a raised platform to the crossing would not be appropriate as Greers Road is a major arterial road with the function of accommodating large traffic volumes and the expectation that (outside of school crossing times) reasonable speeds could be maintained by vehicles.

It is considered that adding a median refuge island may improve the situation for those crossing unaided by the school patrol as it would simplify the crossing task by allowing the road to be crossed in stages. Addition of a median island would require the current kerb extensions to be reduced in order to maintain the width of the traffic lanes. It is considered that a median refuge would not be appropriate as a sole treatment as it would be unlikely to accommodate the large groups of students observed in the afternoon peak and would not give priority to school students. Therefore, if a median island were introduced, to compensate for the removal of the zebra crossing, it is advised that the school crossing patrol operation be maintained.

4.2 SIDRA

The intersection analysis program SIDRA INTERSECTION, (version 3.2) was used to assess the feasibility of option 3 (providing a signalised midblock crossing in place of the zebra crossing and school patrol).

Liaison with the CCC traffic signals department has revealed that, if any signals are introduced in the area they will be coordinated with the nearby Greers Road / Harewood Road intersection. Modelling parameters have been based on this intersection's current operational characteristics. Table 2 shows the assumed cycle times for the modelling. Note that the PM peak is actually the evening peak of school crossings, which occurs at around 3 pm, as opposed to the evening peak of vehicle volumes, which occurs at around 5 pm.

Table 2: Cycle times for peak periods

Period	Cycle time (s)
AM peak	80
PM school peak	70

Table 3 shows the summary of levels of service, queue lengths and delays expected if the school crossing is signalised for both morning and evening peak crossing periods.

Table 3: Summary characteristics for signalised crossing option

Movement	Level of Service	95th percentile Queue length (m)	Average Delay (s/ person)
Pedestrians (am)	D	n/a	34.2
Motorists - through from north (am)	A	133	5.9
Motorists - through from south – (am)	A	77	4.7
Pedestrians (pm)	C	n/a	29.3
Motorists - through from north (pm)	A	58	4.8
Motorists – through from south (pm)	A	98	6.0

It can be seen in Table 3 that the level of service to vehicles is maintained at the highest possible level, similar to that experienced if they did not have to stop for pedestrians at all.

The levels of service to pedestrians seem much worse than the vehicle movement levels of service. SIDRA uses different methods of calculating levels of service for pedestrians and motorists so the two are not directly comparable. SIDRA bases the level of service for pedestrians on the delay experienced, so it is best to compare the signalised crossing with the current school patrol in terms of pedestrian delay.

No measurements of the actual delays experienced by those using the school crossing were taken during the survey but it is considered that delays between the two situations

should be very similar. The school patrol operators generally wait for a group of students waiting to cross to form and then must find a suitable gap in the traffic in order to extend the stop signs and allow students to cross. Given that the signalised crossing is expected to operate with a reasonably low cycle time and the pedestrian crossing phase can be called every cycle it is expected that the delays predicted for pedestrians using the proposed signalised crossing should be acceptable and comparable to the current situation.

The average delay to pedestrians predicted for the signalised crossing is lower in the afternoon peak than in the morning peak due to the fact that the cycle time of the adjacent Greers / Harewood intersection is lower in the afternoon peak than in the morning peak, as shown in Table 2.

It should be noted that delays experienced by vehicles at other times of the day will be much lower with a signalised mid-block crossing option due to the less frequent pedestrian demand. It has been observed that pedestrian demand in the afternoon has a much shorter spread (as all children finish school at the same time) so it is unlikely that the average delay to motorists presented in Table 3 would be experienced for long.

The crossing is approximately 130 m from Langdons Road and 100 m from Paprika Place. Thus, the predictions indicate that queues will not reach the Greers / Langdons intersection but are likely to extend past Paprika Place in the morning peak. This is not considered to be significant as Paprika Place is a small cul-de-sac which provides access to only 10 residences and is therefore likely to have a very low level of peak hour trip generation. Also, the queue length predictions are 95th percentile lengths (meaning they will only occur occasionally) and vehicles turning right Paprika Place will have opportunity to do so when the pedestrian phase terminates and queues dissipate. As the operation of a signalised crossing is similar to that of a school patrol in terms of timing it is considered unlikely that the queues experienced by motorists would be any greater with a signalised crossing than with the current school patrol operation.

5 Comparisons of Options

Bishopdale School has long had concerns with the safety of its school patrol crossing. While international research indicates that school patrol crossings are among the safest crossing options it should be acknowledged that there are exceptions to such generalisations and New Zealand motorists often behave differently to their overseas counterparts. Based on discussions with the school's principal, traffic volume data and the manual crossing survey it appears that the current crossing operation is not satisfactory and it should be changed to improve safety to pedestrians. The "do-nothing" option of retaining the existing provision is seen as highly undesirable.

In addition to providing for pedestrians associated with the school, other pedestrians using the crossing should be considered. Volumes of pedestrians using the site outside of school peak crossing times are considered to be too low to justify retaining the existing zebra crossing. Research shows that allowing a school crossing to operate on a zebra crossing that has low volumes outside of the school crossing operation times may significantly reduce the safety of the zebra crossing. Also, zebra crossings alone (i.e. without additional aids such as platforms or median islands) have been shown to actually reduce safety compared with no crossing provision at all. Given the low volumes of crossings made outside of school times it is recommended that the zebra crossing be removed. Removing the zebra crossing should actually improve the safety of pedestrians using the crossing outside of school peak times.

It is considered that adding a median refuge on Greers Road at the location of the school crossing would aid those crossing the road at times when the school patrol was not in operation. However, it is unlikely that the presence of an island would aid the operation of the school patrol at all. The current problems associated with the school patrol arise from the difficulties experienced by operators trying to extend the stop signs into the traffic; the presence of a median would not improve this situation.

Adding a raised platform at the crossing location is likely to increase motorists' awareness of the crossing and reduce the speeds of those motorists who choose to ignore (or genuinely do not notice) the 40 km/h school speed zone signs. However, slowing the speeds of vehicles is likely to reduce the number of available gaps in the traffic streams and therefore reduce the chances for the signs to be extended. A platform is not likely to improve the politeness of drivers and encourage them to stop to allow the signs to be extended. Also, at times when the crossing is not in operation the platform would unnecessarily hinder motorists; as Greers Road is a major arterial and part of the designated ring route this is highly undesirable.

Increasing the size of the 40 km/h school speed zone signs (they are smaller than the latest signs being installed around the city) may help reduce the speeds of motorists but again are unlikely to improve the available gaps or increase driver compliance and politeness.

Overall, while changes could be made to the current crossing provision to improve the safety for pedestrians crossing outside of the school peaks, there seems to be few options for physical treatment to improve the safety of the school patrol. From discussion with the principal it seems that high traffic volumes coupled with a general lack of assistance from drivers is the main problem. Increased education and enforcement may serve to improve driver behaviour. However, as the majority of drivers travelling through the site are not associated with the school education would be a difficult task. Enforcement relies on the presence of police officers and the concentrated effort required may be outside of the scope of the city's resources.

Therefore, it seems that the best option is to signalise the school crossing. Whereas the school patrol operators currently have problems finding gaps in the slow moving, heavy volume traffic, traffic signals will be able to give consistent crossing opportunities to pedestrians.

It could be argued that driver compliance for a signalised crossing may not be any better than it currently is with the school crossing. It is predicted that through traffic will safely stop for the traffic lights but some drivers may still attempt unsafe U-turning manoeuvres when the crossing is in operation. It is recommended that, if a signalised crossing is installed, the school's practice of providing an adult to supervise crossing students and report offending drivers be continued.

The delays and queue lengths predicted for the signalised midblock crossing option are considered to be reasonable and should be similar to those currently experienced when the school crossing is in operation.

A signalised crossing will also provide a safe crossing opportunity for pedestrians crossing outside of school peak times but will not involve the inconsistency currently experienced where motorists can freely drive across the zebra crossing during operation of the school patrol but must give way to pedestrians at other times.

It is considered that the 40 km/h school zone would no longer be required if midblock signals replaced the current school patrol crossing.

6 Recommendations

It is recommended that the zebra crossing outside Bishopdale School be removed and a signalised midblock crossing be provided in place of the current zebra / school crossing arrangement.

If the signalised crossing option is not adopted it is considered that a combination approach of removing the zebra crossing, installing a median island (and therefore making changes to the kerb extensions as necessary), upgrading the school speed zone signs and improving the levels of education and enforcement would be the most appropriate alternative.

7 References

Elvik, R. and Vaa, T. (2004). *The Handbook of Road Safety Measures.* Elsivier, Amsterdam, The Netherlands.

Land Transport New Zealand (2008). *Pedestrian Planning and Design Guide.* Land Transport New Zealand, Wellington.

CROW (1996). *Sign up for the Bike*, The Netherlands.

Appendix 1: Reported crash history

Land Transport NZ
Ara Whenua Aotearoa

Bishopdale School 03-07
Plain English report, run on 06-Mar-2008 Page 1

First Street	Distance	ID Second street (I) or landmark (N)	Crash Number	Date DD/MM/YYYY	Day DOW	Time HHMM	Description of Events	Crash Factors (ENV = Environmental factors)	Road	Natural Light	Weather	Junction	Cntrl	Tot Inj F S M A S I T R N
GREERS ROAD		I LANGDONS ROAD	2672888	05/09/2006	Tue	1520	CAR2 turning right hit by oncoming CAR1 SBD on GREERS ROAD	CAR2 failed to give way when turning to non-turning traffic, didn't see/look when required to give way to traffic from another direction, misjudged intentions of another party	Dry	Bright	Fine	T Type Junction	Stop Sign	
GREERS ROAD		I LANGDONS ROAD	2420099	02/06/2004	Wed	1535	CAR1 SBD on GREERS ROAD hit CAR2 turning right onto GREERS ROAD from the left, CAR1 hit Kerb, Tree	CAR2 failed to give way at stop sign ENV: dazzling sun	Dry	Bright	Fine	T Type Junction	Stop Sign	1
GREERS ROAD		I LANGDONS ROAD	2621574	12/04/2006	Wed	1645	TAXI1 NBD on LANGDONS ROAD turning right hit MOTOR CYCLE2 turning right into LANGDONS ROAD	TAXI1 failed to give way at stop sign, didn't see/look when required to give way to traffic from another direction	Dry	Bright	Fine	T Type Junction	Stop Sign	1
GREERS ROAD	1068 PAPANUI PLACE		2373540	27/08/2005	Sat	0435	CAR1 SBD on GREERS ROAD hit SUV2 doing driveway manoeuvre, CAR1 hit Fence, Kerb	SUV2 failed to give way at driveway, didn't see/look behind before entering roadway ENV: SUV1 entering or leaving private house / farm	Dry	Dark	Fine	Driveway	N/A	
GREERS ROAD		I PAPANUI PLACE	2321995	09/06/2003	Mon	2148	CAR1 SBD on GREERS ROAD hit rear of CAR2 turning right from centre line	CAR1 failed to notice car slowing, impaired ability due to old age	Wet	Dark	Light Rain	T Type Junction	Nil	1
GREERS ROAD	202 REYNOLDS AVENUE		2373343	24/10/2005	Mon		CAR1 SBD on GREERS ROAD hit obstruction, CAR1 hit Stray Animal	ENV: household pet rushed out or playing	Dry	Bright	Fine	Unknown	N/A	
GREERS ROAD	I REYNOLDS AVENUE		2773480	12/09/2007	Wed	1720	CAR2 turning right hit by oncoming CAR1 NBD on GREERS ROAD	CAR2 failed to give way when turning to non-turning traffic, didn't see/look when required to give way to traffic from another direction	Dry	Overcast	Fine	T Type Junction	Stop Sign	
GREERS ROAD	I REYNOLDS AVENUE		2574388	05/09/2005	Mon		CAR1 NBD on GREERS ROAD hit CAR2 turning right onto GREERS ROAD from the left	CAR2 failed to give way when turning to non-turning traffic, didn't see/look when required to give way to traffic from another direction	Dry	Bright	Fine	T Type Junction	Stop Sign	
GREERS ROAD	I REYNOLDS AVENUE		2772327	07/07/2007	Sat	1450	CAR1 SBD on REYNOLDS AVENUE hit CAR2 crossing at right angle from right	CAR1 failed to give way at stop sign, didn't see/look when required to give way to traffic from another direction	Dry	Bright	Fine	T Type Junction	Stop Sign	
LANGDONS ROAD	I GREERS ROAD		2474200	08/12/2004	Wed	1900	CAR1 NBD on LANGDONS ROAD overtaking CAR2	CAR1 misjudged speed of own vehicle	Dry	Bright	Fine	T Type Junction	Stop Sign	

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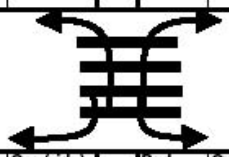
Appendix 2: Manual Crossing Survey Results

Pedestrians and cyclists using crossing
Location: Bishopdale school
Date: 7/03/2008
Weath sunny NW

OPPOSITE SIDE TO SCHOOL

		Ped	Cyc (walk)	Cyc (ride)	Ped	Cyc (walk)	Cyc (ride)
08:00	08:15						
08:15	08:30	3			3	1	
08:30	08:45						
08:45	09:00	1			4		
09:00	09:15						
09:15	09:30						
09:30	09:45						
09:45	10:00						
14:30	14:45	1					
14:45	15:00	3					
15:00	15:15	20			61		
15:15	15:30						
15:30	15:45						
15:45	16:00						
16:15	16:30						
16:30	16:45						
16:45	17:00						
17:00	17:15						
17:15	17:30				2		
17:30	17:45						



SCHOOL SIDE

		Ped	Cyc (walk)	Cyc (ride)	Ped	Cyc (walk)	Cyc (ride)
08:00	08:15	3					
08:15	08:30	9					
08:30	08:45	42					
08:45	09:00	9					
09:00	09:15				1		
09:15	09:30						
09:30	09:45						
09:45	10:00						
14:30	14:45	2					
14:45	15:00	4					
15:00	15:15	3					
15:15	15:30	1					
15:30	15:45	2					
15:45	16:00						
16:15	16:30						
16:30	16:45						
16:45	17:00	1					
17:00	17:15						
17:15	17:30						
17:30	17:45						

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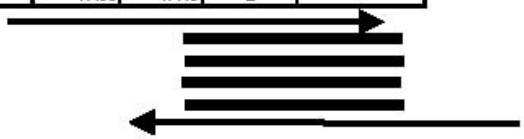
Cyclists passing crossing
Location:Bishopdale school
Date: 7/03/2008
Weather: sunny NW

			Cyc (road)	Cyc (footpath)
OPPOSITE SIDE TO SCHOOL	08:00	08:15	7	1
	08:15	08:30	3	
	08:30	08:45	1	
	08:45	09:00		
	09:00	09:15		
	09:15	09:30		
	09:30	09:45		
	09:45	10:00		
	14:30	14:45		
	14:45	15:00		
	15:00	15:15	6	1
	15:15	15:30	15	
	15:30	15:45		
	15:45	16:00	1	
	16:15	16:30	1	
	16:30	16:45		
	16:45	17:00	3	
	17:00	17:15		1
	17:15	17:30		
	17:30	17:45	2	



			Cyc (road)	Cyc (footpath)
SCHOOL SIDE	08:00	08:15	15	
	08:15	08:30	4	
	08:30	08:45	1	
	08:45	09:00		
	09:00	09:15		
	09:15	09:30		
	09:30	09:45		
	09:45	10:00		
	14:30	14:45		
	14:45	15:00	1	
	15:00	15:15		
	15:15	15:30	8	
	15:30	15:45		2
	15:45	16:00	5	2
	16:15	16:30	2	
	16:30	16:45	1	1
	16:45	17:00	1	
	17:00	17:15		1
	17:15	17:30	3	
	17:30	17:45	5	

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VIASTRADA

TRAFFIC ENGINEERING AND PLANNING

WESTBURN SCHOOL PEDESTRIAN CROSSING FEASIBILITY STUDY

Report prepared for

Christchurch City Council

ViaStrada Ltd

April 2008

www.viastrada.co.nz

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			Date
ViaStrada Ltd Level 6, The Link Centre 152 Hereford St PO Box 22 458 Christchurch New Zealand Phone: (03) 366-7605 Fax: (03) 366-7603 www.viastrada.co.nz	Project Manager: Jeanette Ward		8/04/08
	Prepared by: Megan Fowler		8/04/08
	Reviewed by: Axel Wilke		8/04/08
Project Number:	242		
Project Name:	Westburn school pedestrian crossing feasibility study		
Status	Final Report after CCC feedback		
Date:	April 2008		

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Summary

ViaStrada has been commissioned by the Christchurch City Council to assess the current zebra crossing and school patrol operation at Westburn School. The school and local community board consider that the current crossing provision could be improved.

Alternatives to the current provisions, such as physical treatments to the crossing, replacing the crossing with a signalised crossing and modifying the adjacent Greers Road / Waimairi Road intersection have been considered, based on data collected, literature reviewed and modelling analysis.

It was decided that the most viable option, in terms of safety and efficiency is to remove the school crossing provision and provide for pedestrians by signalising the Greers / Waimairi intersection.

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1 Introduction

ViaStrada has been commissioned by Christchurch City Council (CCC) to undertake a feasibility study to an alternative of the Westburn School pedestrian crossing on Waimairi Road. The current arrangement of a school patrol operating on a zebra crossing has been identified by the local community board as undesirable. The community board has suggested that a new signalised midblock crossing may improve safety. An alternative option is to signalise the adjacent intersection between Waimairi Road and Greers Road and provide crossing opportunities there.

The aim of this study is to investigate the current crossing provision compared with alternative options and from this recommend a course of action for CCC.

2 Current Situation

2.1 Westburn School

Westburn School is a Christchurch primary school located in the suburb of Ilam. It is situated on Waimairi Road, just north of the Greers Road intersection (a give-way controlled T-junction) and south of the Grahams Road intersection (a four-legged roundabout) as shown in Figure 1.

