

RICCARTON/WIGRAM COMMUNITY BOARD
TRANSPORT AND GREENSPACE COMMITTEE
AGENDA

MONDAY 23 AUGUST 2010

AT 9.30AM

**AT SOCKBURN SERVICE CENTRE
IN THE BOARDROOM,
149 MAIN SOUTH ROAD, CHRISTCHURCH**

Committee: Mike Mora (Chairperson), Helen Broughton, Jimmy Chen, Beth Dunn, Judy Kirk, Peter Laloli and Bob Shearing.

Community Board Adviser

Liz Beaven

Telephone: 941-6501

Email: liz.beaven@ccc.govt.nz

PART A - MATTERS REQUIRING A COUNCIL DECISION

PART B - REPORTS FOR INFORMATION

PART C - DELEGATED DECISIONS

INDEX

CLAUSE

- | | | |
|---------------|------------|--|
| PART B | 1. | APOLOGIES |
| PART B | 2. | DEPUTATIONS BY APPOINTMENT |
| | 2.1 | Ilam and Upper Riccarton Residents' Association |
| PART B | 3. | CORRESPONDENCE |
| PART B | 4. | BRIEFINGS |
| | 4.1 | New Zealand Transport Authority |
| | 4.2 | Western Interceptor Update |
| | 4.3 | Park Litter Bins |
| PART A | 5. | PEER STREET AND WAIMAIRI ROAD INTERSECTION TRAFFIC SIGNALS AND PEER STREET TRAFFIC MANAGEMENT CHANGES |
| PART C | 6. | HAYTON ROAD/PARKHOUSE ROAD PROPOSED ROUNDABOUT |
| PART C | 7. | BRADSHAW TERRACE - STREET RENEWAL |
| PART B | 8. | ELECTED MEMBERS' INFORMATION EXCHANGE |

We're on the Web!

www.ccc.govt.nz/Council/Agendas/

1. APOLOGIES

2. DEPUTATIONS BY APPOINTMENT

2.1 JANE TAYLOR-GORDON, ILAM AND UPPER RICCARTON RESIDENTS' ASSOCIATION

Jane Taylor-Gordon, a representative of the Ilam and Upper Riccarton Residents Association will address the Board regarding the Peer Street/Waimari Road Traffic Signals.

3. CORRESPONDENCE

4. BRIEFINGS

4.1 NEW ZEALAND TRANSPORT AUTHORITY (NZTA)

Mr Tony Spowart, Regional Traffic and Safety Manager for the New Zealand Transport Authority (NZTA) will discuss with the Committee NZTA issues within Riccarton/Wigram ward.

4.2 WESTERN INTERCEPTOR UPDATE

Mike Bourke and Peter Brocklehurst will update the Board on the progress of the Western Interceptor.

4.3 PARK LITTER BINS

John Revell, Contracts Manager – Urban Parks, will be in attendance to speak to the Committee regarding the reinstating of litter bins to parks around the city.

5. PEER STREET AND WAIMAIRI ROAD INTERSECTION TRAFFIC SIGNALS AND PEER STREET TRAFFIC MANAGEMENT CHANGES

General Manager responsible:	General Manager City Environment Group, DDI 941-8608
Officer responsible:	Asset Network and Planning Manager
Author:	Weng Kei Chen, Asset Engineer (Policy) and Peter Atkinson, Network Planning Engineer

PURPOSE OF REPORT

1. The purpose of this report is to seek the Committee's recommendation to the Board to recommend to the Council for the installation of traffic signals at the intersection of Peer Street and Waimairi Road as shown on **Attachment 1**, and for the Board to approve no stopping restrictions along Peer Street, and a minor realignment of kerb and channel to Athol Terrace as shown on **Attachment 2**.