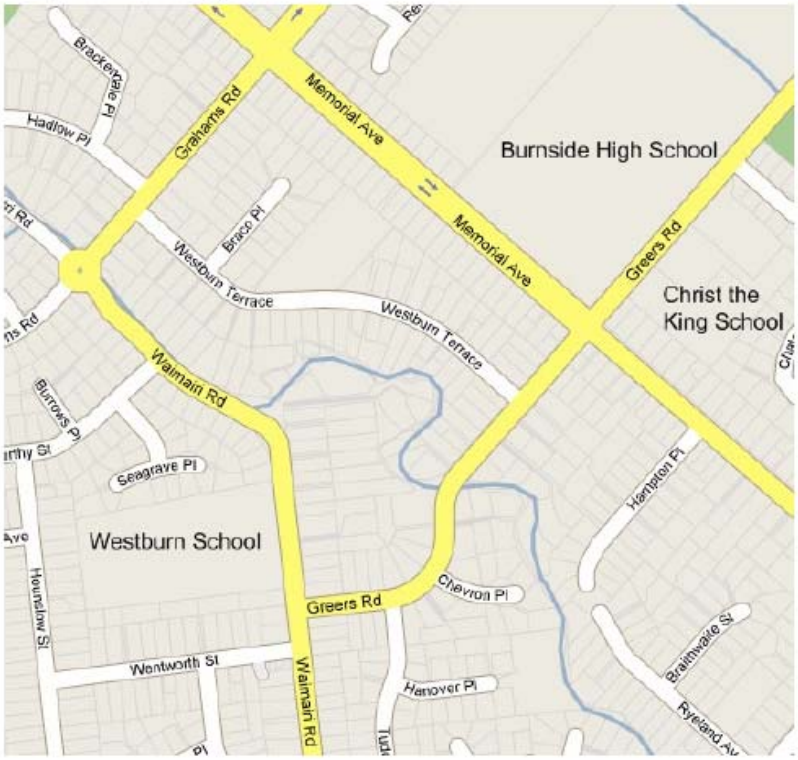

Figure 1: Westburn School location

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As of July 2007 the school role was 484 students. It is understood that mid-year role numbers are generally slightly higher than start of year role numbers.

The only entrance to Westburn School is from Waimairi Road. Waimairi Road has an average daily traffic volume of around 12,200 vehicles in the vicinity of the school. The posted speed limit of Waimairi Road is 50 km/h although school zone speed signs operate at the start and end of school days to reduce the maximum legal speed to 40 km/h.

Waimairi Road and Grahams Road are both classified under the city plan as minor arterial roads (meaning their function is mainly for traffic distribution rather than property access) and both form part of the Christchurch city "ring route". Greers Road is classified as a collector road (meaning that property access is of more importance) in the vicinity of the school.

Parking is provided on the opposite side of Waimairi Road to the school without restriction. Approximately 180 m north of the crossing the roadway narrows and no parking or footpath is provided between here and the Grahams Road roundabout. Parking immediately outside of the school is currently restricted to P3 (i.e. three minute maximum stays) during peak times.

Cycle lanes are provided on both sides of Waimairi Road in the vicinity of the school.

The area surrounding the school is mainly residential with a group of small shops on the corner of Waimairi Road and Wentworth Street. Burnside High School and Christ the King Primary School are located on the corners of Greers Road and Memorial Avenue; this results in a large number of pedestrians at the Greers Road / Waimairi Road intersection. A pedestrian crossing island is provided on Waimairi Road south of Wentworth Street.

2.2 School Patrol

A zebra crossing is located outside of Westburn School on Waimairi Road. The crossing has kerb extensions which reduce the crossing distance and increase visibility as the extensions take the place of car parking spaces. Legally, all vehicles must stop for any pedestrian on a pedestrian crossing.

Figure 2: School patrol on zebra crossing

During the periods when children arrive at school in the morning and leave school in the afternoon a school patrol is operated, as shown in Figure 2. This involves students operating "STOP" signs which are swung out into the path of traffic. When the signs are not extended across the roadway, but the school patrol is present, motorists are not required by law to stop for pedestrians waiting to cross. Training is given to the students who operate the school patrol and they are always supervised by an adult when doing so. The school has a rule that students are not allowed to cross Waimairi Road at any location other than the zebra crossing, unless accompanied by an adult.

2.3 Crash History

A summary of the reported crashes occurring in the vicinity of the school over the five year period from 2003 to 2007 is shown in Figure 3, with a full crash report given in Appendix 1. It is apparent from the crash records that very few crashes have occurred adjacent to the school – one u-turning crash (which may well have involved a parent of a child at the school) outside the school has been recorded. The only recorded crash involving a pedestrian occurred just north of Greers Road when one vehicle rear ended another that had slowed for a pedestrian. This pedestrian was crossing the road at some distance away from the school zebra crossing.

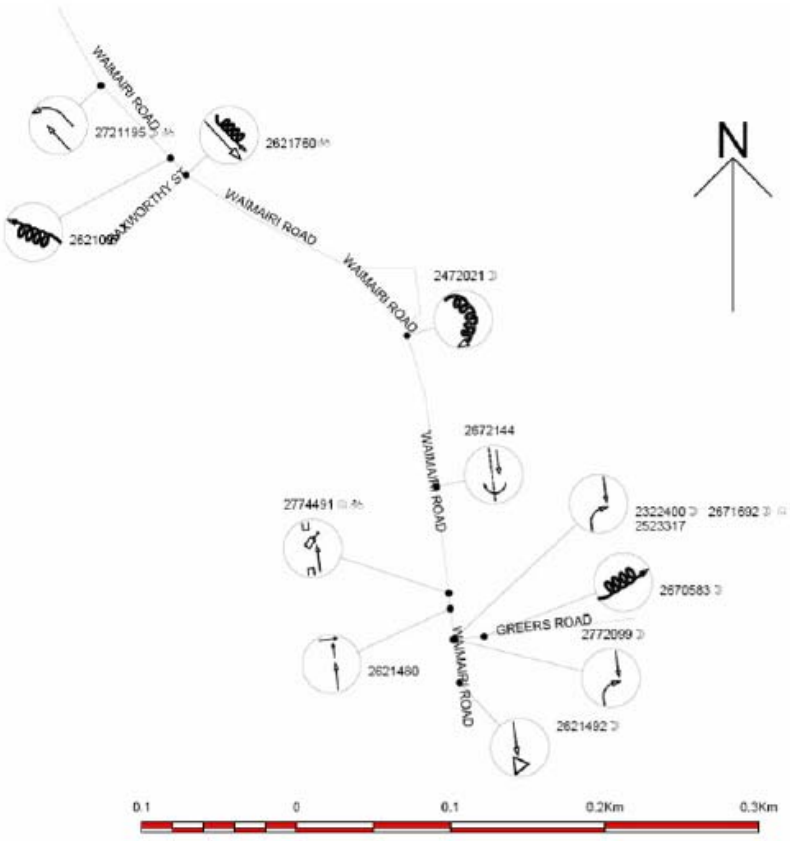

Figure 3: Crash diagram (2003 - 2007)

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From the reported crash history, the school crossing appears to have a good safety record. Reporting rates for pedestrian crashes and conflicts are notoriously lower than for typical vehicle-only crashes but the school's principal does not know of any conflicts occurring between vehicles and pedestrians using the crossing in his nine year experience. However, in his opinion the crossing is becoming increasingly unsafe due to increasing traffic volumes, the limitations on visibility due to the sweeping corner north of the school and the congestion of the Greers Road / Waimairi Road intersection. He feels the school zone speed limit has improved safety somewhat but that for children to operate the crossing and teachers to supervise it is still a big responsibility. As well as actual crash occurrences, for vulnerable road users such as young pedestrians the perception of safety is also extremely important. Users of the crossing should feel comfortable doing so and, based on the principal's account, this is not the case. The general feeling is that those at the school who use the crossing are not convinced that it is safe.

3 Research

3.1 Literature Review

Significant research on the safety effects of different crossing types has been made worldwide. Elvik and Vaa (2004) conducted a meta-analysis of 30 studies from various countries and concluded that zebra crossings installed by themselves without the addition of raised platforms actually increases the crash risk to pedestrians by about 28%. This is generally attributed to a discrepancy between pedestrians' perceptions of the crossings and motorists' perceptions and physical limitations. For example some pedestrians, especially young children with limited cognitive ability, may perceive it to be completely safe to step onto a zebra crossing without considering the proximity and speed of approaching vehicles and the time it takes for drivers to react and stop their vehicles. Raised platforms, which force drivers to slow down by means of vertical deflection, have been shown to increase driver awareness of a site and decrease speeds. Conversely, school patrol crossings were shown to decrease pedestrian crashes by 35% and mid-block traffic signals were shown to decrease pedestrian crashes by 12%.

Thus the school patrol currently operated at Westburn School is likely to have a much more beneficial effect than the zebra crossing.

Land Transport New Zealand's (2008) Pedestrian Planning and Design Guide states that:

> *"The provision of a zebra crossing for a school patrol should be made on the basis of the use of the crossing away from school times. If there is little pedestrian use outside school times then a zebra crossing is likely to be dangerous at those times and is not appropriate. A kea crossing should be considered."*

Allowing motorists to pass by the zebra crossing without stopping for waiting pedestrians at times when a school patrol is in operation may enforce the message to motorists that they don't have to stop at zebra crossings. If individual motorists pass by the site often, it is likely that they will become complacent and forget to stop for waiting pedestrians at times when the school patrol is not in operation. Pedestrians, however, are still likely to expect motorists to stop and may step onto the zebra crossing assuming that it's safe to do so. This can be especially dangerous if few pedestrians use the crossing outside of school hours as there is little opposition to the message enforced by the school crossing. Thus it is extremely important that the pedestrian volumes outside of school times at the Westburn School crossing be considered also.

In terms of appropriate pedestrian volumes for zebra crossings, the guide states:

> *"Do not use zebra crossings for locations with fewer than 50 pedestrians per hour."*

In relation to raised platforms the guide states:

> *"Platforms are generally installed on local roads and sometimes on collector roads. They are not installed on arterial roads except in major shopping areas where the need for traffic calming and pedestrian assistance exceeds the arterial function."*

When assessing the relevance of installing signalised crossings for schools, the Pedestrian Planning and Design Guide states that:

> *"If the crossing is not likely to be well used outside school hours, signalising an intersection would be the preferred option. They should also be considered where traffic flows are very high, making school patrol operation difficult, and where pedestrians need to cross outside school crossing times."*

This reinforces the notion that the level of crossing demand outside of school time is important. If the school crossing were observed to face difficulties in operation traffic signals should be considered.

3.2 Surveys

Two surveys were commissioned for this study. The first was a survey of pedestrians using the crossing on Thursday 6 March 2008 for the periods of 8:00-10:00 am and 2:30-5:45 PM. These times were chosen so that the morning school arrival and afternoon school leaving periods were captured, as well as a significant length of time when users of the crossing were likely to not be associated with the school. Cyclists using the crossing and passing though the site on the road and footpath were also counted. A summary of the survey results is shown in Table 1 and full results are given in Appendix 2. It should be noted that there are obvious peaks in the periods of 8:15-9:00 am and 3:00-3:30 PM (highlighted) and outside of these times the usage of the crossing is much lower.

Table 1: Manual crossing survey summary

Observation Period	Number of people using crossing	Number of cyclists passing crossing
8:00-8:15	6	13
8:15-8:30	42	10
8:30-8:45	61	5
8:45-9:00	60	4
9:00-9:15	3	4
9:15-9:30	0	2
9:30-9:45	1	3
9:45-10:00	0	3
14:30-14:45	1	3
14:45-15:00	15	1
15:00-15:15	113	8
15:15-15:30	28	3
15:30-15:45	0	8
15:45-16:00	3	5
16:15-16:30	13	5
16:30-16:45	1	5
16:45-17:00	2	7
17:00-17:15	5	8
17:15-17:30	2	4
17:30-17:45	4	7

The numbers of people turning left or right after using the crossing, as well as whether they were walking, cycling or pushing a bicycle are shown in Figure 4. It can be seen that almost two-thirds of people crossing away from the school turn right (towards Greers Road), this is probably due to the lack of parking and footpaths further along Waimairi Road to the north of the school. People crossing towards the school are quite evenly split in terms of what direction they turn after crossing.

Cyclists leaving the school are particularly good at following the road rule which specifies that cyclists must dismount and walk across pedestrian crossings. This is probably due to the presence of teacher or parental supervision (the disaggregated data show that cyclists who rode across the crossings generally did so outside of the school patrol operation times).

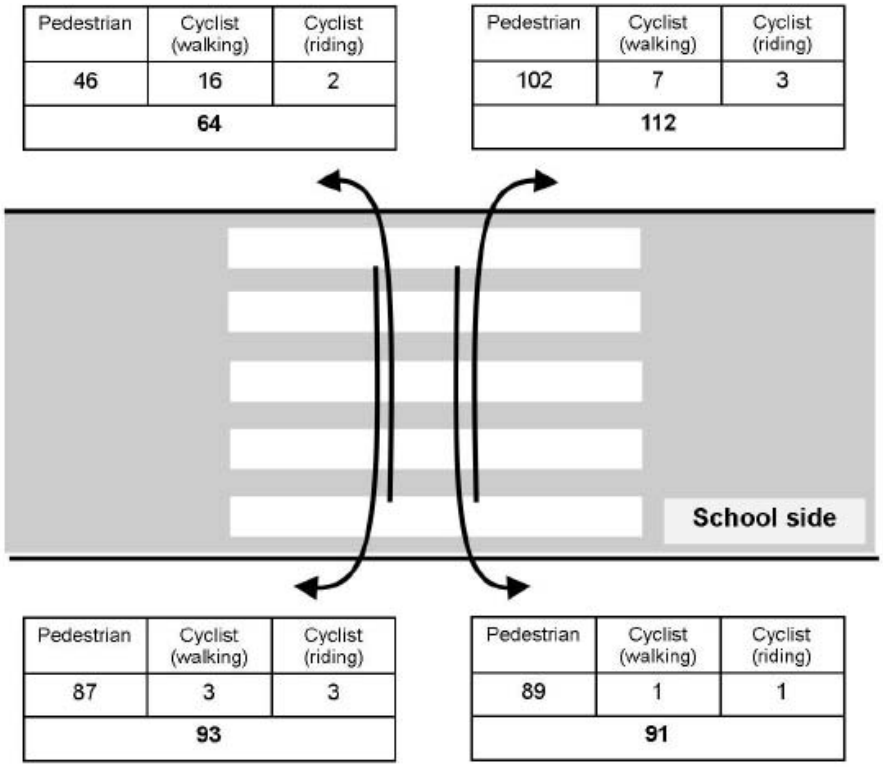


Figure 4: Directional and modal split for crossing users observed in survey

The surveyor noted that the operation of the school crossing was smooth and efficient; the operators did not seem to have much difficulty in getting the signs out and allowing people to cross.

The second survey considered the vehicle and pedestrian movements associated with the Greers Road / Waimairi Road intersection on Monday 10 March 2008 for the periods of 2:30-3:30 pm and 4:30-5:30 pm and Tuesday 11 March 2008 for the periods 7:30-9:30 am. Full results from this survey are given in Appendix 3.

The surveyors (who were both very experienced in conducting intersection counts for different intersection types) noted that this was one of the busiest intersections they had counted. It was noted that a large proportion of pedestrians observed at the intersection appeared to be Burnside High School Students.

While counts of pedestrians crossing near to but not at the intersection were not recorded, it was the surveyors' impression that more people crossed at the pedestrian island situated south of Wentworth Street rather than at the Greers / Waimairi intersection itself.

Data were also available from CCC regarding vehicle counts on Waimairi Road, Greers Road and Grahams Road near the site. These were used in the modelling stages described later in this report.

3.3 Suggested Options

Based on suggestions from the community board, research, surveys and general traffic engineering knowledge, four mutually exclusive options for the school crossing will be considered:

1. No change to the existing provisions;
2. Treatments to the existing zebra crossing / school patrol – including removal of the zebra crossing and physical works;
3. Replacement of the zebra crossing and school crossing patrol with a signalised mid-block crossing; and
4. Removal of the zebra crossing and signalisation of the adjacent Greers / Waimairi intersection.

The fourth option will be considered because it may be more efficient in terms of the road network to signalise the nearby Greers / Waimairi intersection rather than add signals in this nearby mid-block location.

These four options will be considered in terms of safety and efficiency for both pedestrians and other road users.

4 Analysis

4.1 Pedestrian Planning and Design Guide

The Pedestrian Planning and Design Guide includes a spreadsheet that, based on relevant site information, suggests appropriate crossing treatments and the benefits associated with this.

The spreadsheet suggested that a platform, a median refuge, kerb extensions, a zebra crossing and traffic signals are all appropriate options for the crossing. This suggests that the current provision of a zebra crossing plus kerb extensions is appropriate. However, the average pedestrian volume for periods outside of the school crossing operation is 25 pedestrians per hour; this is significantly less than the minimum 50 pedestrians per hour specified by the Pedestrian Planning and Design Guide. (As the pedestrians crossing during the school patrol operation are not affected by the zebra crossing it is suitable that they not be considered in the determination of the zebra crossing's appropriateness). Therefore it is considered that the volume of pedestrians using the crossing outside of peak school periods is too low to warrant retaining the zebra crossing and that it should be removed.

Although the Pedestrian Planning and Design Guides spreadsheet indicates that addition of a platform may be a suitable measure this is superseded elsewhere in the guide. It is considered that adding a raised platform to the crossing would not be appropriate as Waimairi Road is a major arterial road with the function of accommodating large traffic volumes and the expectation that (outside of school crossing times) reasonable speeds could be maintained by vehicles. Addition of a raised platform will therefore not be considered for the rest of this analysis.

It is considered that adding a median refuge island may improve the situation for those crossing unaided by the school patrol as it would simplify the crossing task by allowing the road to be crossed in stages. Addition of a median island would require the current kerb extensions to be reduced in order to maintain the width of the traffic lanes. It is considered that a median refuge would not be appropriate as a sole treatment as it would

be unlikely to accommodate the large groups of students observed in the afternoon peak and would not give priority to school students. Therefore, if a median island were introduced, to compensate for the removal of the zebra crossing, it is advised that the school crossing patrol operation be maintained.

The spreadsheet suggested that a level of service F (i.e. unsatisfactory) would be experienced by pedestrians if no facility were provided at the site.

None of the options outlined in the previous section will be discarded based on the Pedestrian Planning and Design Guide Analysis.

4.2 SIDRA

The intersection analysis program SIDRA INTERSECTION, (version 3.2) was used to assess the feasibility of options 3 and 4 (signalisation of the crossing and the Greers / Waimairi intersection respectively). It is considered that, while these options will provide the highest level of safety to crossing pedestrians they may be opposed on the grounds of efficiency. Therefore it is important to have a good understanding of the likely effects of these options.

4.2.1 Traffic signals for crossing

Liaison with the CCC traffic signals department has revealed that, if any signals are introduced in the area they will be coordinated with the nearby Waimairi / Maidstone intersection. Modelling parameters have been based on this intersection's current operational characteristics. Table 2 shows the assumed cycle times for the modelling. Note that the PM peak is actually the afternoon peak of school crossings, which occurs at around 3 PM, as opposed to the evening peak of vehicle volumes, which occurs at around 5 PM.

Table 2: Cycle times for peak periods

Period	Cycle time (s)
AM peak	100
PM school peak	70

Table 3 shows the summary of levels of service, queue lengths and delays expected if the school crossing is signalised for both morning and afternoon peak crossing periods.

Table 3: Summary characteristics for signalised crossing option

Movement	Level of Service	95th percentile Queue length (m)	Average Delay (s/ person)
Pedestrians (am)	E	n/a	44.2
Motorists - through from north (am)	A	77	3.7
Motorists - through from south – (am)	A	47	3.2
Pedestrians (PM)	C	n/a	29.3
Motorists - through from north (PM)	A	45	4.5
Motorists – through from south (PM)	A	59	4.9

It can be seen in Table 3 that the level of service to vehicles is maintained at the highest possible level, similar to that experienced if they did not have to stop for pedestrians at all.

The levels of service to pedestrians seem much worse than the vehicle movement levels of service. SIDRA uses different methods of calculating levels of service for pedestrians and motorists so the two are not directly comparable. SIDRA bases the level of service for pedestrians on the delay experienced, so it is best to compare the signalised crossing with the current school patrol in terms of pedestrian delay.

No measurements of the actual delays experienced by those using the school crossing were taken during the survey but it is considered that delays between the two situations should be very similar. The school patrol operators generally wait for a group of students waiting to cross to form and then must find a suitable gap in the traffic in order to extend the stop signs and allow students to cross. Given that the signalised crossing is expected to operate with a reasonably low cycle time and the pedestrian crossing phase can be called every cycle it is expected that the delays predicted for pedestrians using the proposed signalised crossing should be acceptable and comparable to the current situation.

The average delay to pedestrians predicted for the signalised crossing is lower in the afternoon peak than in the morning peak due to the fact that the cycle time of the adjacent Waimairi / Maidstone intersection is lower in the afternoon peak than in the morning peak, as shown in Table 2.

It should be noted that delays experienced by vehicles at other times of the day will be much lower with a signalised mid-block crossing option due to the less frequent pedestrian demand. It has been observed that pedestrian demand in the afternoon has a much shorter spread (as all children finish school at the same time) so it is unlikely that the average delay to motorists presented in Table 3 would be experienced for long.

The crossing is located approximately 57 m from the Greers Road intersection (to the south) and 310 m from the Raxworthy Street intersection (to the north). Thus the predictions indicate that queues could reach the Greers / Waimairi intersection in the PM peak. This is not considered to be significant as the only movement that could be affected is the right turn from Greers Road, which has a very low demand and, as the queue length predictions are 95th percentile lengths, the likelihood of a queue blocking a right turner from Greers Road for a significant amount of time is negligible. The 90th percentile queue length for the northbound traffic in the PM peak is 49 m, which does not reach the intersection.

By "double-cycling" the crossing operation (i.e. applying a cycle time of 50 seconds in the AM peak or 35 seconds in the PM peak so that two cycles of the crossing run for each one cycle of the Maidstone / Waimairi intersection) the level of service to pedestrians can be increased to level B. This does however increase the average delays to motorists, as shown in Table 4.

Table 4: Summary characteristics for signalised crossing option with double cycling

Movement	Level of Service	95th percentile Queue length (m)	Average Delay (s/ person)
Pedestrians (am)	B	n/a	44.2
Motorists - through from north (am)	A	79	7.6
Motorists - through from south – (am)	A	49	6.6
Pedestrians (PM)	B	n/a	12.0
Motorists - through from north (PM)	A	47	9.6
Motorists – through from south (PM)	B	63	10.9

Based on comparison of Table 3 and Table 4 it is considered that double-cycling of the midblock crossing is definitely appropriate for the AM peak and possibly appropriate for the afternoon peak.

4.2.2 Signalisation of Greers / Waimairi intersection

Given the traffic volumes on Greers Road and Waimairi Road and the levels of pedestrian demand, it has been assumed that the morning peak period is the critical case. The morning peak is obviously more critical than the afternoon school peak as the pedestrian levels are the same but traffic volumes are much lower in the afternoon school peak. It was assumed that the morning peak would also be more critical then the evening traffic peak as the two periods have similar traffic volumes but the morning has much higher pedestrian volumes; subsequent modelling of the evening traffic peak confirmed this assumption but details for the evening peak have not been included in this report.

SIDRA models have been developed for the AM peak to compare the existing situation with the proposed phasing. The models were calibrated according to observations of average queue lengths made by the surveyors who did the turning movement counts.

Table 5 shows the current operational characteristics of the intersection under the Give Way control. Note that the intersection currently has no provision for pedestrians, other than a splitter island on the Greers Road approach. The model assesses that the intersection currently has a practical spare capacity of 62% with an average intersection delay of 5.4 seconds per person. As it is not a signalised intersection it is not relevant to assess the overall intersection level of service.

Table 5: Summary characteristics for current intersection (AM peak)

Movement	Level of Service	95th percentile Queue length (m)	Average Delay (s/ person)
Motorists - through from south	A	0	0
Motorists - through from north	A	0	0
Motorists – right from Waimairi	B	23	11.2
Motorists – left from Waimairi	A	2	8.2
Motorists – right from Greers	F	4	73.0
Motorists – left from Greers	C	26	10.9

Figure 5 shows the phasing arrangements and predicted timings for the intersection. A three phase arrangement has been used. There are two pedestrian crossing locations; one across Greers Road and one on the northern leg of Waimairi Road. The placement of the latter crossing warrants discussion - it is standard practice to provide a crossing on the left approach of the T (in this case on the southern leg of Waimairi Road) however in this case it is seen as more appropriate to provide it on the right approach for two reasons.

Firstly, this arrangement will be more in line with the desired crossing location for students and parents travelling to and from the school. If the crossing were placed on the other side it would result in many pedestrians having to double back to get to parked cars, or to walk home.

Secondly, the phasing arrangement ensures that there are no vehicle movements conflicting with pedestrians crossing in the chosen location. This allows clearance of the heavy movements between the south of Waimairi Road and Greers Road and increases efficiency. If it were a fully protected movement (which we would suggest as appropriate),

it would also safer than the standard practice of placing the crossing on the left of the T but allowing left turners to filter through crossing pedestrians.

Hence, the suggested layout would better service students going to both Burnside High and Westburn School.

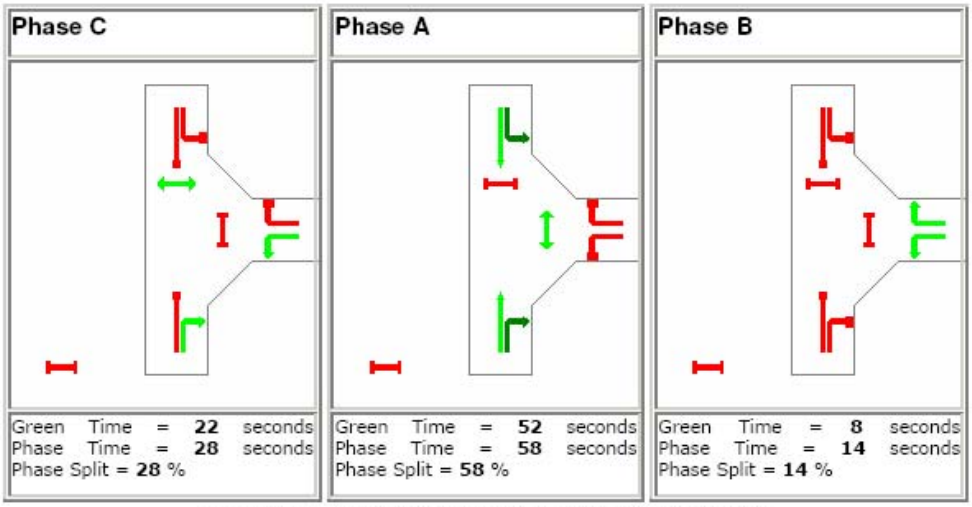


Figure 5: Proposed phasing for Greers / Waimairi intersection

Nevertheless, a pedestrian crosswalk could also be provided on the south leg of the intersection, but in that case, we would suggest that a late start for motorists be provided, achieving partial pedestrian protection. The degree of pedestrian protection is a matter of the signal time settings, where safety and efficiency have to be weighed up.

The Greers Road crossing is operated at the same time as turning movements from Waimairi Road into Greers Road, however it has been modelled so that these movements will be held back (by use of red arrows) for the time it is calculated to take a child to cross the road. As the right turn has already been given time during the previous phase and the left turn volume is very low this delay to turning motorists does not adversely affect the efficiency of the intersection but should provide a high level of safety to crossing pedestrians.

This model predicts that the intersection would have an overall level of service (LOS) C with a practical spare capacity of 37% and an overall average delay of 21.8 seconds per person. A summary of delays and levels of service to individual movements is shown in Table 6.

Table 6: Summary characteristics for signalised intersection option (AM peak)

Movement	Level of Service	95th percentile Queue length (m)	Average Delay (s/ person)
Pedestrians – crossing Waimairi	D	n/a	32.8
Pedestrians – crossing Greers	B	n/a	13.5
Motorists - through from south	B	88	15.2
Motorists - through from north	B	164	18.7
Motorists – right from Waimairi	B	82	17.4
Motorists – left from Waimairi	C	164	25.1
Motorists – right from Greers	D	4	54.9
Motorists – left from Greers	D	128	35.5

If the intersection were signalised the pedestrian crossing south of Wentworth Street would be removed to encourage pedestrians to cross at the lights where it is safer with the operational concept that we are suggesting here. This would also be necessary to accommodate the queues of right turners on the southern Waimairi approach.

With the exception of the right turners coming from Greers Road (which is a very low volume movement in the AM peak) the average delay to all motorists is expected to increase significantly if the Waimairi / Greers intersection is signalised. Thus the level of service to most movements is also decreased. Queue lengths are increased, as would be expected given that vehicles accumulate during the time a phase is stopped.

However, the upside of this is that pedestrians are given a safe and efficient means of crossing the intersection. This option is likely to provide for more than just the pedestrians from Westburn School as it is more in line with desire lines for other pedestrians in the area, for example those travelling to and from Burnside High School. The levels of service provided to pedestrians are also higher than for the case of signalising the school crossing.

It should also be noted that, while motorists on Waimairi Road may experience greater delays if the Greers / Waimairi intersection is signalised, as the school patrol will no longer be in operation they will save on delay elsewhere, although to a much lesser extent.

It is possible that signalising the Greers / Waimairi intersection will result in rerouting of traffic. Currently there is a very low demand for the right turn out of Greers Road but this may be due to the difficulty involved in making this movement due to the heavy through traffic volumes. If the intersection is signalised the right turn movement will be made easier and more motorists may choose to turn right here instead of using a different route. A sensitivity test has been carried out to predict the effects of higher right turn volumes coming from Greers Road.

The sensitivity analysis used a base of 50 right turners per hour from Greers Road and increased this to 250 right turners per hour (i.e. a 500% increase over the base assumption) while assuming all other volumes remained the same. In the extreme case the intersection is predicted to have a spare capacity of 18%, a level of service of C and an overall average delay of 28.6 seconds per person in the AM peak.

Currently Greers Road has a single approach lane. Previous models have allowed for two right turning vehicles to queue at the intersection while still allowing left turners to flow freely (it is assumed that this is realistic as left turners will often drive in the cycle lane near the intersection if right turners are queued). However, increasing the volume of right turners from Greers Road to 250 vehicles per hour requires storage for approximately 14

vehicles (i.e. a queue length of around 100 m). This would require separate left turn and right turn approaches on the Greers Road leg of the intersection.

The width Greers Road is currently 13 m; this provides enough room for two kerbside cycle lanes of 1.5 m, a left turn lane and a right turn lane each of 3.0 m and a departure lane of 4.0 m. Parking on Greers Road would have to be removed to accommodate this and it is assumed that the pedestrian island currently provided on Greers Road at the intersection would be removed (as pedestrians would be able to cross the road in one stage with the signals). Therefore, it is considered that even if the right turn volume from Greers Road increases dramatically this could be accommodated within the existing roadway.

Increasing the number of right turners from Greers Road is also expected to increase the queue lengths of other approaches (as a higher proportion of the cycle time will be required for the B phase). In particular, queues forming on the southbound lane of Waimairi Road, which consists of through and left turning traffic, is expected to be critical. Figure 6 shows the 95th percentile queue lengths (in terms of number of vehicles queued) predicted for this lane for flows ranging from 100% to 500% of 50 right turners per hour coming from Greers Road.

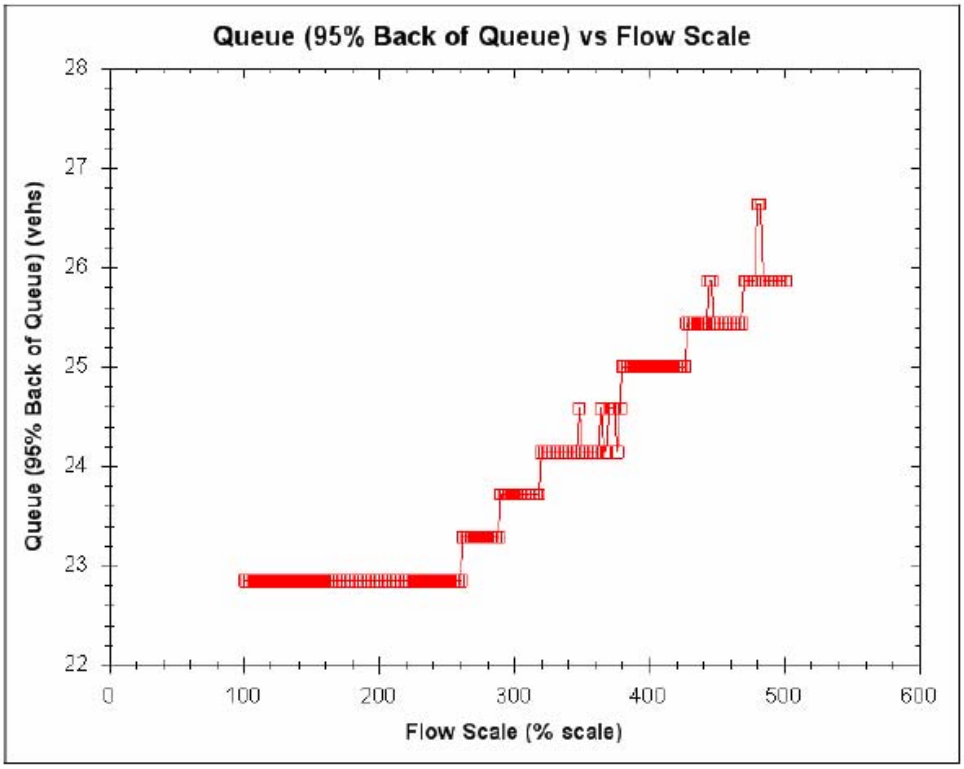


Figure 6: northern Waimairi approach 95% queues when right turn from Greers increased (AM peak)

While this lane has ample room to accommodate 26 vehicles (a queue of approximately 185 m) it would be more efficient to separate it into separate through and left turn lanes. This would require widening of the Waimairi approach. This should be taken into consideration when determining the choice of option.

5 Comparisons of Options

The crash history for Westburn's school crossing combined with the principal's observation that no conflicts between vehicles and pedestrians have occurred on the crossing in the last nine years suggest that the current crossing operation is safe. However, the general impression gained from talking to the principal is that those operating and using the crossing do not feel safe. It therefore seems that alternatives to retaining the current crossing as it is should be explored.

No suggestions for improving the school's current method of operating the school patrol can be suggested. Students, staff and parents are well-educated and the school is very effective at enforcing the rules relating to the crossing's use. The crossing is well-placed and visibility is enhanced through use of high-visibility clothing worn by the operators and traffic cones placed on the kerb extensions at the crossing. The 40 km/h school speed sign seems to be effective in reducing traffic speeds and increasing motorists' awareness.

It is important to consider all users of the crossing, not just those who use it when the school patrol operates. Volumes of pedestrians using the site outside of the school patrol operating times are considered to be too low to warrant retaining the existing zebra crossing. Therefore, the zebra crossing should be removed so as to not endanger those using it. This would result in the school patrol becoming a "kea crossing", which is essentially the same operation taking place on unmarked road as opposed to on a zebra crossing.

It is considered that adding a median refuge on Waimairi Road in place of the zebra crossing would aid those crossing the road at times when the school patrol was not in operation. However, it is unlikely that the presence of an island would aid the operation of the school patrol in any way. As a median island is currently provided south of Wentworth Street it may not be seen as necessary to provide a median island in place of the zebra crossing; this issue would require further evaluation to determine whether provision should be given to those pedestrians who currently cross at the zebra crossing outside of the school patrol operation.

Signalising the school crossing is predicted to be similar to the current school crossing operation in terms of delays to pedestrians and motorists. However, international research indicates that signalised crossings do not have the same safety increase expected as school patrol type operations when applied to previously uncontrolled sites. Driver compliance with traffic signals is never one hundred percent and signalising the crossing may not necessarily improve its safety. It should be acknowledged that New Zealand drivers often behave differently to their overseas counterparts and crossing treatments are site-specific. In the case of Westburn School which is situated on a major arterial road with high traffic volumes it may well be that a signalised midblock crossing would be safer than the current school patrol.

It is predicted that signalising the school crossing would have a much less significant effect on motorists passing the school and those at the nearby Greers Road / Waimairi Road intersection than signalising the intersection itself. The latter option, however, provides a higher level of service to pedestrians and is predicted to cater for a wider catchment of pedestrians.

The level of service calculation for the intersection signalisation option does not take into account the detour required for students to travel between the school and the intersection. One concern is that children whose parents park on Waimairi Road opposite the school may be tempted to cross the road directly rather than have to detour via the Greers / Waimairi intersection. Similarly, children who normally walk home in a north direction via the footpath opposite the school would face a detour if the intersection were signalised.

The manual crossing survey showed that a total of 64 people turned north after crossing away from the school and 112 people crossed and turned south. Parking on the opposite side of the road continues for approximately 180 m north of the current zebra crossing. Past this point the roadway narrows and there is no parking or footpath provided. Thus it is unlikely that, of the 64 people who crossed and turned north, many were walking further than to a parked car. For children who walk home northwards it would be more sensible to stay on the footpath on the same side of the road to the school and, if needed, cross at the Grahams Road intersection.