EXECUTIVE SUMMARY

2. A resource consent was granted by the Council to Foodstuff South Island Limited for the development of a supermarket at 47 - 57 Peer Street with floor area of approximately 3,130 square metres. The consent requires the installation of traffic signals at the Peer Street and Waimairi Road intersection, with associated traffic management measures along Peer Street.
3. The Resource Consent also requires Foodstuffs South Island Limited to seek the Council's approval for the change to its existing road infrastructures prior to the commencement of the supermarket construction. In addition, it is a requirement of the resource consent that the traffic signals have to be in operation prior to the opening of the supermarket in April 2011.
4. Peer Street and Waimairi Road are both minor arterial roads along the city ring route network carrying approximately 14,000 vehicles per day. In close proximity of the development there is an existing high school, university hostels and a future retirement village. The proposed traffic signals are an appropriate form of traffic control for the road network.
5. The Council received 22 submissions when the approved resource consent traffic plan was presented to stakeholders for their input. Six submissions objecting to the proposals were received and several submissions raised other concerns and issues.
6. Peer Street and Waimairi Road are two important minor arterial roads within the city network and often specific needs of individuals cannot be accommodated with the existing proposed change. This was the case for the four objections received from residents who had concerns exiting a right of way. With the traffic signals installation their abilities to turn right from their driveway will be further disadvantaged particularly at peak travel times. The two other objections were on the grounds that the signals would disadvantage the flow of traffic for the ring route.
7. Other issues and concerns raised were the need for:
 - (a) Safer pedestrian and cycle route;
 - (b) Traffic controls for pedestrian and cyclist movements at the Athol Terrace and Peer Street intersection;
 - (c) Change to Athol Terrace intersection with Peer Street to accommodate cyclists and create adequate space for right and left turners onto Peer Street;
 - (d) Additional traffic signs to remind commuters of the speed restriction;
 - (e) Trimming of vegetation to improve sight distance;
 - (f) Additional 'no stopping' of vehicles to provide more road space;

5. Cont'd

- (g) Driver education programmes to improve traffic behaviour on roads particular speeds, various functions of traffic arrangement measures such as flushed median, cycle lane etc.
- 8. In considering the feedback received and at the same time maintaining the function of the two minor arterial roads, two changes are considered appropriate:
 - (a) The provision of a pedestrian facility at Athol Terrace intersection;
 - (b) Extension of 'no stopping' of vehicles outside 93 Waimairi Road.
- 9. The provision of a pedestrian facility at Athol Terrace intersection will result in the resumption of road land currently occupied by the owners of 23 Peer Street. The land is densely landscaped with trees and shrubs. The existing ditched channel will be replaced on a new alignment as shown on **Attachment 2**. This will create adequate road spaces for a traffic island and sufficient space for left and right vehicular movements at the intersection.
- 10. Other operational issues raised, for example the trimming of vegetation and installation of extra traffic signs have been referred to Road Maintenance Team for appropriate actions.
- 11. The main features for the proposal can be summarised:
 - (a) Installation of traffic signals at Peer Street and Waimairi Road intersection incorporating pedestrian safety measures;
 - (b) Extending the 'no stopping' along the western side of Peer Street at Waimairi Road intersection to 87 Peer Street to create sufficient space for a painted flush median and adequate traffic lane width;
 - (c) Extending the 'no stopping' along the eastern side of Peer Street and Waimairi Road intersection to Athol Terrace to provide sufficient space for a painted flush median and adequate traffic lane width;
 - (d) Extending the 'no stopping' along the western side of Waimairi Road outside 93 Waimairi Road;
 - (e) Alteration to Athol Terrace at Peer Street intersection to provide a pedestrian facility and adequate road space for vehicles turning movements.

FINANCIAL IMPLICATIONS

- 12. The traffic signals and traffic management measures along Peer Street as shown on **Attachment 1** will be funded by Foodstuffs South Island Limited.
- 13. Foodstuff South Island Limited will be contributing \$5,000 to the pedestrian facility at Athol Terrace. The estimated cost for this facility and other associated work is \$20,000. The funding for the balance of \$15,000 is available from the Transport and Greenspace Subdivision Budget.

Do the Recommendations of this Report Align with 2009-19 LTCCP budgets?

- 14. The work required is stipulated in the resource consents for the supermarket development. There is funding in the Subdivision LTCCP Budget for this work in 2010/11.