The detour would be 110 m long for anyone who would have otherwise travelled north of the current crossing (and shorter for those who travel to cars parked between the crossing and the Greers / Waimairi intersection. Studies show that if a route is 10% longer than an alternative, 70% of cyclists (assumedly pedestrians behave similarly) will choose the shorter route, regardless of other factors such as safety and convenience (CROW, 1996); therefore it is likely that most people would prefer to cross near the current crossing point rather than detour to the intersection.

As the school currently enforces the use of the school patrol crossing and prohibits students from crossing at other locations it seems feasible that they could enforce the use of a signalised crossing at the Greers / Waimairi intersection and ensure that unsafe behaviour such as crossing at uncontrolled midblock locations does not occur, as they currently do with use of the school crossing. This has been confirmed by the school's principal who saw this option as very desirable. This would not necessarily mean that children and parents would prefer this option; the principal acknowledged that parents would be the hardest group to "train" to use the signals.

From a network operations perspective signalising the Greers / Waimairi intersection may seen as undesirable as it could encourage more traffic to turn right from Waimairi Road onto Greers Road rather than travel to Grahams Road and take the ring route specified in the City's road hierarchy. The intersection volume survey showed that a significant volume of traffic currently turns right onto Greers Road, which suggests that the intersections current form of control is not a deterrent. It may be that many of these motorists have a genuine reason to choose Greers Road, for example travel to Burnside High School. It could also be that the Westburn School patrol crossing deters motorists from continuing along Waimairi Road to Grahams Road. It is considered that, if motorists are intending to travel the length of Greers Road the location of Burnside High School, the Greers Road / Wairakei Road intersection and the Greers Road / Grahams Road intersection should be deterrents enough, even if the Greers / Waimairi intersection is signalised.

Currently it is the right turn movement from Greers Road that is much lower than the other intersection movements; it is predicted that this right turn is the most likely to increase as a result of the signalisation as it is currently the most impeded movement. Given the direction of this movement in relation to the ring route it is unlikely that traffic would be diverted from the ring route. Travelling on Greers Road, turning right and travelling on Waimairi Road would be a greater distance with more potential sources of delay than travelling the alternative route along Grahams Road.

It has been shown that, even if traffic turning right from Greers Road is increased to 250 vehicles per hour, the signalised intersection could be configured to accommodate this increase.

It is considered that the 40 km/h school zone would no longer be required if either midblock signals or signalisation of the Greers / Waimairi intersection replaced the current school patrol crossing.

Overall, in terms of choosing between a signalised midblock crossing and signalising the Greers / Waimairi intersection, the main difference is that for the latter option approximately one third of the school's pedestrians will have to undergo a significant detour; this is not considered to be of concern by the school's principal. Signalising the intersection would provide further for those students who, after using the current school crossing, cross Greers Road. It is likely to have benefits to the wider community, especially those who currently cross at the intersection (e.g. Burnside High School students). While delays appear higher for the signalised option than the current situation it should be considered that the school / zebra crossing would no longer exist so motorists would save on delays further down the road.

6 Recommendations

It should be noted that this study has been commissioned as a feasibility study; while recommendations will be made there will be further investigation and consultation required before the chosen option can be implemented.

Based on the extent of this study, it is recommended that the most beneficial option, for Westburn School pupils and the wider community, is to remove the current zebra crossing and school patrol and signalise the Greers Road / Waimairi Road intersection. This is also likely to be the most expensive option and will require consultation with CCC's network planners and signals engineers as well as further consideration of the evening traffic peak models that were not analysed in depth for this report. Also, it is recommended that a topographical survey and service analysis of the intersection be carried out to enable full civil design of the intersection layout.

If this recommendation is not realised, providing a midblock crossing in place of the current school crossing is seen the second best alternative.

Finally, it is recommended that if neither of these options are adopted and the school patrol is maintained that the current zebra crossing should be removed to ensure the safety of those few pedestrians who currently use it outside of the school patrol operation times. The possibility of introducing a median island (with associated changes to the kerb extensions) could also be explored.

7 References

Elvik, R. and Vaa, T. (2004). *The Handbook of Road Safety Measures.* Elsivier, Amsterdam, The Netherlands.

Land Transport New Zealand (2008). *Pedestrian Planning and Design Guide.* Land Transport New Zealand, Wellington.

CROW (1996). *Sign up for the Bike*, The Netherlands.

Appendix 1: Reported crash history

Land Transport NZ
Waka Kotahi Aotearoa

Westburn School crash list 2003-2007
Plain English report, run on 06-Mar-2008 Page 1

First Street	(2)Second street (1)Or landmark Distance(m)	Crash Number	Date DD/MM/YYYY	Day	Time 2400	Description of Events	Crash Factors (ENV = Environmental factors)	Road	Natural Light	Weather	Junction	Ctrl	Tot Inj P S H A S I T S H
GREERS ROAD	208 WAIMAIRI ROAD	2670583	28/01/2006	Sat	0300	CAR1 RHD on GREERS ROAD lost control; went off road to left, CAR1 hit Fence	CAR1 too fast on straight, new driver showed inexperience	Dry	Dark	Fine	Unknown	N/A	
WAIMAIRI ROAD	208 GREERS ROAD	2621480	29/03/2006	Wed	1100	CAR1 RHD on WAIMAIRI ROAD hit rear end of CAR2 stop/slow for PEDESTRIAN	CAR1 failed to notice car slowing, call phone, communication or navigation device	Dry	Overcast	Fine	Unknown	N/A	1
WAIMAIRI ROAD	338 GREERS ROAD	2774491	10/12/2007	Mon	0835	CYCLIST1 RHD on WAIMAIRI ROAD hit CAR2 parking/unparking	CAR2 didnt see/look behind when pulling out from parked position	Wet	Overcast	Light Rain	Unknown	N/A	
WAIMAIRI ROAD	1038 GREERS ROAD	2672144	30/06/2006	Fri	1340	CAR1 RHD on WAIMAIRI ROAD hit CAR2 U-turning from same direction of travel	CAR2 didnt see/look behind when changing lanes, position or direction	Dry	Bright	Fine	Unknown	N/A	
WAIMAIRI ROAD	2008 GREERS ROAD	2472021	10/07/2004	Sat	0156	CAR1 RHD on WAIMAIRI ROAD lost control turning right, CAR1 hit Fence on right hand hand	CAR1 alcohol test above limit or test refused, too fast entering corner	Dry	Dark	Fine	Unknown	N/A	
WAIMAIRI ROAD	1 GREERS ROAD	2523317	18/11/2005	Fri	1605	VAN2 turning right hit by oncoming MOTOR CYCLE2 RHD on WAIMAIRI ROAD	VAN2 failed to give way when turning to non-turning traffic, misjudged intention of another party	Dry	Bright	Fine	T Type Junction	Give Way Sign	1
WAIMAIRI ROAD	1 GREERS ROAD	2322400	25/07/2003	Fri	1845	VAN2 turning right hit by oncoming MOTOR CYCLE2 RHD on WAIMAIRI ROAD	MOTOR CYCLE2 headlights inadequate or no headlights VAN2 failed to give way when turning to non-turning traffic, didnt see/look when required to give way to traffic from another direction	Dry	Dark	Fine	T Type Junction	Give Way Sign	1
WAIMAIRI ROAD	1 GREERS ROAD	2772099	13/06/2007	Wed	0545	VAN2 turning right hit by oncoming SUV1 RHD on WAIMAIRI ROAD	VAN2 failed to give way when turning to non-turning traffic, didnt see/look when required to give way to traffic from another direction	Dry	Dark	Fine	T Type Junction	Give Way Sign	
WAIMAIRI ROAD	1 GREERS ROAD	2671692	22/05/2006	Mon	0630	CAR2 turning right hit by oncoming CAR1 RHD on WAIMAIRI ROAD	CAR2 failed to give way when turning to non-turning traffic, didnt see/look when required to give way to traffic from another direction	Wet	Dark	Light Rain	T Type Junction	Give Way Sign	
WAIMAIRI ROAD	138 RAKAHUHU ST	2621607	05/01/2006	Thu	1346	CAR1 RHD on WAIMAIRI ROAD lost control; went off road to left, CAR1 hit Kerb, Tree	CAR1 suddenly swerved to avoid animal	Dry	Overcast	Fine	Unknown	N/A	1
WAIMAIRI ROAD	808 RAUKAHUHU ST	2721185	26/02/2007	Mon	2010	CYCLIST1 (Age 11) RHD on WAIMAIRI ROAD dismounted by CAR2 turning left	CAR2 didnt see/look behind when changing lanes, position or direction ENV: entering or leaving private house / farm	Dry	Twilight	Fine	Driveway	Nil	1
WAIMAIRI ROAD	1 RAUKAHUHU ST	2621780	30/03/2006	Thu	0822	CYCLIST2 (Age 2) RHD on WAIMAIRI ROAD lost control while being overtaken by VAN1	CYCLIST2 wandering or wobbling	Dry	Overcast	Fine	T Type Junction	Nil	1
WAIMAIRI ROAD	238 WAINONI ST	2621492	13/01/2006	Fri	0020	CAR1 RHD on WAIMAIRI ROAD hit destruction, CAR1 hit Roadworks	CAR1 obstruction on roadway ENV: road surface under construction or maintenance	Dry	Dark	Fine	T Type Junction	Nil	1

Date last saved 08 / Apr / 08 05:40:00

Appendix 2: Manual Crossing Survey Results

Date last saved 08 / Apr / 08 05:40:00

Pedestrians and cyclists using crossing
Location: Westburn School Crossing
Date Thurs 6/3/08
Weat Overcast NB Cyclesafe at school this week, so extra cycles brought to school

OPPOSITE SIDE TO SCHOOL

From	To	Ped	Cyc (walk)	Cyc (ride)	Ped	Cyc (walk)	Cyc (ride)
8:00	8:15	1					
8:15	8:30	5			3		1
8:30	8:45	3					
8:45	9:00	10	1	1	8		
9:00	9:15				2		
9:15	9:30						
9:30	9:45				1		
9:45	10:00						
14:30	14:45						
14:45	15:00	1			3		
15:00	15:15	12	15		65	4	
15:15	15:30	7			13	1	
15:30	15:45						
15:45	16:00			1			
16:15	16:30	6			5	2	
16:30	16:45						
16:45	17:00	1					
17:00	17:15				1		
17:15	17:30						
17:30	17:45				1		2

SCHOOL SIDE

From	To	Ped	Cyc (walk)	Cyc (ride)	Ped	Cyc (walk)	Cyc (ride)
8:00	8:15	4	1				
8:15	8:30	24		2	7		
8:30	8:45	19	1		37	1	
8:45	9:00	2	1		37		
9:00	9:15	1					
9:15	9:30						
9:30	9:45						
9:45	10:00						
14:30	14:45				1		
14:45	15:00	9			2		
15:00	15:15	12		1	4		
15:15	15:30	7					
15:30	15:45						
15:45	16:00	2					
16:15	16:30						
16:30	16:45	1					
16:45	17:00	1					
17:00	17:15	4					
17:15	17:30	1			1		
17:30	17:45						1

Date last saved 08 / Apr / 08 05:40:00

Cyclists passing crossing
Location:
Date: Thurs 6/3/08
Weather: Overcast

OPPOSITE SIDE TO SCHOOL

		Cyc (road)	Cyc (footpath)
8:00	8:15	3	
8:15	8:30	3	
8:30	8:45	2	
8:45	9:00	2	
9:00	9:15	2	
9:15	9:30	1	
9:30	9:45	1	
9:45	10:00	2	1
14:30	14:45	1	
14:45	15:00		
15:00	15:15		
15:15	15:30	1	
15:30	15:45	1	
15:45	16:00		
16:15	16:30		
16:30	16:45	1	
16:45	17:00	2	
17:00	17:15	4	
17:15	17:30	3	1
17:30	17:45	2	1

SCHOOL SIDE

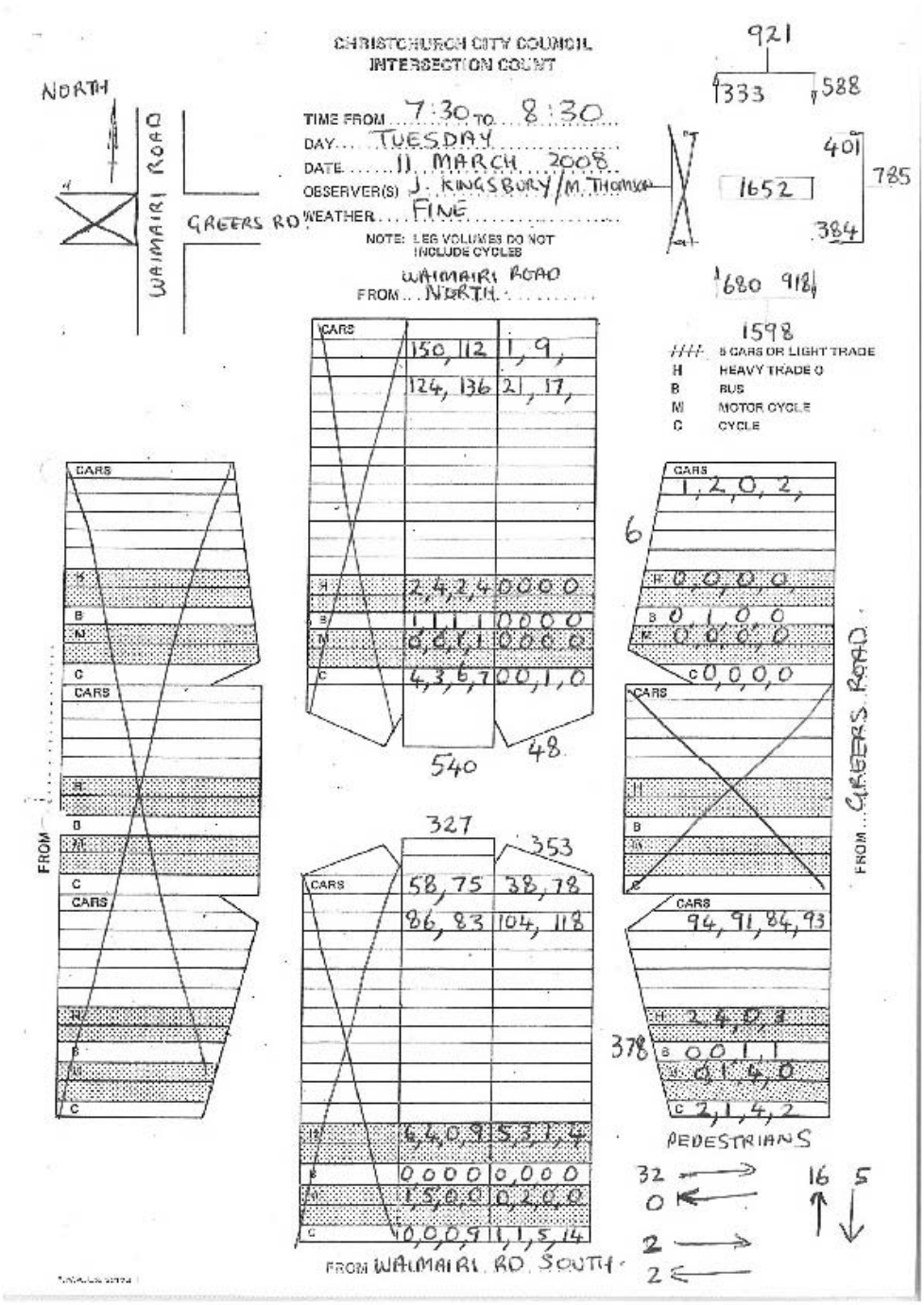
		Cyc (road)	Cyc (footpath)
8:00	8:15	5	5
8:15	8:30	6	1
8:30	8:45	3	
8:45	9:00	1	1
9:00	9:15	2	
9:15	9:30	1	
9:30	9:45	2	
9:45	10:00		
14:30	14:45	2	
14:45	15:00	1	
15:00	15:15	3	5
15:15	15:30	1	1
15:30	15:45	7	
15:45	16:00	4	1
16:15	16:30	1	4
16:30	16:45	4	
16:45	17:00	5	
17:00	17:15	4	
17:15	17:30		
17:30	17:45	4	

Date last saved 08 / Apr / 08 05:40:00

Appendix 3: Intersection Vehicle Survey Results

Date last saved 08 / Apr / 08 05:40:00

Westburn School pedestrian crossing feasibility study 24 of 32



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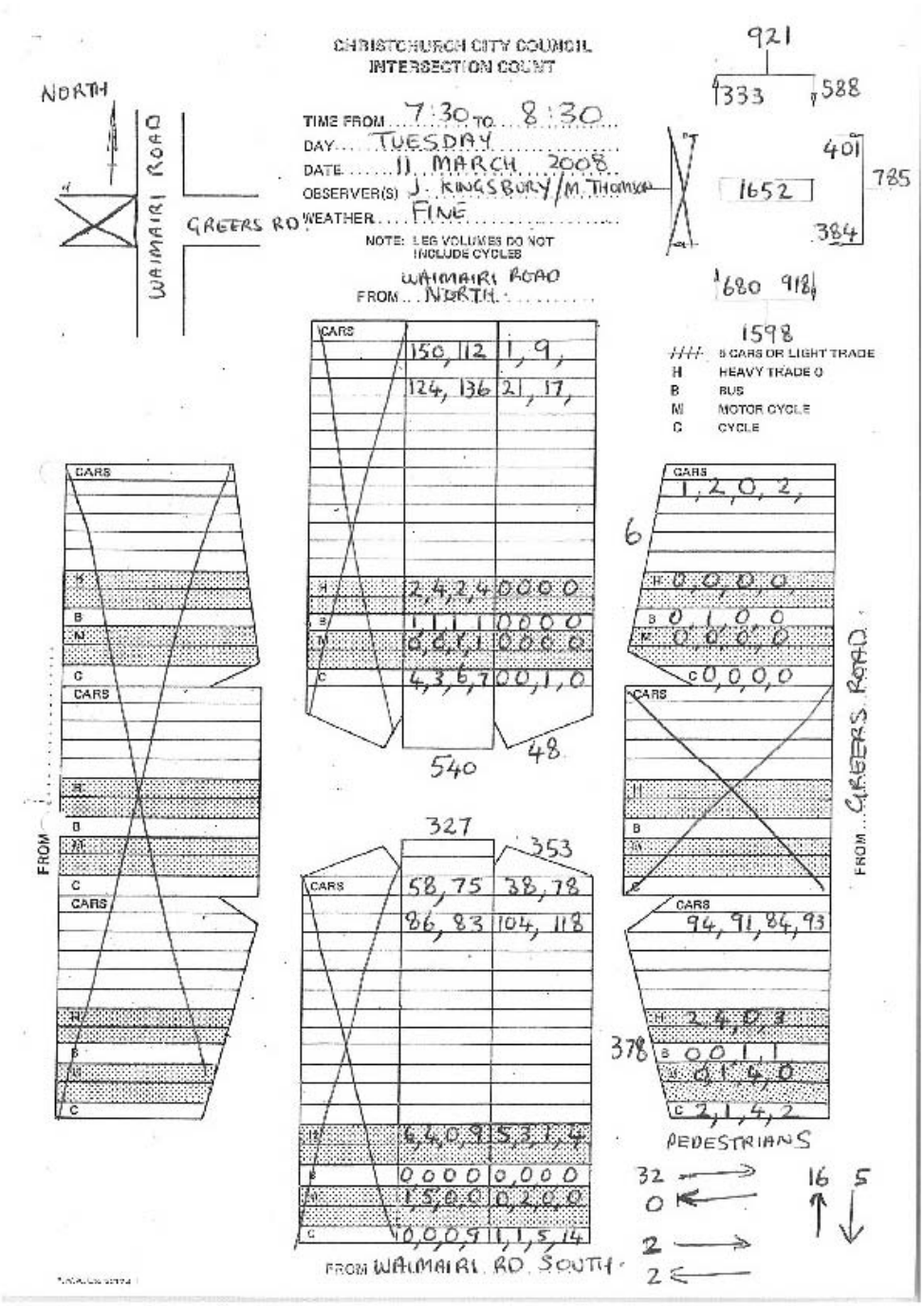
Westburn School pedestrian crossing feasibility study

25 of 32



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Westburn School pedestrian crossing feasibility study

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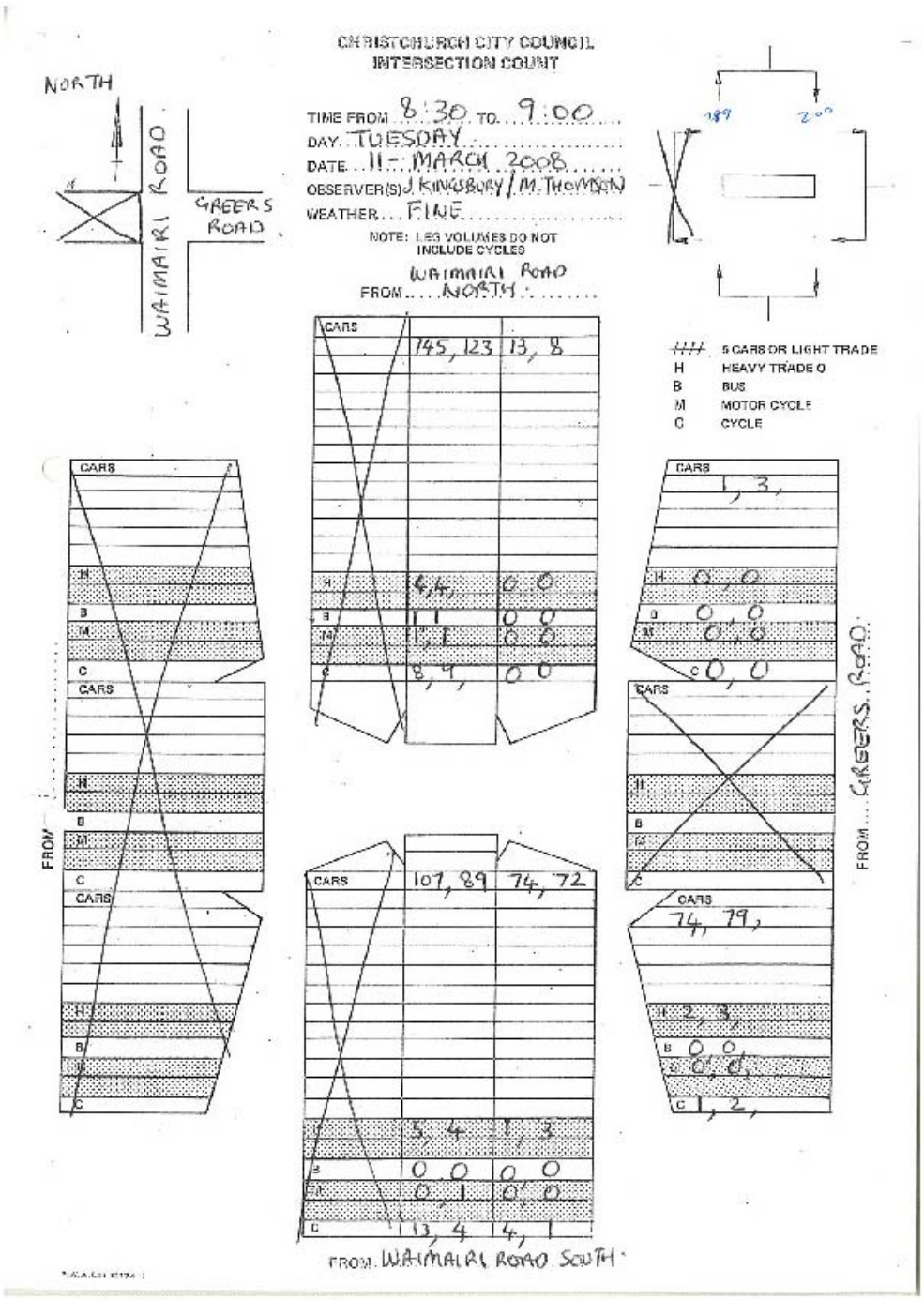
VIASTRADA

TRAFFIC ENGINEERING AND PLANNING



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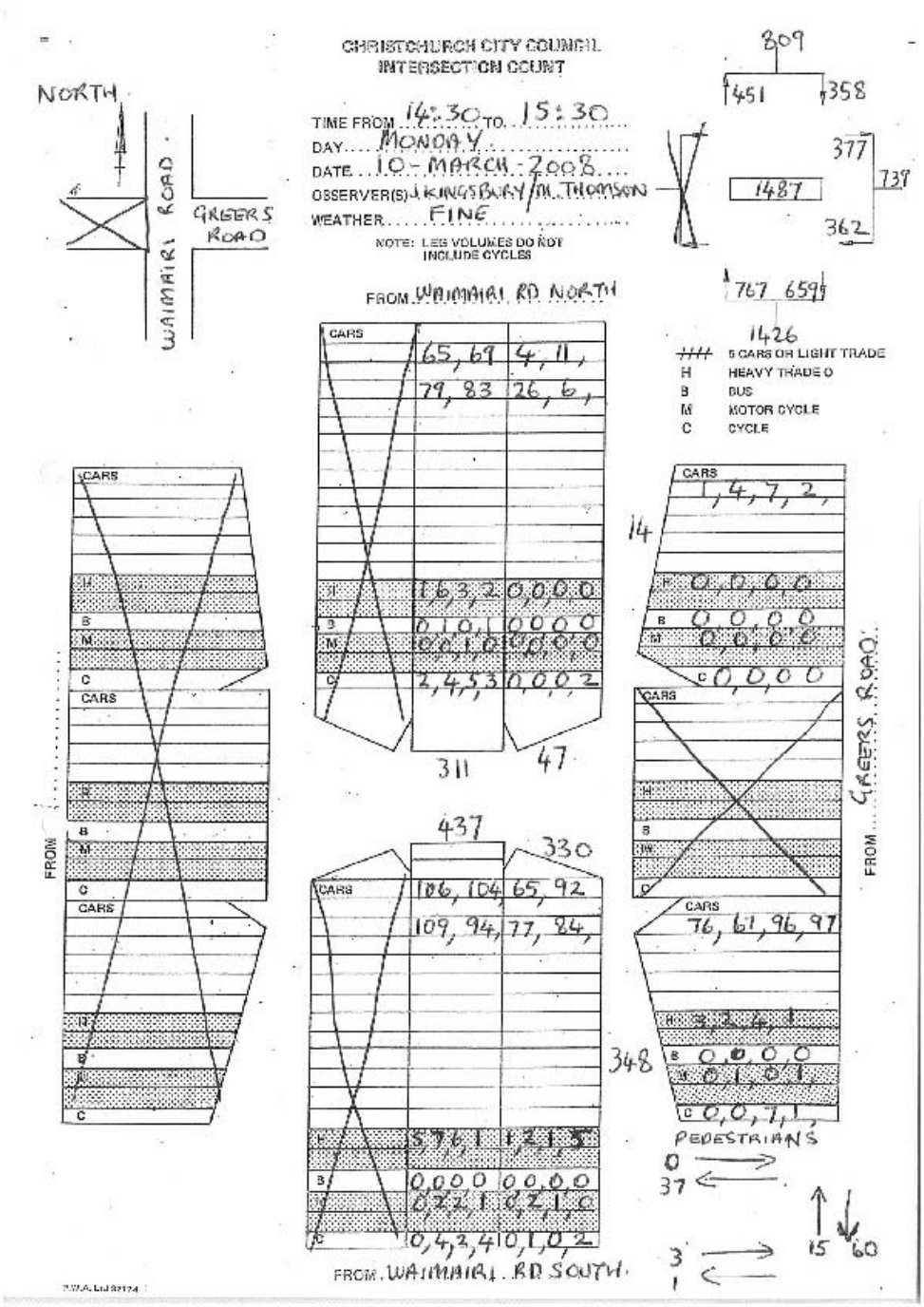
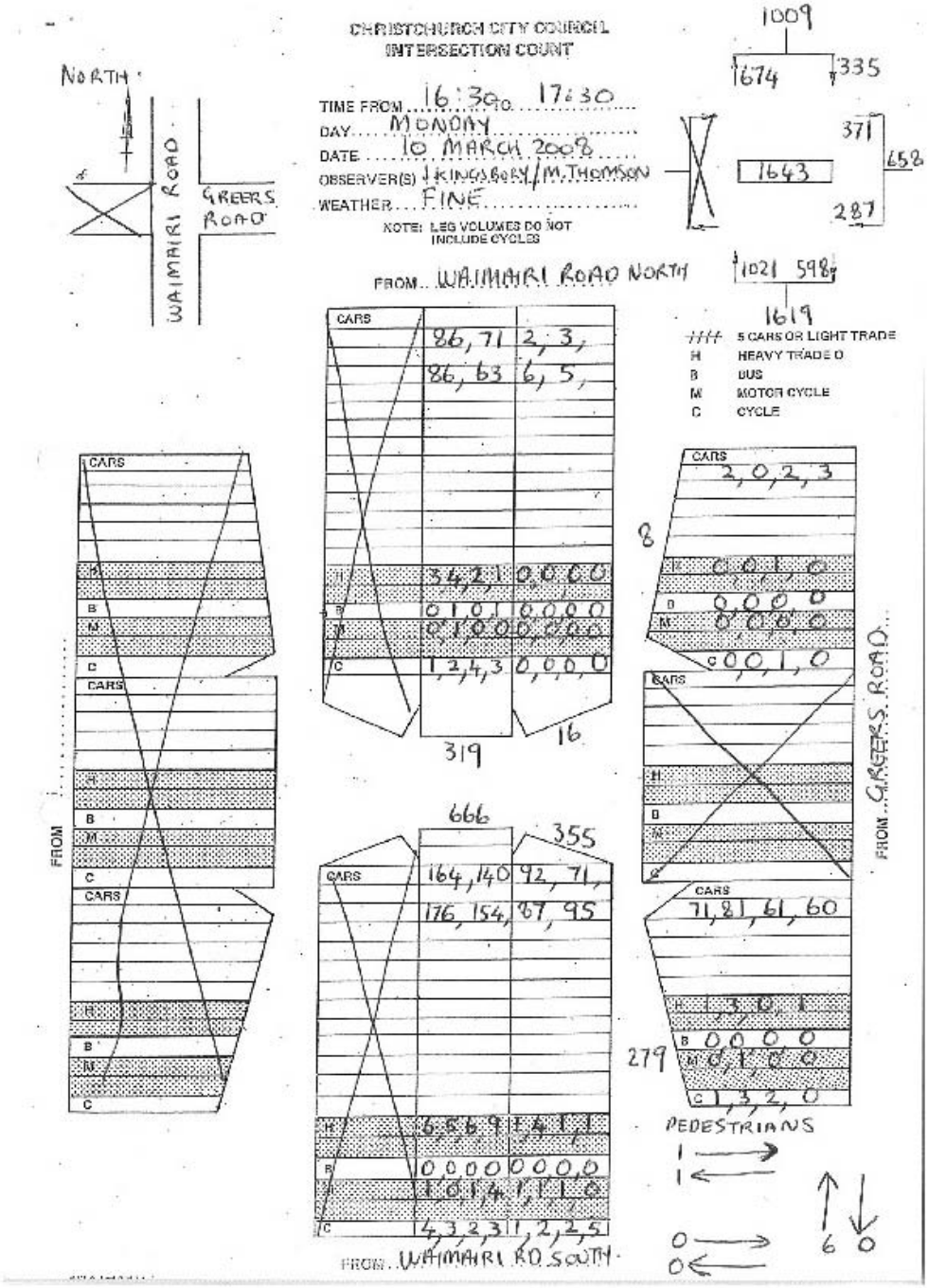
Westburn School pedestrian crossing feasibility study 27 of 32




CHRISTCHURCH CITY COUNCIL
INTERSECTION COUNT
TIME FROM 16:30 TO 17:30
DAY MONDAY
DATE 10 MARCH 2008
OBSERVER(S) J KINGSBURY / M THOMSON
WEATHER FINE
NOTE: LEG VOLUMES DO NOT INCLUDE CYCLES
NORTH
WAIMAIRI ROAD
GREERS ROAD
FROM WAIMAIRI ROAD NORTH
FROM GREERS ROAD
FROM WAIMAIRI RD SOUTH
FROM
1009
674
335
371
1643
658
287
1021
598
1619
5 CARS OR LIGHT TRADE
H HEAVY TRADE O
B BUS
M MOTOR CYCLE
C CYCLE
CARS
319
16
666
355
279
PEDESTRIANS

7. MANAGEMENT OF ON-STREET PARKING - MERIVALE

General Manager responsible:	General Manager City Environment, DDI 941 8608
Officer responsible:	Acting Transport and Greenspace Manager
Author:	Deborah Burden and Mike Thomson, Senior Traffic Engineer

PURPOSE OF REPORT

1. The purpose of this report is to inform the Committee of the outcome of the consultation process regarding the overall management of on-street car parking in the streets surrounding Rangi Ruru School and St Margaret's College in Merivale or more specifically:

    - Merivale Lane (Rossall Street – Winchester Street);
    - Repton Street;
    - Naseby Street;
    - Clissold Street;
    - Winchester Street (Rugby Street – Merivale Lane);
    - Hewitts Road;
    - Andover Street;
    - Shrewsbury Street;
    - Tonbridge Street.

2. The purpose is also to seek the Community Board's approval to implement lengths of "120 minute, 8am-4pm, Mon-Fri, School Days" parking restrictions and lengths of broken yellow "no stopping" restrictions in the area.

EXECUTIVE SUMMARY

3. The Council had received numerous concerns and complaints regarding the overall management of car parking and the high demand for long term on-street car parking which is predominantly attributed to the schools in the immediate vicinity of the above streets in Merivale.

4. Two rounds of consultation have been carried out in February and May 2007, with affected stakeholders including residents, the schools and various businesses located in the streets mentioned above. Consultation documents were also left on randomly selected vehicles as part of the first round of consultation in February 2007. Refer **attachments** 2, 3 and 4 of this report for copies of the consultation documents and summaries of the results. Note: Streets in Sync is now ViaStrada Limited.

5. The consultation documents left on parked vehicles in the area asked drivers where they would park if parking was unavailable in the current location and if they would consider an alternative means of transport instead. The results indicated that if parking was unavailable in the current location some consideration would be given to using alternative means of transport however overwhelmingly they stated it was more likely that they would choose to park in another nearby street.

6. The first round of consultation involving affected stakeholders revealed the following issues:

    - The lack of available on-street car parking spaces for residents, visitors and trades people;
    - Poor visibility when exiting private property as a result of inconsiderate parking around vehicle entrances;
    - Congestion, particularly at school "drop-off" and "pick up" times resulting in double parking and parking over vehicle entrances etc;
    - The narrowness of some streets and their ability to accommodate parking on both sides of the street safely;
    - The lack of enforcement of existing parking restrictions;
    - The demand for all-day parking particularly from teachers working in the area.

7. Cont'd

7. School policies were also a main issue that came out of the first round of consultation. Residents indicated their frustration with the current demand for long-term parking predominantly by students but also by teachers associated with the nearby schools and questioned the school's responsibility and in turn the Council's responsibility for ensuring the schools accommodate this demand on-site. The Council can only assess the provision of on-street parking for any new applications for extensions or additions to a school under the City Plan and is unable to require the schools to manage the present demand for parking on-site. School policies for allowing students to bring vehicles to school were also questioned however the schools do not have the authority to prevent students from bringing cars to school. Rangi Ruru School in particular is mindful of its residential location and the need to respect the rights of its neighbours and makes a genuine attempt to discourage students from bringing vehicles to school and has guidelines and restrictions as to where their students should park. For details of Rangi Ruru School policies and their response to the second round of consultation refer to **attachment** 5 of this report. Rangi Ruru's response to the proposal in the second round of consultation was not favourable. They view the proposed restrictions as being unfair on their students and are more favourable to residents of the area. They feel that the school was there first and that there should be a degree of "buyer beware" for those purchasing properties in close proximity to a High School. That said, it is only in recent years that a noticeable number of students have been bringing vehicles to school and the issue of student parking in neighbouring streets has arisen. The school also expressed concern over this demand for long-term car parking being pushed further into residential areas and also onto Rossall Street. Rangi Ruru has also requested a "drop off/pick up" zone be considered adjacent to the school's main entrance on the east side of Hewitts Road. This request is supported and it is recommended that a "three minute, 7.30am – 9am and 2.30pm – 4pm, Mon-Fri, School days" restriction is installed.

8. Numerous requests for "Residents Only" parking and parking "ticks" were received in both rounds of consultation. Requests for "Residents Only" parking are considered on a case by case basis however they are generally not viewed favourably by the Christchurch City Council and are generally restricted to locations where there is no possibility for vehicle access to a property. A recent request for a "Residents Only" restriction outside 27 Tonbridge Street has been recommended by Council staff in a separate report. The request for parking "ticks" is supported and it is recommended that parking "ticks" are installed on both sides of the streets where parking restrictions are to be installed.