LEGAL CONSIDERATIONS

- 15. The changes to the Council's road infrastructure requires both the Board's and the Council's approvals as set out in the delegation register dated December 2009.

5. Cont'd

ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

16. Yes the work provides a safe sustainable road network that enables access to goods and services, work and leisure activities.

ALIGNMENT WITH STRATEGIES

17. This work is considered consistent with the traffic objectives in the Christchurch City Plan.

CONSULTATION FULFILMENT

18. A presentation was made to Riccarton/Wigram Board by representatives of Foodstuff South Island Limited prior to the plan being distributed to stakeholders for consultation. The plan was distributed after the appeal period of resource consent issued on 2 June 2010.
19. Consultation documents were delivered to surrounding residents along Peer Street and Waimairi Road and similar documents were also sent to other stakeholders and owners of the properties.
20. There were 22 responses with 16 supportive and six against.
21. Out of six submissions against the proposal four objections were from residents served by a right of way at 103 Waimairi Road. Their concerns were their abilities to turn right onto Waimairi Road. The right vehicular movement would be severely compromised particularly at peak travel times with traffic signals working. The two other objections were on grounds that signals would disadvantage the function of the ring route and one suggested of realigning Waimairi Road at the intersection.
22. There were 16 submissions in support of the proposal and at the same time some issues were also raised and these were:
 - (a) Safer pedestrian and cycle route;
 - (b) Traffic controls for pedestrian and cyclist movements at Athol Terrace and Peer Street intersection;
 - (c) Change to Athol Terrace intersection to accommodate cyclists and create adequate road space for right and left turns;
 - (d) Additional traffic signs to remind commuters of the speed restriction;
 - (e) Trimming of vegetation to improve traffic sight distance;
 - (f) Additional 'no stopping' of vehicles to provide more road space at 93 Waimairi Road;
 - (g) More resources to be employed for driver education.

STAFF RECOMMENDATION

It is recommended:

- (a) That the Committee recommends that the Board approve:
 - (i) That any existing parking restrictions at any time on the western side of Peer Street from Waimairi road the Athol Terrace be revoked;
 - (ii) That any existing parking restrictions at any time on the eastern side of Peer Street from Waimairi Road to a point measured 40 metres generally south of Athol Terrace be revoked;

5. Cont'd

- (iii) That any existing parking restrictions at any time on the western side of Waimairi Road from Peer Street to a point measured 40 metres generally southeast be revoked;
 - (iv) That all existing parking restrictions on the eastern side of Peer Street from Waimairi Road the Athol Terrace be revoked;
 - (v) That the stopping of vehicles be prohibited at any time on the western side of Peer Street commencing at the intersection with Athol Terrace and extending in a generally southerly direction for a distance of 205 metres;
 - (vi) That the stopping of vehicles be prohibited at any time on the western side of Peer Street commencing at the intersection with Athol Terrace and extending in a generally northerly direction for a distance of 20 metres;
 - (vii) That the stopping of vehicles be prohibited at any time on the western side of Waimairi Road commencing at the intersection with Peer Street and extending in a generally southerly direction for a distance of 55 meters;
 - (viii) That the stopping of vehicles be prohibited at any time on the western side of Peer Street commencing at the intersection with Waimairi Road and extending in a generally southerly direction for a distance of 57 metres;
 - (ix) That the stopping of vehicles be prohibited at any time on the eastern side of Peer Street commencing at the intersection with Waimairi Road and extending in a generally southerly direction for a distance of 180 metres;
 - (x) That the pedestrian facility at Athol Terrace as shown on **Attachment 2** be installed.
- (b) That the Committee recommends that the Board recommend to the Council to approve:
- (i) That traffic signals be installed at the intersection of Waimairi Road and Peer Street as indicated in the **Attachment 1**.
 - (ii) That the Give Way control on Peer Street at the intersection with Waimairi Road be removed.