9. Road width was raised as an area of concern for many residents in the first round of consultation and it is an issue that needs to be addressed in some streets. To accommodate on-street parking on both sides of the street and provide a single traffic lane for one direction only, a minimum road width of 7.5 metres is required. The Carlton Mill Road end of Hewitts Road measures 6 metres in width and currently has a "P5" parking restriction on one side and unrestricted parking on the other. Andover Street between Shrewsbury Street and Tonbridge Street measures 6.5 metres in width and narrows further to 4.6 metres at the kerb build out, both sides are currently unrestricted. Tonbridge Street measures 6.7 metres in width at the Andover Street end and 5.9 metres at the Rastrick Street end and narrows further to 4.9 metres at the kerb build outs, both sides are currently unrestricted. As a result in the second round of consultation it was proposed that lengths of broken yellow "no stopping" lines be installed in the following locations:

    - Hewitts Road (east side, Carlton Mill Road to Andover Street);
    - Hewitts Road (west side, Andover Street to 48 Hewitts Road);
    - Andover Street (south side, Shrewsbury Street to Tonbridge Street);
    - Tonbridge Street (east side – whole length).

7. Cont'd

9. The installation of a "120 minute, 8am-4pm, School Days" parking restriction was also proposed in the following locations:

    - Merivale Lane (north side, Rossall Street to Naseby Street);
    - Merivale Lane (south side, Hewitts Road to Winchester Street);
    - Naseby Street (west side, Merivale Lane to Rugby Street);
    - Repton Street (west side, Merivale Lane to Rugby Street);
    - Winchester Street (west side, Merivale Lane to Rugby Street);
    - Hewitts Road (west side, Carlton Mill Road to Andover Street);
    - Clissold Street (east side, Andover Street to Merivale Lane);
    - Andover Street (north side, Hewitts Road to Tonbridge Street);
    - Shrewsbury Street (east side, Carlton Mill Rd to St Margarets College entrance);
    - Tonbridge Street (west side, whole length).

10. In response to the second round of consultation a petition was been received signed by 30 residents of Repton Street opposed to any parking restrictions being installed in the street. A copy of the petition is attached to this report (refer **attachment** 6). A total of 69% of the responses for Repton Street (including responses from all affected stakeholders) did not support the proposed restriction however only 1 Repton Street resident responded in support of the restriction therefore it is recommended that the status quo remains. The total results (residents and non residents of the street) for all other streets in the area ranged between 76% and 85% support for the proposed restrictions. For a detailed summary of the responses to the second round of consultation please refer to **attachment** 4 of this report.

11. This review has highlighted specific safety issues where current carriageway widths are insufficient to accommodate on-street parking on both sides of the street and a traffic lane for one direction only. It has also highlighted the frustrations of residents in these streets who are adversely affected by the current levels of long term on-street car parking. It is important to note that the need for parking in the area is unlikely to diminish and therefore measures such as parking restrictions will generally result in this demand spreading further into neighbouring streets. Rangi Ruru School have attempt to manage the demand for parking by their students and staff however they are in an untenable situation and the installation of parking restrictions should go some way to help balance the needs of both residents and visitors to the area alike.

12. As a result it is recommended that all proposed restrictions ("120 minute, 8am-4pm School Days" restrictions and broken yellow "no stopping" restrictions) with the exception of Repton Street be implemented and that in association with this that parking "ticks" be on both sides of affected streets.

FINANCIAL IMPLICATIONS

13. The estimated cost of this work is $5,000.

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

14. The installation of parking signs and road markings is within the LTCCP Streets and Transport Operational Budgets.

LEGAL CONSIDERATIONS

15. The Land Transport Rules provide for the installation of parking restrictions.

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

16. As above.

7. Cont'd

ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

17. Aligns with the Streets and Transport activities by contributing to the council's community outcomes-safety.

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

18. As above.

ALIGNMENT WITH STRATEGIES

19. The recommendations align with the Council's Parking Strategy.

Do the recommendations align with the Council's strategies?

20. As above.

CONSULTATION FULFILMENT

21. Consultation has been carried out with the surrounding properties as detailed in this report.

STAFF RECOMMENDATIONS

1. It is recommended that the Committee recommend that the Community Board revoke the following restrictions:

   (a) The five minute parking restriction on the west side of Hewitts Road commencing at the Carlton Mill Road intersection and extending 261.8 metres in a northerly direction;

   (b) The 60 minute parking restriction on the west side of Naseby Street commencing 19.5 metres north west of the Merivale Lane intersection and extending 29 metres in a north westerly direction.

2. It is recommended that the Committee recommend that the Community Board approve the installation of "120 minute, 8am – 4pm, School Days" parking restrictions in the following locations:

   (a) The north side of Merivale Lane commencing at the Rossall Street intersection and extending in an easterly direction to the Naseby Street intersection;

   (b) The south side of Merivale Lane commencing at the Hewitts Road intersection and extending in an easterly direction to the Winchester Street intersection.

   (c) The west side of Naseby Street commencing at the Rugby Street intersection and extending in a southerly direction to the Merivale Lane intersection;

   (d) The west side of Winchester Street commencing at the Rugby Street intersection and extending in a southerly direction to the Merivale Lane intersection;

   (e) The east side of Clissold Street commencing at the Merivale Lane intersection and extending in a southerly direction to the Andover Street intersection;

   (f) The north side of Andover street commencing at the Hewitts Road intersection and extending in an easterly direction to the Tonbridge Street intersection;

   (g) The west side of Hewitts Road commencing at the Carlton Mill Road intersection and extending 129 metres in a northerly direction;

7. Cont'd

(h) The east side of Shrewsbury Street commencing at the Carlton Mill Road intersection and extending 234.08 metres in a northerly direction;

(i) The west side of Tonbridge Street commencing at the southern end of Tonbridge Street and extending 237.16 metres in a northerly direction.

3. It is recommended that the Committee recommend that the Community Board approve the installation of "three minute, 7.30am-9am and 2.30pm- 4pm, School Days" parking restrictions in the following location:

(a) The west side of Hewitts Road commencing 153.5 metres south of the Merivale Lane intersection and extending 29 metres in a southerly direction.

4. It is recommended that the Committee recommend that the Community Board approve the installation of broken yellow "no stopping" lines in the following locations:

(a) The south side of Andover Street commencing at the Shrewsbury Street intersection and extending in an easterly direction to the Tonbridge Street intersection.

(b) The east side of Hewitts Road commencing at the Carlton Mill Road intersection and extending 261.8 metres in a northerly direction;

(c) The east side of Tonbridge Street commencing at the southern end of Tonbridge Street and extending 237.16 metres in a northerly direction.

7. Cont'd

BACKGROUND (THE ISSUES)

22. The streets in the immediate vicinity of Rangi Ruru School and St Margarets College included in this review are Merivale Lane (Rossall Street – Winchester Street), Repton Street, Naseby Street, Clissold Street, Winchester Street (Rugby Street – Merivale Lane), Hewitts Road, Andover Street, Shrewsbury Street and Tonbridge Street. These streets also accommodate overflow long-term parking associated with other nearby educational institutions including the Selwyn House School and Pre-School and the Ferndale School. The area, although predominantly residential also houses a medical centre, a hairdressers and a picture framing business. Properties are a mixture of traditional homes, modern homes on small sections and an increasing number of high density dwellings. Currently there is a "P5" parking restriction on the west side of Hewitts Road commencing at the Carlton Mill Road corner and extending 261.8 metres and a "P60" parking restriction on the west side of Naseby Street outside the Medical Centre covering three spaces.

23. The section of Winchester Street (Merivale Lane to Andover Street) and Merivale Lane (Winchester Street to Papanui Road) have not been included in this review. The Council has recently reviewed on-street car parking in these streets and time limited parking restriction have been installed (a P120, 8am-4pm, School Days restriction on the south side of Merivale Lane and a P5 restriction on the east side of Winchester Street).

24. Observations have shown that currently on "school days" on-street parking is fully occupied by vehicles parked for extended periods in Merivale Lane (Rossall Street to Repton Street), Naseby Street, Hewitts Road, Andover Street, Shrewsbury Street and Tonbridge Street. On street parking is currently intermittent with some spaces generally available in Merivale Lane (Repton Street to Winchester Street), Repton Street, Clissold Street, and Winchester Street. Observations on "non school days" have shown that the demand for on-street parking in all of the streets mentioned is low. Clearly this demand can therefore be directly attributed to the number of educational institutions located in the immediate vicinity.

25. The management of on-street car parking should ideally reflect a balance in the demands of residents and the demands of nearby commercial or educational activities therefore minimising the effects of displacing parking further into residential areas. It is acknowledged that vehicle parking can detract from an otherwise attractive street and be a frustration for residents. The Council has successfully addressed similar concerns in other locations through the installation of 2 hour time limited car parking on one side of affected streets.

ATTACHMENT 1 (a) and (b) – DIAGRAMS, MANAGEMENT OF ON-STREET PARKING, MERIVALE

Management of On Street Parking, Merivale

Appendix 1a

Management of On Street Parking, Merivale

Appendix 1b

ATTACHMENT 2 – CONSULTATION DOCUMENT AND A SUMMARY OF RESULTS – STAGE 1

13 February 2007

Dear Sir/Madam

MANAGEMENT OF ON-STREET PARKING

The Christchurch City Council has received concerns regarding the high levels of long term on-street car parking and the overall management of on-street parking in the streets surrounding Merivale Lane or more specifically:

- Merivale Lane (Rossall St – Winchester St)
- Repton Street
- Naseby Street
- Clissold Street
- Winchester Street (Rugby St – Merivale Lane)
- Hewitts Road
- Andover Street
- Shrewsbury Street

Observations have shown that currently on *"school days"* on-street parking in Merivale Lane (between Rossall Street and Repton Street/Clissold Street), Naseby Street, Hewitts Road, Andover Street and Shrewsbury Street is generally fully occupied between 9am – 4pm with vehicles parked for long periods resulting in a lack of turn over of car parking spaces. On-street parking on *"school days"* in Merivale Lane (between Repton Street/Clissold Street and Winchester Street) as well as in Repton Street, Clissold Street and Winchester Street (between Rugby Street and Merivale Lane) is generally intermittent with some on-street car parking available. Observations on *"non school days"* have shown that the demand for on-street parking in all of the streets mentioned is low. The proximity of the Rangi Ruru School, St Margarets College, Selwyn House School and Pre-School and the Ferndale School is clearly resulting in a high demand for on-street parking in the area on *"school days"*. The Council has engaged Streets in Sync to review how this demand is managed and accommodated in consultation with all effected stakeholders including residents and the schools as well as the owners of the vehicles currently parking in these locations.

It is the Council's view that the management of the on-street car parks should ideally reflect a balance in the demands of residents and the demands of nearby commercial or educational activities therefore minimising the effects of displacing parking further into the residential areas. The Council also acknowledges that vehicle parking can detract from an otherwise attractive street and be a frustration for residents. The Council has successfully addressed similar concerns in other locations through the installation of 2 hour time limited car parking on one side of affected streets. As you may be aware the Council has recently reviewed on-street car parking in the section of Merivale Lane between Winchester Street and Papanui Road and as a result has installed a time limited parking restriction (P120, 8am-4pm, School Days) on the south side of the Lane. On-street parking in Winchester Street has also been recently addressed and a time limited parking restriction (P5) has been installed.

Attached is a questionnaire asking for your views regarding on-street car parking in the area and any issues you feel should be addressed as part of this process. One possible option for consideration is the installation of a time limited parking restriction (e.g. P120, 8am-4pm, School Days) on <u>one</u> side of the effected streets. It is likely that the installation of a parking restriction will result in some migration of long term on-street parking into areas where currently on-street parking is low or intermittent such as Repton Street or Clissold Street therefore it is important that all of these streets are included in this process.

In order for us to find a solution to the concerns being raised please take the time to complete the attached questionnaire and return it to us in the reply paid envelope provided no later than **Friday, 2nd March 2007.**

Yours Sincerely

Deborah Burden
STREETS IN SYNC LTD

MANAGEMENT OF ON-STREET CAR PARKING

What do you see as the current problems/issues in the area, if any?

_____

_____

_____

_____

_____

_____

_____

Is the parking of non-residential vehicles in your street a problem for you?

YES **NO** **SOMETIMES** **DON'T KNOW**

Could these problems/issues be resolved with the installation of a parking restriction (e.g. P120 Monday – Friday, School Days) on one side of effected streets?

YES **NO** **DON'T KNOW**

Do you have any other suggestions and/or comments on how you would like to see parking in the area managed?

_____

_____

_____

_____

_____

_____

_____

Your contact details (optional):

Name: _____

Address: _____

E/mail: _____

Phone Number: _____

Please return this in the post paid envelope provided.

Summary of Results - Stage 1

	Is the parking of non residential vehicles in your street a problem for you?				Could these problems/issues be resolved with the installation of a parking restriction on one side of the affected street?				Are you happy with the current P5 Restriction located on Hewitts Rd?	
Street Name	**Yes**	**No**	**Sometimes**		**Yes**	**No**	**Don't Know**		**Yes**	**No**
Merivale Lane	7	7	6		9	9	2		0	0
Hewitts Road	12	4	10		12	8	4		9	9
Winchester Street	6	8	7		11	5	3		0	0
Repton Street	2	3	5		1	7	0		0	0
Clissold Street	1	7	5		5	6	2		0	0
Naseby Street	7	6	4		6	8	1		0	0
Andover Street	22	6	16		24	14	6		0	0
Shrewsbury Street	15	0	2		13	2	2		0	0
Tonbridge Street	7	1	3		6	5	0		0	0
General/unspecified	4	4	3		9	6	2		0	0
Total	**83**	**46**	**61**		**96**	**70**	**22**		**9**	**9**

ATTACHMENT 3 – CONSULTATION DOCUMENTS AND A SUMMARY OF RESULTS – PARKED VEHICLES

15 February 2007

Dear Vehicle Driver

MANAGEMENT OF ON-STREET PARKING

You have parked today in a street where residents are concerned about the majority of on-street parking being used by people associated with the nearby educational facilities. The Council has to make decisions about how long term on-street parking is managed in this area or more specifically in:
P

- Merivale Lane (between Rossall Street and Winchester Street);
- Winchester Street (Rugby Street – Merivale Lane);
- Repton Street;
- Naseby Street;
- Hewitts Road;
- Clissold Street;
- Andover Street and
- Shrewsbury Street.

Your opinion is important to us. Please take the time to complete the attached questionnaire and return it to us in the reply paid envelope no later than **Monday, 5th March 2007.**

Yours Sincerely

Deborah Burden
STREETS IN SYNC LTD

ON-STREET CAR PARKING QUESTIONAIRE

(If you are a resident of this street and have already received a survey in the mail please ignore this questionnaire)

Which street were you parked on when you received this questionnaire? _____

What were your reasons for parking in this location?

a. **Working in the area**
b. **Attending a local educational facility as a student**
c. **Visiting a resident**
d. **Other *(please describe)***

If you could not park in this street would you *(please circle)*?

a.	**Park in another Street**	**Yes**	**No**	**Maybe**	**Don't Know**
b.	**Use public transport**	**Yes**	**No**	**Maybe**	**Don't Know**
c.	**Cycle**	**Yes**	**No**	**Maybe**	**Don't Know**
d.	**Car pool**	**Yes**	**No**	**Maybe**	**Don't Know**
e.	**Walk**	**Yes**	**No**	**Maybe**	**Don't Know**
f.	**Request employer to provide off-street car parking**	**Yes**	**No**	**Maybe**	**Don't Know**

g. **Other *(please specify)*** _____

How often do you park in this area?

a. **Everyday**
b. **School Days Only**
c. **2-4 days a week**
d. **Once a week**
e. **Less than once a week**
f. **Other (please specify)**

How long do you normally park in the area for?

a. **More than 8 hours**
b. **4-8 hours**
c. **1-4 hours**
d. **Less than 1 hour**

Any additional comments:

_____

_____

_____

Your contact details (optional):

Name: _____

Address: _____

E/mail: _____

Phone Number: _____

Please return this in the post paid envelope provided.

Summary of Results – Stage 1 (Parked Vehicles)

Which street were you parked in when your received this questionnaire?

Merivale Lane	7
Hewitts Road	6
Whichester Street	0
Repton Street	1
Clissold Street	2
Naseby Street	2
Andover Street	8
Shrewsbury Street	2
Tonbridge Street	0
Total	**28**

What were your reasons for parking in this location?

Working in the area	12
Attending a local educational facility as a student	12
Visiting a resident	4
Other	1

If you could not park in this street would you?

	Yes	No	Maybe	Don't Know	Total
Park in another street	22	0	6	0	**28**
Use public transport	0	0	3	0	**3**
Cycle	0	0	2	0	**2**
Car pool	2	0	3	0	**5**
Walk	1	0	4	0	**5**
Request employer to provide off-street car parking	3	0	6	0	**9**

How often do you park in this area?

Everyday	2
School days only	14
2-4 days a week	9
Once a week	4
Less than once a week	0

How long do you normally park in the area for?

More than 8 hours	4
4-8 hours	22
1-4 hours	3
Less than 1 hour	1

ATTACHMENT 4 – CONSULTATION DOCUMENTS AND A SUMMARY OF RESULTS – STAGE – 2

2 May 2007

Dear Sir/Madam

MANAGEMENT OF ON-STREET PARKING

Thank you to all those who responded to the first questionnaire dated 13th February 2007 regarding the management of on-street car parking in the area around Merivale Lane and Andover Street. The aim of this review is to find a balance between the demand for all day parking and the needs of affected residents.

A total of 460 questionnaires were delivered to residents in the area and 209 were returned. The large majority of responses indicated that the current situation was problematic and the majority were also in support of parking restrictions being installed. Residents in the streets which are not currently experiencing a high demand for all day parking such as Repton Street and Clissold Street were less supportive of the installation of a parking restriction in their street. However it is possible that the demand for parking in these areas will increase if restrictions are installed in the surrounding streets. Therefore it is important that residents consider this and indicate their preference as part of this process. In addition 100 questionnaires were left randomly on parked vehicles in the area and 29 of these were returned. From the 29 questionnaires returned twelve were from people working in the area and twelve were from students attending a local school, the remaining five questionnaires were from people visiting the area. Although the responses indicated that if parking was unavailable in their current location they would consider using alternative means of transport such as public transport, cycling, walking or car pooling they overwhelming indicated it was more likely that they would choose to park in another nearby street.

The main issues raised in the responses from residents were:

- The lack of available on-street car parking spaces for residents, visitors and trades people;
- Poor visibility when exiting private property as a result of inconsiderate parking around vehicle entrances;
- Congestion particularly at school “drop-off” and “pick up” times resulting in double parking and parking over vehicle entrances etc;
- The narrowness of some streets and their ability to accommodate parking on both sides of the street safely;
- The lack of enforcement of existing parking restrictions;
- The demand for all day parking particularly from teachers working in the area.

Road width, as stated in many of the responses, is an issue that needs to be addressed in some areas. To accommodate on-street parking on both sides of the street and provide a single traffic lane a street needs to be a minimum of 7.5 metres wide. The following streets do not meet this requirement:

- The narrow section of Hewitts Road which measures 6.0 metres in width and which currently has a P5 restriction on one side of the street;
- Andover Street between Shrewsbury Street and Tonbridge Street which measures 6.5 metres in width and narrows further to 4.6 metres at the kerb build out;
- Tonbridge Street which measures 6.7 metres in width at the Andover Street end and 5.9 metres in width at the Rastrict Street end and narrowing further to 4.9 metres at the kerb build outs.

School policies and responsibilities were also raised in a high number of the questionnaires. The main concerns were regarding the School’s policies for allowing students to bring vehicles to school and the Christchurch City Council’s role in ensuring this demand is accommodated on-site as opposed to on-street. With reference to the schools requirements under the City Plan, due to their longevity the schools in question have “existing use rights” and the Council can only assess the provision for on-street parking for any new applications for extensions or additions to the school. Therefore the Council is unable to require that schools manage the demand for parking solely on-site. The schools also do not have the authority to tell students that they can not bring cars to school. Rangi Ruru in particular is mindful of its residential location and the need to respect the rights of its neighbours. As a result permission to bring a vehicle to school is only granted to senior students if they have genuine transport difficulties. At this point the student is informed of where they should park in an attempt to mitigate the effects on neighbouring streets.

The main suggestions (other than the suggested 120 minute parking restriction) for managing on-street parking were:

- "Residents Only" parking;
- Increased enforcement;
- "Parking ticks" at vehicle entrances (white paint identifying the edges of driveways);
- Angled parking;
- Improved "drop off" and "pick up" areas outside the schools;
- Traffic calming/speed humps.

"Residents Only" parking as suggested in many of the responses, is not something that the Christchurch City Council would consider favourably in this situation. The Council's policy on "Residents Only" car parking spaces restricts these spaces to locations where there is no possibility for vehicle access to a property. Suggestions such as traffic calming and angled parking would require capital funding and are longer term proposals and currently outside the scope of this review. "Drop off" and "pick up" areas outside the schools may also require capital funding.

Attached is a second questionnaire outlining what is proposed for each street and a map showing the same. Please take the time to consider all aspects and implications of this proposal. There is a genuine need for all day parking in the area however this demand is so high in some streets that residents require relief from the current situation. Your views are important and in order for us to find a solution to the concerns being raised please take the time to complete the questionnaire and return it to us in the reply paid envelope provided no later than **Wednesday, 30th May 2007.**

Yours Sincerely

Deborah Burden
STREETS IN SYNC LTD

MANAGEMENT OF ON-STREET CAR PARKING – STAGE 2

The following is proposed as a result of the responses received to the first round of consultation and extensive investigation. Please indicate your preference by ticking the appropriate box for each street.

Merivale Lane:

- That a "120 minute, 8am – 4pm, Mon – Fri, School Days" parking restriction is installed on the north side of Merivale Lane between Rossall Street and Naseby Street;
- That a "120 minute, 8am – 4pm, Mon – Fri, School Days" parking restriction is installed on the south side of Merivale Lane between Hewitts Road and Winchester Street;
- That the north side of Merivale Lane between Naseby Street and Winchester Street and the south side of Merivale Land between Rossall Street and Hewitts Road remain unrestricted.

Do you support the proposal for Merivale Lane? Yes ☐ No ☐

Comments

_____

_____

Naseby Street:

- That a "P120 minute, 8am – 4pm, Mon – Fri, School Days" parking restriction is installed on the west side of Naseby Street between Merivale Lane and Rugby Street replacing the existing 60 minute restriction outside the Medical Centre.
- That the east side of Naseby Street between Merivale Lane and Rugby Street remains unrestricted.

Do you support the proposal for Naseby Street? Yes ☐ No ☐

Comments

_____

_____

Repton Street:

- That a "P120 minute, 8am – 4pm, Mon – Fri, School Days" parking restriction is installed on the west side of Repton Street between Merivale Lane and Rugby Street.
- That the east side of Repton Street between Merivale Lane and Rugby Street remains unrestricted.

Do you support the proposal for Repton Street? Yes ☐ No ☐

Comments

_____

_____

Winchester Street:

- That a "P120 minute, 8am – 4pm, Mon – Fri, School Days" parking restriction is installed on the west side of Winchester Street between Merivale Lane and Rugby Street.
- That the east side of Winchester Street between Merivale Lane and Rugby Street remains unrestricted.

Do you support the proposal for Winchester Street? Yes ☐ No ☐

Comments

_____

_____

Hewitts Road:

- That the current "5 minute" parking restriction on the west side of Hewitts Road be revoked.
- That broken yellow "no stopping" lines be installed on the east side of Hewitts Road between Carlton Mill Road and Andover Street.
- That a "P120 minute, 8am – 4pm, Mon – Fri, School Days" parking restriction is installed on the west side of Hewitts Road between Carlton Mill Road and Andover Street.
- That broken yellow "no stopping" lines be installed on the west side of Hewitts Road between Andover Street and where the carriageway widens at number 48 Hewitts Road.
- That the west side of Hewitts Road from opposite number 48 Hewitts Road to Merivale Lane and the east side of Hewitts Road between Andover Street and Merivale Lane remains unrestricted.

Do you support the proposal for Hewitts Road? Yes ☐ No ☐

Comments

_____

_____

Clissold Street:

- That a "P120 minute, 8am – 4pm, Mon – Fri, School Days" parking restriction is installed on the east side of Clissold Street between Andover Street and Merivale Lane.
- That the west side of Clissold Street between Andover Street and Merivale Lane remains unrestricted.

Do you support the proposal for Clissold Street? Yes ☐ No ☐

Comments

_____

_____

Andover Street:

- That a "P120 minute, 8am – 4pm, Mon – Fri, School Days" parking restriction is installed on the north side of Andover Street between Hewitts Road and Tonbridge Street.
- That broken yellow "no stopping" lines be installed on the south side of Andover Street between Shrewbury Street and Tonbridge Street.
- That the south side of Andover Street between Hewitts Road and Shrewsbury Street remains unrestricted.

Do you support the proposal for Andover Street? Yes ☐ No ☐

Comments

_____

_____

Shrewsbury Street:

- That a "P120 minute, 8am – 4pm, Mon – Fri, School Days" parking restriction is installed on the east side of Shrewsbury Street between Carlton Mill Road and the entrance to St Margaret's College.
- That the west side of Shrewsbury Street between Carlton Mill Road and the entrance to St Margaret's College remains unrestricted.

Do you support the proposal for Shrewsbury Street? Yes ☐ No ☐

Comments

_____

_____

Tonbridge Street:

- That broken yellow "no stopping" lines be installed on the east side of Tonbridge Street (whole length).
- That a "P120 minute, 8am – 4pm, Mon – Fri, School Days" parking restriction is installed on the west side of Tonbridge Street (whole length).

Do you support the proposal for Tonbridge Street? Yes ☐ No ☐

Comments

_____

_____

Your contact details (optional):

Name: _____

Address: _____

E/mail: _____

Phone Number: _____

The results and recommendations emerging from this round of consultation will be presented to the Fendalton/Waimairi Community Board for deliberation and decision making.

Please return this in the post paid envelope provided.

Summary of Results – Stage 2

	Residents		Non Residents		Unidentified		Total		Total Percentages	
Street Name	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**
Naseby Street	9	5	58	15	21	2	88	22	80%	20%
Repton Street	1	30	68	26	22	3	91	59	61%	39%
Clissold Street	3	4	71	19	18	3	92	26	78%	22%
Winchester St	8	5	74	23	20	3	102	31	77%	23%
Merivale Lane	12	2	59	25	22	3	93	30	76%	24%
Hewitts Road	9	4	73	16	22	2	104	22	83%	17%
Andover Street	18	9	63	11	20	3	101	23	81%	19%
Shrewsbury St	12	3	70	17	23	1	105	21	83%	17%
Tonbridge St	11	1	68	17	21	0	100	18	85%	15%

ATTACHMENT 5 – RANGI RURU SCHOOL'S GUIDELINES AND THEIR RESPONSE TO STAGE 2

VEHICLE PERMITS

Students driving cars - This is issued to all girls who wish to drive to school.

Because if its residential location, Rangi Ruru has to be very mindful of the need to respect the rights of our neighbours, and nowhere is this more evident than in the issue of parking. We have limited parking on site, and as much as possible try to minimise street parking.

Naturally we want senior students to be able to bring cars to school, but it is necessary to impose some conditions as the number of cars around the school continues to grow at an alarming rate. Please read this form carefully to ensure both you and your daughter are aware of these conditions.

1. Vehicle permission will be granted only to girls with genuine transport difficulties arising from the following:
   - (a) living out of town
   - (b) before or after school commitments which make other transport difficult
   - (c) family reasons
   - (d) living away from convenient public transport

   Out of school commitments must be specified, giving the nature of the commitment, times, days.

2. Except in exceptional circumstances, permission to bring a car will be granted only to Year 12 and 13 students.

3. *Parking*
   - (a) Students are asked not to park in:
     - Hewitts Road – to allow parking for staff and visitors
     - Merivale Lane opposite the school – to allow residential parking
     - On the corner of Merivale Lane and Naseby Street, outside the medical clinic
     - The school grounds
     - Rhodes Street – to allow pre-school parking
     - Rossall Street – to allow ECC parking
   - (b) Students may park on the school side of Merivale Lane and in other streets away from the school. They will be allocated a parking area when their permit is issued.
   - (c) At all times parking must be legal and considerate.

4. In order to cause as little impact as possible on the neighbourhood, we would ask students to be particularly mindful of noise. This applies to unnecessary revving of car engines, keeping voices down late at night and, in the interests not only of our neighbours, but also the hearing of the driver, that 'boom blasters' be turned off in Hewitts Road, Merivale Lane and Naseby Street.

5. No student may transport other students unless there is permission in writing from the parents of the driver and the passengers. Drivers must have a full licence.

6. Permission will be granted on an annual basis.

7. All drivers, even those who bring a car only occasionally, will receive a coloured sticker to go on the back window of the car. This will indicate their designated parking area.

We appreciate the co-operation of everyone in this matter. Girls who repeatedly fail to comply with these conditions will risk losing the privilege of bringing a car.

109

Permission to Drive a Car to School

Student's Name _____ **Tutor Group** _____

Home Address _____

Please complete all relevant sections

PART A DRIVER

I wish to apply for permission for _____ to be allowed to bring a car to school this year. This is necessary because _____

_____

This will be ☐ occasionally ☐ regularly (e.g. once a week) ☐ every day

The car is a _____ (make), colour _____

Registration number _____

Licence number _____ ☐ Restricted ☐ Full

I have read the conditions pertaining to bringing a car to school and agree to abide by them.

Student's Signature _____

Parent/Guardian's Signature _____ **Date** _____

PART B CARRYING A PASSENGER (Applies only to drivers with a full licence)

I agree that my daughter _____ of Year _____

may transport _____ Year _____

_____ Year _____

☐ occasionally ☐ regularly ☐ every day

in the car she is driving. My daughter has her full licence.

Signature of Parent/Guardian _____

Date _____

110

Additional comments to Stage Two of the consultation regarding On-Street Parking

The main impression of the Senior Management at Rangi Ruru, having studied and discussed your suggestions, is one of disappointment. In fact we feel that we and our students are being penalised by these proposals. Whilst you referred positively to our own management of the parking situation as far as we can, your measures appear to greatly favour residents, the majority of whom in the greater area, especially given the number of townhouses that have been built in the last ten years, are recent purchasers into an existing situation. One can only liken it to people who buy near airports and then complain about the noise. It would be most interesting to know exactly how many have moved into the area in this time frame and also how many work during the day and are thus not affected by the daytime parking.

In addition, we believe that the scope of the review, excluding as it does capital expenditure, is far too narrow. It would appear that the Council is looking for a cheap fix which will in fact simply move the problem rather than finding creative solutions and I have no doubt that in a few years an expensive consultation round will begin again. This is short sighted and false economy. At the very least there should be consideration of the suggestions that we have made whereby the council could assist us to create some more parking. This could well be, in the long term, more cost effective than employing more parking wardens – though of course parking wardens do generate income through fines. The cynic could well say that this proposal is simply another revenue gathering exercise.

We have recently responded to a proposal about kerbing in the area. I am assuming that the two projects are working together, but it did seem odd that such a proposal seemed almost set in concrete before the results of this survey have been assimilated. It is also of concern that these parking issues were not canvassed in 2005/2006 when much work on the roads in the area was carried out. There seems to be some problems in terms of cohesive long term planning.

We have the following comments and some questions to which we would appreciate responses:

- Winchester Street between Andover and Merivale Lane has no restrictions. Why not?
- What happens when there are weekday funerals or weddings at St Andrew's at Rangi Ruru ?
- What schedule does the council intend to instigate in order to police this? As any school will tell you, something that can't be enforced should not be instigated.
- This proposal will push the parking into Rossall Street, which I believe is dangerous and thus the likelihood of an accident is heightened.
- It will also push parking into other streets, simply moving the problem.
- We have agreed to discourage parking in Rhodes Street. This will become difficult to enforce.
- The negative impact of these measures on our students will mean that our requests of them and our reliance on their good will will be severely compromised. Whilst

we feel we have a duty to consider the community of which we are a part, the parking requests we make of the girls involve a considerable amount of work. The attitudes of some of our neighbours are not helpful and staff have to deal with unpleasant phone calls on a regular basis. Certainly the efforts we make go unthanked and unrecognised, apart from your acknowledgement which was appreciated. It would actually seem that should the current proposal be implemented, there is nothing we can do to specify where the girls should park and thus I suppose the positive is that we will have a great deal less work to do. I very much doubt that the neighbours' complaints will lessen – they will simply increase but will be directed to the council, demanding to know why the area isn't constantly being policed.

- Can you assure me that the other businesses in Merivale Lane – the hairdresser, the framer and the doctors, have the requisite off street parking. Some of these businesses are quick to complain about our girls, but I am not at all convinced that they themselves are not adding to the problem.
- Rather than whole streets of restrictions, if people want visitors to be able to park somewhere, a few 1 hour zones, capable of taking 3-4 cars might be a better option.
- If the problem is blocked access this is not the solution. The solution is to have the offending car towed away, not penalise everyone.
- Our students have suggested that painted parking spaces would encourage better and more economical parking.
- Our students have also commented that in other cities where there are 120min zones around schools the students simply all move their cars around every 2 hours. Have you spoken with the councils in other cities as to their experiences and the efficacy of various strategies ?

The Senior Management Team and I are always happy to discuss this issue with you.

Julie Moor
May 2007

ATTACHMENT 6 – REPTON STREET PETITION

TO THE CHRISTCHURCH CITY COUNCIL. A PETITION.
Through Traffic Engineers,Street Network Operation, Transport & City Streets Unit. PO Box 237 Christchurch.

We the undersigned residents of Repton Street, Merivale Christchurch wish to affirm that they are completely opposed to any parking restrictions being introduced in our street.

Name.	Address.	Signature.
Janine Charbet	18 Repton St	
Vivienne Bryant	36 Repton St	
Prue Wilson	37 Repton	
Jo Dawson	22 Repton	
Frank McWatt	22 Repton St	
Olly Watson	21 Repton St	
Julie Henriston	35 Repton St	
Paul McGregor	2/29 Repton St	
Theresa Jewell	34 Repton St	
C Vogan	3/3 Repton St Merivale	
C Hunter	24 Repton ST	
S Huntsbell	24 Repton St	
Jaron Hart	35 Repton St	
Jason Crouch	4/19 Repton	

TO THE CHRISTCHURCH CITY COUNCIL. A PETITION.
Through Traffic Engineers,Street Network Operation, Transport & City Streets Unit. PO Box 237 Christchurch.

We the undersigned residents of Repton Street, Merivale Christchurch wish to affirm that they are completely opposed to any parking restrictions being introduced in our street.

Name.	Address.	Signature.
Juliana + Chris Sheerin	28 Repton St.	
David Evans	20 Repton St	
Anton & Allison Summerford	10 Repton Street	
MARK AND ANNA TANNDALE	6 REPTON ST	
Hamish + Margie McCrostie	32 REPTON ST.	
[illegible]	[illegible]	
JEAN VAN HEERDEN	1/19 Repton st.	
NATALIE MORGAN	33A REPTON ST	
[illegible]	34 REPTON ST.	
[illegible]	[illegible]	
M. A. Aloss	Garage access Rugby St. 52 Rugby St.	
HARRY + MAIRE McLERNON	Garage on Repton Str. 50 Rugby STR.	
[illegible]	[illegible]	
Murray Alterman Fern Alterman	25a Repton Street	

TO THE CHRISTCHURCH CITY COUNCIL. A PETITION.
Through Traffic Engineers,Street Network Operation, Transport & City Streets Unit. PO Box 237 Christchurch.

We the undersigned residents of Repton Street, Merivale Christchurch wish to affirm that they are completely opposed to any parking restrictions being introduced in our street.

Name.	Address.	Signature.
Bill & Bettina Wallace	5 Repton St	B.M.Wallace, Bettina Wallace
Gill & Jane Lapthorn	17 Repton St	G.J.Lapthorn S.J.Lapthorn

8. KNOWLES STREET (PAPANUI ROAD- BRETTS ROAD) STREET RENEWAL PROJECT - ST ALBANS CREEK ENHANCEMENT

General Manager responsible:	General Manager City Environment Group, DDI 941-8608
Officer responsible:	Transport and Greenspace Unit Manager
Author:	Andrew Hensley, Consultation Leader- Capital Programme Group

PURPOSE OF REPORT

1. The purpose of this report is to seek the recommendation of the Fendalton/Waimairi Works, Traffic and Environment Committee to the Fendalton/Waimairi Community Board that the plan shown in **Attachment** 1 (Fencing and Viewing Option) proceed to final design, tender and construction.

EXECUTIVE SUMMARY

2. The Board at its 19 February 2008 meeting considered the report of its Works, Traffic and Environment Committee meeting of 28 January 2008 and resolved:
"To grant approval for this project to proceed to final design, tender and construction in accordance with the plan attached to the report, subject to staff working with the affected residents to find an appropriate solution to the issue of day-lighting the St Albans Stream."