6. HAYTON ROAD/PARKHOUSE ROAD PROPOSED ROUNDABOUT

General Manager responsible:	General Manager City Environment Group, DDI 941-8608
Officer responsible:	Asset Network and Planning Manager
Author:	Weng Kei Chen, Asset Engineer (Policy) and Peter Atkinson, Network Planning Engineer

PURPOSE OF REPORT

1. The purpose of this report is to seek the Committee's recommendation to the Board for the installation of roundabout at the intersection of Hayton Road and Parkhouse Road as shown on **Attachments 1 and 2**.

EXECUTIVE SUMMARY

2. A subdivision application has been lodged with the Council by Wigram Aerodrome Limited to develop its site at the Wigram Business Area. The subdivision itself will be served by a new road accessing onto the existing intersection of Hayton Road and Parkhouse Road. The new subdivision road is identified as a collector road in the South West Area Plan. The access to the new development is by way of a roundabout as shown on **Attachments 1 and 2**.
3. The proposed roundabout will also provide a more appropriate and effective transport connection to the existing business area.
4. There were four submissions received and they all supported the proposal. There was a suggestion by one submitter that provision be made for two lanes approaches to the proposed roundabout. However the projected traffic movements do not warrant the two lanes approaches.
5. The main features for the proposal are:
 - (a) All accesses to private sites are maintained;
 - (b) A 22 metre in diameter roundabout designed for large vehicular movements;
 - (c) Splitter islands provided at each leg of the roundabout to provide a safer environment for pedestrians and cyclists.
6. The realignment of the existing roads to the new roundabout will result in redundant road land. This redundant road land is as shown in the attachment and will be available for disposal to adjacent property owners.

FINANCIAL IMPLICATIONS

7. The roundabout installation and other associated works will be funded by Wigram Aerodrome Limited.

Do the Recommendations of this Report Align with 2009-19 LTCCP budgets?

8. Yes. The work is a condition for the subdivision consent.

LEGAL CONSIDERATIONS

9. The change to the Council's road infrastructure requires the Board's approval, as set out in the Delegation Register dated December 2009.

ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

10. Yes. The work provides a safe sustainable road network that enables access to goods and services, work and leisure activities.

6. Cont'd

ALIGNMENT WITH STRATEGIES

11. This work is considered consistent with the traffic objectives in the Christchurch City Plan and the South West Area Plan.

CONSULTATION FULFILMENT

12. A presentation was made to Riccarton/Wigram Community Board on 3 November 2009 by representatives of Wigram Aerodrome Limited prior to the plan being distributed to stakeholders for consultation.
13. Consultation documents were delivered to surrounding businesses at the Hayton Road and Parkhouse Road intersection and similar documents were also sent to the owners of the properties.
14. There were four responses and all were supportive of the proposal.
15. Suggestions received were:
 - (a) Redundant road area be used for parking;
 - (b) Provision of two approaching lanes to the roundabout.

STAFF RECOMMENDATION

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

- (a) The installation of roundabout as shown in **Attachments 1 and 2**;
- (b) That the stopping of vehicles be prohibited at any time on the south western side of Hayton Road commencing at the intersection with Parkhouse Drive and extending in a generally north westerly direction for a distance of 115 metres;
- (c) That the stopping of vehicles be prohibited at any time on the north eastern side of Hayton Road commencing at the intersection with Parkhouse Drive and extending in a generally south easterly direction for a distance of 90 metres;
- (d) That the stopping of vehicles be prohibited at any time on the south western side of Hayton Road commencing at the intersection with Parkhouse Drive and extending in a generally south westerly direction for a distance of 90 metres;
- (e) That the stopping of vehicles be prohibited at any time on the northern side of the proposed subdivision road commencing at the intersection with Hayton Road and extending in a generally westerly direction for a distance of 45 metres;
- (f) That the stopping of vehicles be prohibited at any time on the southern side of the proposed subdivision road commencing at the intersection with Hayton Road and extending in a generally westerly direction for a distance of 50 metres;
- (g) That the give way control on Hayton Road at the intersection with Parkhouse Road be removed.
- (h) That the "Give Way " controls be installed for the approaches to the roundabout from both ends of Hayton Road, Parkhouse Road, driveway serving 3 Parkhouse Road and the new road serving Wigram Business.

7. BRADSHAW TERRACE - STREET RENEWAL

General Manager responsible:	General Manager, City Environment, DDI 941-8608
Officer responsible:	Transport and Greenspace Unit Manager
Author:	Jennie Hamilton, Consultation Leader

PURPOSE OF REPORT

1. The purpose of this report is to seek the Committee's recommendation to the Board for approval of the Bradshaw Terrace Renewal Plan, as shown in **Attachment 1**.

EXECUTIVE SUMMARY

2. The Bradshaw Terrace street renewal project is to replace the existing kerb and dish channel, reconstruct the carriageway and undertake other street improvements in Bradshaw Terrace.
3. The project was initiated by the Transport and Greenspace Unit as part of the Asset Management Programme and has been included in the 2009-2019 Long Term Council Community Plan. The Council has allocated funding in the street renewal section of the Transport and Greenspace Capital Works Budget.
4. Bradshaw Terrace is approximately 190 metres long and 10 metres wide and is designated as a Local Road in the City Plan. Flanked on both sides by housing, it is a cul-de-sac which runs off Straven Road.
5. Because of its proximity to the Riccarton shopping area, Bradshaw Terrace is a popular parking area, particularly for workers. However, Council consultation on parking in 2009 indicated that most residents did not want parking restrictions.
6. In addition to replacing the kerb and channel, key objectives are to maintain and improve safety for all users and to ensure that additional assets such as signage, footpaths and drainage are upgraded to current standards. The proposed street tree and landscaping improvements are consistent with Council strategies.
7. Key objectives of this project are met by:
 - (a) Replacing the existing kerb and filled dish channel with kerb and flat channel.
 - (b) Maintaining and improving safety for all road users by maintaining the existing level of safety at the Straven Road intersection and narrowing the carriageway to nine metres.
 - (c) Reconstructing the carriageway and providing 1.5 metre wide footpaths.
 - (d) Renewing the grass berms, which will vary from 1.8 metres wide to more than four metres at the road bend. Berms over 1.5 metres will be planted with magnolia black tulip trees. Existing landscaping will be retained at the intersection of Bradshaw Terrace and Straven Road.
 - (d) Upgrading the street drainage pipes to current Council standards.
 - (e) Relocating the street sign to a new post on the Straven Road footpath, so it can be more easily seen by northbound traffic on Straven Road.

FINANCIAL IMPLICATIONS

8. Funding for the proposed kerb and channel renewal works in Bradshaw Terrace is provided in the 2009 – 2019 LTCCP Street Renewal Programme, as shown below:

2009/10	\$20,000
2010/11	\$47,000
2011/12	\$471,000.

7. Cont'd

Based on current estimates, there is sufficient funding to complete the construction of this project.

Do the Recommendations of this Report Align with 2009-19 LTCCP budgets?

9. Yes. Funding for this project is provided in the 2009-19 LTCCP, page 245, Street Renewal Programme.

LEGAL CONSIDERATIONS

10. Part 1, Clause 5 of the Christchurch City Council Traffic and Parking Bylaw 2008 provides the Council with the authority to install traffic and parking restrictions by resolution.
11. The Community Boards have delegated authority from the Council to exercise the delegations as set out in the Register of Delegations dated July 2010. The list of delegations for the Community Boards includes the resolution of parking restrictions and Traffic Control devices.
12. The installation of any parking restriction signs and/or markings must comply with the Land Transport Rule: Traffic Control Devices 2004.

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

13. As above.

ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

14. Funding for the project is provided in the 2009-2019 LTCCP Street Renewal Programme and is consistent with Activity 10.0: Road Network in the Streets and Transport Asset Management Plan.

Do the recommendations of this report support a level of service or project in the 2009-19 LTCCP?