3. A number of further options and variations for the enhancement project have been investigated, developed and consulted on during February, March and April 2008.

4. Consultation has been undertaken with the four affected residents who made a deputation to the 28 January 2008 meeting of the Works, Traffic and Environment Committee.

5. The three residents surrounding the proposed St Albans Creek Enhancement have indicated that they prefer a similar treatment to that constructed in Chapter Street. This lay-out has been developed into the 'Fencing and Viewing Option' (Attachment 1).

6. Features of the 'Fencing and Viewing Option' include:

- 1.8 metre high 'pool type' fencing with pillars
- 1.1 metre high 'pool type' fencing with timber rail viewing area
- No change to existing head wall/wing wall
- Lighting
- Landscaping kerbside and along St Albans Creek margin
- Seat
- Paved footpath feature
- Low Halswell Stone wall to be removed and used in viewing and seating area
- 6 metre wide two-way narrowing traffic calming treatment
- Estimated cost: $40,000

7. Ms Melanie Williams, representing the views of some people in Knowles Street who wish to see St Albans Creek enhanced, has indicated that they prefer the 'Original Consultation Option' (**Attachment** 2), or, as a compromise, the 'Alternative Consultation Option' (**Attachment** 3).

8. Features of the 'Original Consultation Option' include:

- Creek 'day-lighted' into legal road
- Fencing around the 'day-lighted' section of St Albans Creek
- Balustrade
- Existing head wall / wing wall removed
- Timber footbridge
- Landscaping kerbside and beside 'day-lighted' section of St Albans Creek
- Viewing vent at 56 Knowles Street (further consultation required with the property owners at 56 Knowles Street required)
- 4 metre wide one-way narrowing traffic calming treatment
- Estimated cost: $120,000

8. Cont'd

9. Features of the 'Alternative Consultation Option' include:

   - Creek 'day-lighted' into legal road
   - Balustrade
   - Existing head wall / wing wall removed
   - Landscaping kerbside and beside 'day-lighted' section of St Albans Creek
   - Seat
   - Paved footpath feature
   - 6 metre wide two-way narrowing traffic calming treatment
   - Estimated cost: $100,000

10. Ms Williams advises that she undertook her own consultation, and reports that people from ten residences are in favour of the 'Alternative Consultation Option' as a compromise to the 'Original Consultation Option'.

FINANCIAL IMPLICATIONS

11. The Knowles Street (Papanui Road- Bretts Road) Street Renewal Project has a budget of $996,773.

12. Knowles Street (Papanui Road- Bretts Road) Street Renewal Project including the 'Fencing and Viewing Option' (Attachment 1) is estimated to cost $904,500 including fees and contingencies.

13. Knowles Street (Papanui Road- Bretts Road) Street Renewal Project including the 'Original Consultation Option' (Attachment 2) is estimated to cost $984,000 including fees and contingencies.

14. Knowles Street (Papanui Road- Bretts Road) Street Renewal Project including the 'Alternative Consultation Option' (Attachment 3) is estimated to cost $964,000 including fees and contingencies.

15. It is expected the St Albans Creek Enhancement work will commence early in the 2008/09 financial year, as part of the wider Knowles Street (Papanui- Cranford Street) Street Renewal Project.

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

16. Yes.

LEGAL CONSIDERATIONS

17. The 'Original Consultation Option' and the 'Alternative Consultation Option' are covered by existing waterways Global Consent. The 'Fence and Viewing Option' does not require this consent.

18. All works within the vicinity of St Albans Creek will comply with relevant consent conditions.

19. There are no land ownership issues involved in the St Albans Creek enhancement.

20. There are no notable or heritage trees shown in the City Plan.

21. The minimum lane width in the 'Fencing & Viewing Option' and 'Alternative Consultation Option' is 3.0 metres, which occurs at the 6 metre wide narrowing treatment. This lane width is adequate and appropriate for a local road traffic calming treatment.

22. The 'Original Consultation Option' includes a 4 metre wide one-way section. This is adequate and appropriate for a local road traffic calming treatment.

8. Cont'd

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

23. Yes - see above.

ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

24. This project aligns with the Capital Programme, as detailed on page 85 of the LTCCP (2006-2016).

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

25. The recommendations of this report support the Capital Programme in the 2006-2016 LTCCP.

ALIGNMENT WITH STRATEGIES

26. This project is consistent with key Council strategies, primarily the Waterway and Wetlands Natural Asset Management Strategy, but also the Parking Strategy, Road Safety Strategy, Pedestrian Strategy and Cycling Strategy.

Do the recommendations align with the Council's strategies?

27. As above.

CONSULTATION FULFILMENT

28. Consultation has been undertaken during February, March and April 2008 with the four affected residents who made a deputation to the 28 January 2008 meeting of the Works, Traffic and Environment Committee.

29. The three residents surrounding the proposed St Albans Creek Enhancement have indicated that they prefer a similar treatment to that constructed in Chapter Street. This lay-out has been developed into the 'Fencing & Viewing Option' (Attachment 1).

30. Ms Melanie Williams, representing the views of some residents in Knowles Street who wish to see St Albans Creek enhanced, has indicated that they prefer the 'Original Consultation Option' (Attachment 2), or, as a compromise, the 'Alternative Consultation Option' (Attachment 3).

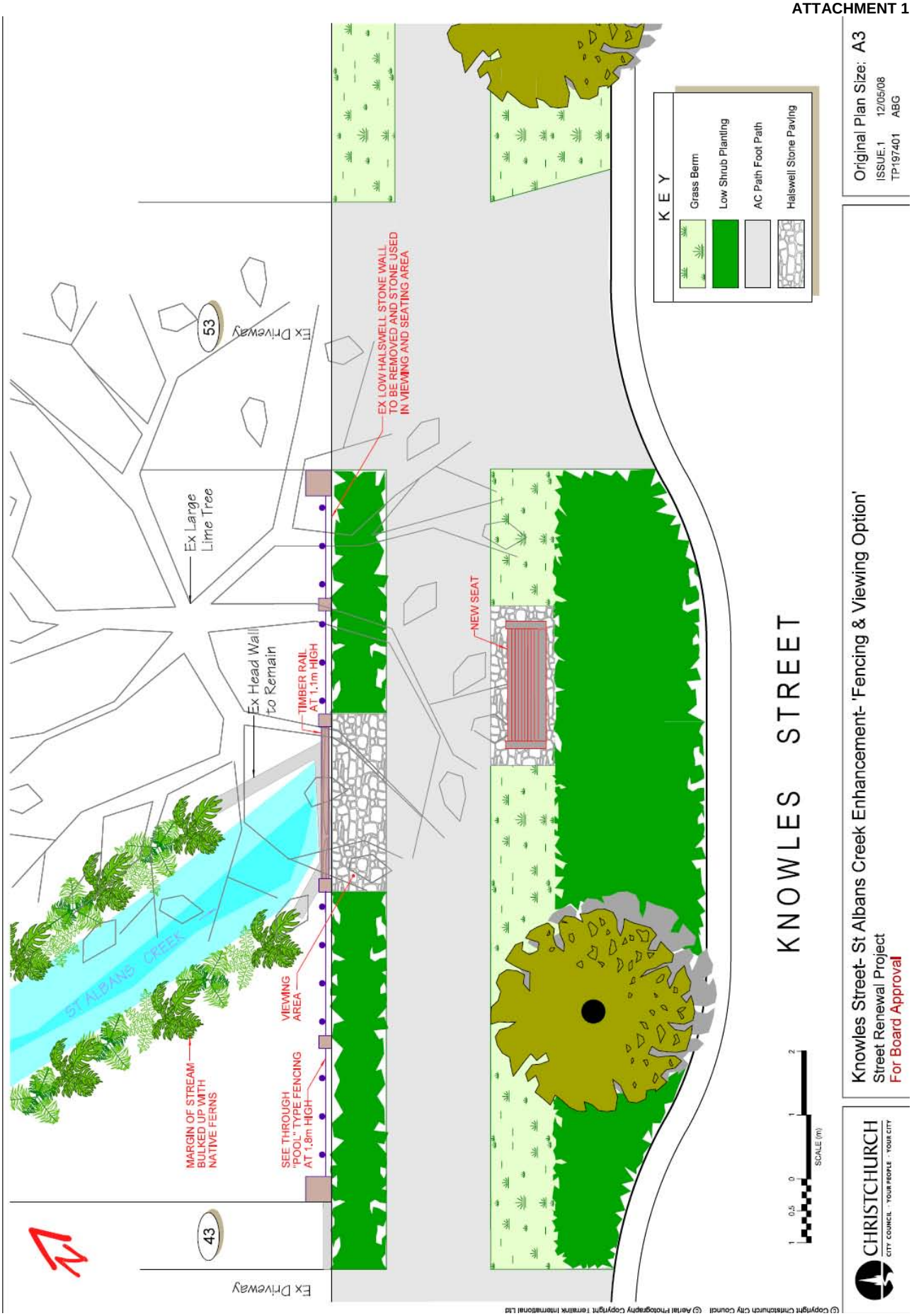
31. Ms Williams advises that she undertook her own consultation, and reports that people from 10 residents are in favour of the 'Alternative Consultation Option' as a compromise to the 'Original Consultation Option'

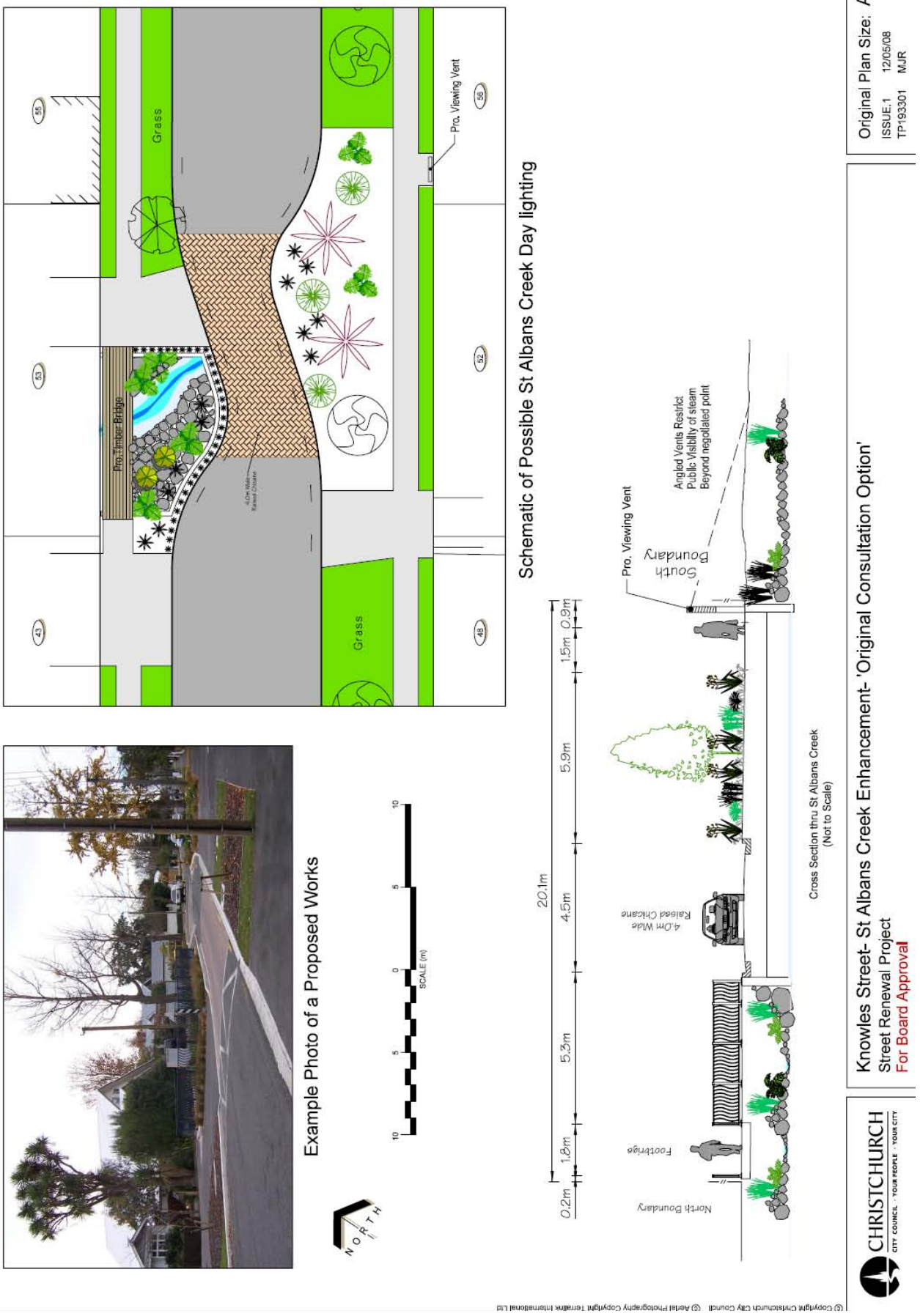
32. However, we have no knowledge or confirmation where these residents who are in favour of the 'Alternative Consultation Option' (as a compromise) reside in the street.

STAFF RECOMMENDATION

That the Fendalton/Waimairi Works, Traffic and Environment Committee recommend to the Fendalton/Waimari Community Board the approval of the plan shown in Attachment 1 (Fencing and Viewing Option) to proceed to final design, tender and construction.

ATTACHMENT TO CLAUSE 8
ATTACHMENT 1




Schematic of Possible St Albans Creek Day lighting
Grass
Pro. Timber Bridge
Pro. Viewing Vent
Grass
Example Photo of a Proposed Works
SCALE (m)
NORTH
Cross Section thru St Albans Creek
(Not to Scale)
Pro. Viewing Vent
South Boundary
Angled Vents Restrict
Public Visibility of steam
Beyond negotiated point
4.0m Wide
Raised Chicane
Footbridge
North Boundary
0.2m
1.8m
5.3m
4.5m
5.9m
1.5m
0.9m
20.1m
Original Plan Size: A3
ISSUE.1 12/05/08
TP193301 MJR
Knowles Street- St Albans Creek Enhancement- 'Original Consultation Option'
Street Renewal Project
For Board Approval
CHRISTCHURCH
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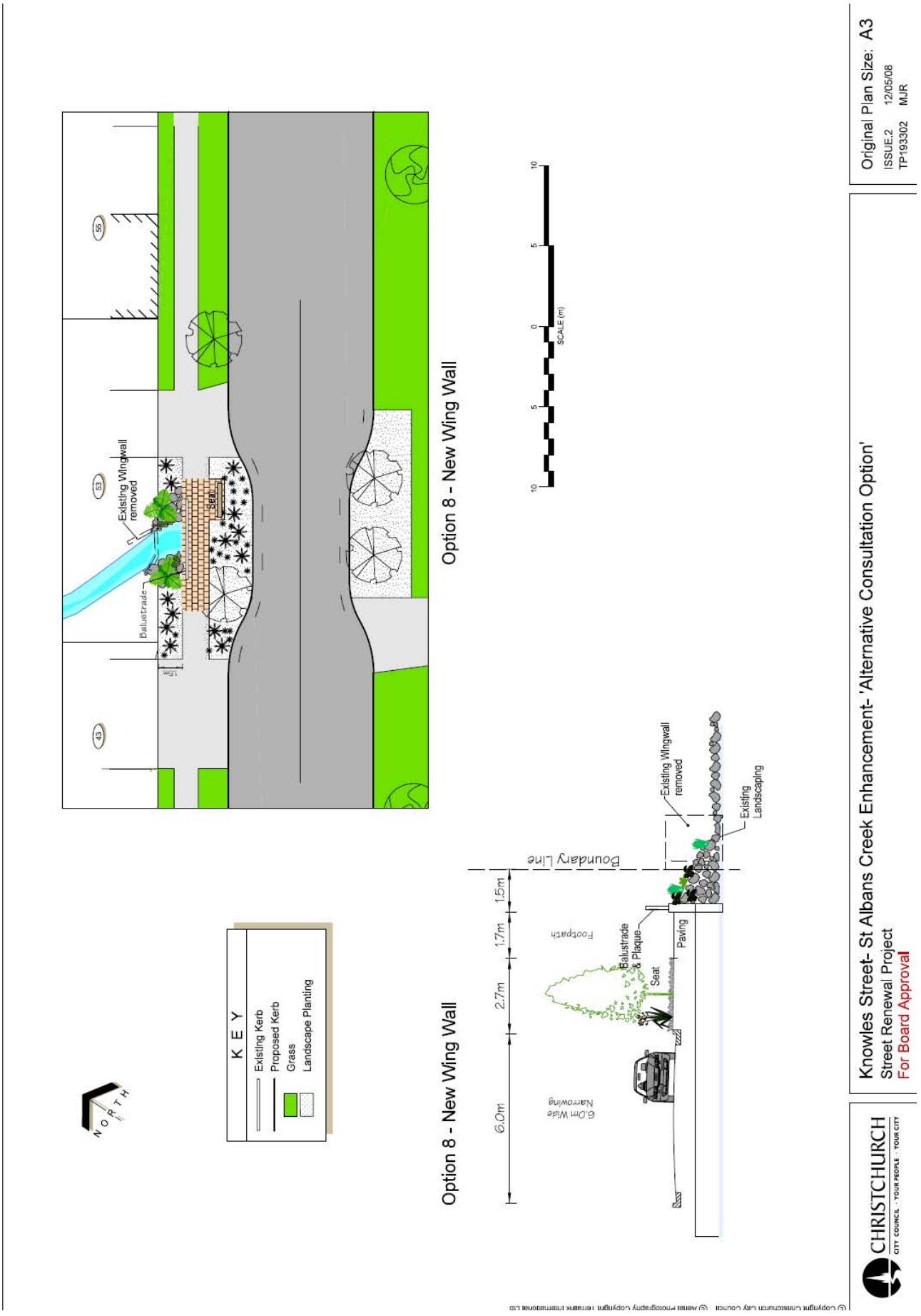
Original Plan Size: A3
ISSUE.2 12/05/08
TP193302 MJR
CHRISTCHURCH
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Knowles Street- St Albans Creek Enhancement- 'Alternative Consultation Option'
Street Renewal Project
For Board Approval
Option 8 - New Wing Wall
Existing Wingwall removed
Seat
Balustrade
55
53
43
SCALE (m)
10 5 0 5 10
Option 8 - New Wing Wall
Boundary Line
Existing Wingwall removed
Existing Landscaping
Footpath
Balustrade & Plaque
Seat
Paving
6.0m Wide Narrowing
6.0m
2.7m
1.7m
1.5m
KEY
Existing Kerb
Proposed Kerb
Grass
Landscape Planting
NORTH