15. Yes.

ALIGNMENT WITH STRATEGIES

16. The recommendations in this report align with current Council strategies including the Parking Strategy 2003, the Road Strategy 2004, the Christchurch Public Passenger Transport Strategy 1998, the Cycling Strategy 1998 and 2004 and Pedestrian Strategy 2001; and are consistent with the requirements for arterial and local roads as defined within the City Plan.

Do the recommendations align with the Council's strategies?

17. Yes.

CONSULTATION FULFILMENT

18. The street renewal concept plan for Bradshaw Terrace was presented to the Board's Transport and Greenspace Committee on 19 April 2010.
19. Community consultation on the concept plan was undertaken from 30 April to 19 May 2010. Key stakeholders, including all Bradshaw Terrace residents and property owners, and the Riccarton Kilmarnock Residents' Association, received consultation leaflets.
20. An informal drop-in session was also held in Bradshaw Street on Tuesday 11 May. Issues raised included drainage problems, poor street lighting, the species of trees proposed and the undergrounding of overhead services. One young resident requested a smooth footpath for skateboarding.

7. Cont'd

21. Eighteen submissions were received by the end of March 2010. Of these, nine (50 per cent) supported the proposal, five (27.8 per cent) gave qualified support and one (5.6 per cent) did not support the proposed plan. Three submitters did not state a position.
22. Seven submitters commented on the street trees. Three supported the proposed magnolia black tulip, while three others preferred a different species, those being kowhai, fruit trees, or a tree with a wider spread such as cherry blossom. One commented that trees generally made a mess and another believed magnolia black tulips may be messy.
23. Three submitters were concerned about the narrowing of the street and were advised that nine metres is the Council's standard width for a local road. This allows for parking on both sides of the road and two way car flow.
24. Two submitters requesting speed humps were advised that the new street lay out is expected to reduce anti social driver behaviour as the large open area of carriageway at the bend in the street will be removed. Drivers seeking a shortcut to Riccarton Road would be warned that the street was a no exit.
25. One submitter suggested parking restrictions but was advised that this was not supported by most other residents. Currently the only proposed parking restrictions in Bradshaw Terrace are 'no stopping' (broken yellow lines) at the street entrance and cul-de-sac head. Should this situation change or problems develop in the future, this could be revisited.
26. Overhead lines in the street prompted four enquiries about undergrounding. These submitters were advised that this was outside the scope of the project as no funding is currently available for this purpose in the 2009-2019 Long Term Council Community Plan. However, residents were sent a Council letter outlining how they could contact the service providers and obtain further information.
27. All respondents who commented on the consultation plan in March 2010 were sent a letter thanking them for their input and a copy of the recommended plan for their street. The letter informed respondents when the plan would be presented to the Board for approval. Details of the meeting (time, venue etc) were also provided so that any interested people could attend or address the Board prior to the decision being made.
28. As a result of community consultation and further investigations the following changes have been made to the Bradshaw Terrace recommended plan:
 - (a) A new street sign post that is visible to vehicles on Straven Road is proposed in the existing landscaping on the northern corner. The existing signs (street sign and no exit sign) may be used on a new post.
 - (b) An additional tree is included in the existing landscape area outside property 1A.
 - (c) The grass berm has been extended at the currently vacant property at 18 Bradshaw Terrace, as the owners have informed the Council of the location of a new driveway.

STAFF RECOMMENDATION

It is recommended that the Committee recommend that the Board:

- (a) Approve the Bradshaw Terrace Street Renewal Plan, **Attachment 1 (TP320701, Issue 2)**.
- (b) Approve the following parking restrictions to take effect following completion of construction.

Revoke Existing Parking Restrictions:

- (i) That all existing parking restrictions on Bradshaw Terrace commencing at its intersection with Straven Road and extending in an easterly direction to the cul-de-sac be revoked.

7. Cont'd

New No Stopping:

- (i) That the stopping of vehicles be prohibited at any time on the north side of Bradshaw Terrace commencing at its intersection with Straven Road and extending for a distance of 15 metres in an easterly direction.
- (ii) That the stopping of vehicles be prohibited at any time around the head of the cul-de-sac of Bradshaw Terrace commencing on the north eastern side and at a point 175 metres generally south east of its intersection with Straven Road and extending in a clockwise direction around the head of the cul-de-sac for a distance of 50 metres finishing on the west side of Bradshaw Terrace.
- (iii) That the stopping of vehicles be prohibited at any time on the south side of Bradshaw Terrace commencing at its intersection with Straven Road and extending for a distance of 15 metres in an easterly direction.

BACKGROUND

29. Bradshaw Terrace is a cul-de-sac about 190 metres in length. The intersection of Straven Road and Bradshaw Terrace was reconstructed in 2002 and the existing layout will be tied into the proposed renewal.
30. Speed and traffic surveys were carried out in May 2010. The 85th percentile speed recorded was 42.5 kilometres per hour, indicating no speeding issue. The average daily volume of traffic over the week was 239 vehicles, reflecting the local street environment.
31. In the past five years there have been no reported crashes in Bradshaw Terrace or its intersection with Straven Road. The proposed works do not involve the intersection.
32. Street lighting has already been upgraded and complies with the Australian and New Zealand standards.

THE OBJECTIVES

33. The project objectives are:
 - (a) Renew the kerb and channels to suit drainage and adjacent street drainage needs as required.
 - (b) Renew carriageway, footpaths, berms and street lights and other Council assets as required.
 - (c) Maintain or improve user safety and level of service.
 - (d) Install new landscaping and street trees to meet the Council's Community Outcomes.
 - (d) Complete project within budget.
 - (f) Complete the construction in the 2011/12 financial year.
 - (g) Minimise the whole-of-life costs.

THE OPTIONS

34. Four options were considered for Bradshaw Terrace. Option Three formed the basis of the plan taken to the community for consultation as it best met project objectives.

7. Cont'd

OPTION ONE

35. Option One provides for the replacement of kerb and dish channel with kerb and flat channel, along the current alignment. It also includes full carriageway reconstruction but no additional features such as trees.

OPTION TWO

36. Option Two includes Option One plus:
- (a) Building out the kerb outside 11 to 17 Bradshaw to produce a consistent nine metre wide carriageway along the whole street. This provides space for trees/landscaping and possibly seating. It can also act as a stormwater retention area.
 - (b) A small 14 metre diameter turning head.
 - (c) Street lighting and drainage upgrades where required.

OPTION THREE

37. Option Three is the same as Option Two above, except that it has a sweeping right angled bend outside Number 10 and a 17 metre turning head.

OPTION FOUR

39. Option 4 includes building a 19 metre diameter turning circle where the surplus road reserve is, with access for the properties 10 to 19 around the corner provided through a narrow (4.5 metre) lane off the south end of the turning circle. Landscaping can be provided at either side of the entrance to this lane.

THE PREFERRED OPTION

40. Option Three has been developed and the proposed plan encompasses the following physical works in Bradshaw Terrace:
- (a) Replacing all existing kerb and dish channels with kerb and flat channel, matching in with the existing kerb and flat channel at the Straven Road intersection. The new kerbing will be built on a consistent nine metre alignment, centralising the carriageway where the road bends at 10 Bradshaw Terrace, and forming a 17 metre diameter turning circle at the cul-de-sac end.
 - (b) Reconstructing footpaths and the carriageway from the existing street entrance to the cul-de-sac. The footpaths will be shifted 1.2 metre towards the property boundary, to avoid obstruction from power poles.
 - (c) Planting 19 magnolia black tulip trees along both sides of the street, in the new grass berms on the kerbside. Landscape planting is provided outside 10 Bradshaw Terrace in addition to that existing at the Straven Road intersection.
 - (d) Drainage upgrades as required.
 - (e) Relocating the 'Bradshaw Terrace' street signage, including a 'no exit' sign, from the lamp post to a new post in the landscape area on the northern corner of Bradshaw Terrace at the Straven Road intersection so it is visible to traffic on Straven Road.

23. 8. 2010

- 14 -

8. ELECTED MEMBERS' INFORMATION EXCHANGE