Woodend-Sefton Community Board

Agenda

Monday 9 April 2018

7.00pm

Pegasus Community Centre
Main Street
Pegasus

Members:

Shona Powell (Chair)
Andrew Thompson (Deputy Chair)
Andrea Allen
John Archer
Al Blackie
Rhonda Mather
John Meyer

Board Members
WOODEND-SEFTON COMMUNITY BOARD

AGENDA FOR THE MEETING OF THE WOODEND-SEFTON COMMUNITY BOARD TO BE HELD IN PEGASUS COMMUNITY CENTRE, MAIN STREET, PEGASUS ON MONDAY 9 APRIL 2018 AT 7PM.

RECOMMENDATIONS IN REPORTS ARE NOT TO BE CONSTRUED AS COUNCIL POLICY UNTIL ADOPTED BY THE COUNCIL

	BUSINESS	PAGES

1 APOLOGIES

2 CONFLICTS OF INTEREST

3 CONFIRMATION MINUTES

3.1 **Minutes of the Woodend-Sefton Community Board – 12 March 2018**

7-13

RECOMMENDATION

THAT the Woodend-Sefton Community Board:

(a) **Confirms** the circulated minutes of the Woodend-Sefton Community Board meeting, held 12 March 2018, as a true and accurate record.

4 MATTERS ARISING

5 DEPUTATIONS AND PRESENTATIONS FROM THE COMMUNITY

5.1 Carville Stewart, Sefton resident, will speak to the Board about concerns regarding the Pembertons Road, Railways Street and Vaughan Street intersection in Sefton.

6 ADJOURNED BUSINESS

Nil.

7 REPORTS

7.1 Gladstone Road Cycleway – Kieran Straw (Civil Project Team Leader)

14-20

RECOMMENDATION

THAT the Woodend-Sefton Community Board recommends:

THAT the Utilities and Roading Committee:

(a) **Receives** report No. 180308023458.

(b) **Approves** Option One, the high level of service path, 2.3m wide surfaced with asphalt.

(c) **Notes** that 750m of the 950m length of the path will become redundant at the time the future Woodend Bypass is constructed

(d) **Notes** that the Bypass is unlikely to be constructed for at least ten years.

7.2 Bramleys Road Well Viability Assessment – Colin Roxburgh (Water Asset Manager) and Kalley Simpson (3 Waters Manager)

21-29

RECOMMENDATION

THAT the Woodend-Sefton Community Board recommends:

THAT the Council:

(a) **Receives** report No. 180323031876.

(b) **Notes** that previously it was expected that water of a suitable quality and quantity could be abstracted from the Bramleys Road well to be distributed to the Woodend Pegasus water supply scheme, via Tuahiwi, without any treatment.

(c) **Notes** that the Bramleys Road well is no longer considered to be a viable future source for the scheme, as the water source would likely require significant treatment and gaining consent to abstract water from the well would be very difficult.

(d) **Notes** that some Tuahiwi residents opposed the joining of the scheme with Pegasus for cultural reasons, and that the future connection of the Bramleys Road well would have potentially mitigated these concerns.

(e) **Notes** that staff will write to the local Runanga and discuss this matter at the next Runanga meeting on the 17 May 2018, to advise them of the reasons that this well is no longer considered to be a viable future source.

(f) **Approves** the replacement of the $2.2M capital works budget in 2022/23 and 2023/24 to connect the Bramleys Road well, with a $0.5M capital works budget in 2023/24 to connect the EQ4 well to provide additional capacity on the Woodend Pegasus water supply scheme.

7.3 **Combining of Woodend and Pegasus Water Supplies – New Water Supply Main Concept Design – Alicia Klos (Project Engineer) and Colin Roxburgh (Water Asset Manager)**

30-60

RECOMMENDATION

THAT the Woodend-Sefton Community Board recommends:

THAT the Utilities and Roading Committee:

(a) **Receives** report No. 180322031093.

(b) **Notes** that this project to install a new raw water pipe is part of the wider project to join the Woodend and Pegasus water schemes.

(c) **Notes** that design work is scheduled to be undertaken this financial year, 2017/18, and construction is scheduled to be completed next financial year, 2018/19.

(d) **Endorses** that the section of pipe immediately north of Gladstone Road be installed in the road reserve land, rather than through Gladstone Park.

(e) **Approves** the removal of the trees along the preferred route, in road reserve land.

(f) **Notes** that the recommended route is supported by the Gladstone Park Advisory Group.

(g) **Recommends** to Council that an additional capital works budget of $231,000 is included in the 2018/19 financial year, split 30% to growth and 70% to level of service, to give a revised total budget of $811,000 for the Gladstone Road to Pegasus WTP raw water main.

7.4 **ANZAC Day Services 2018 – Edwina Cordwell (Governance Adviser)**

61-63

RECOMMENDATION

THAT the Woodend-Sefton Community Board:

(a) **Receives** report No. 180326032222.

(b) **Appoints** Board member(s) ……. to lay a wreath on behalf of the Board at the Sefton Cenotaph at the ANZAC Day service on Tuesday 24 April 2018 in the Sefton Domain.

(c) **Appoints** Board member(s) …….to attend the ANZAC Day service on Tuesday 24 April 2018 at the Woodend Community Centre, in conjunction with the Council representative.

OR

(d) **Appoints** Board member(s) …….to attend the ANZAC Day service on Tuesday 24 April 2018 at the Woodend Community Centre and to lay a wreath on behalf of the Board.

8 CORRESPONDENCE

Nil.

9 CHAIRPERSON'S REPORT

9.1 **Chairperson's Report for March- 2018**

64

RECOMMENDATION

THAT the Woodend-Sefton Community Board:

(a) Receives report No. 180329034371.

10 MATTERS FOR INFORMATION

10.1 **Oxford-Ohoka Community Board meeting minutes – 8 March 2018** (Trim No. 180301021620).

10.2 **Rangiora-Ashley Community Board meeting minutes –14 March 2018** (Trim No. 180307023947**).**

10.3 **Kaiapoi-Tuahiwi Community Board meeting minutes –19 February 2018** (Trim No. 180214015060**).**

10.4 **Youth Council meeting minutes – 27 February 2018**

10.5 **Lees Road and Barkers, Kaiapoi Road Speed Limit** Report to Council 6 March 2018 (Trim No. 180115002738).

10.6 **Update on the Management of Council Wastewater Treatment Plants** Report to Council 20 March 2018 (Trim No. 180301021693)

10.7 **Library Update** Report to Community and Recreation Committee 27 March 2018 (Trim No. 180316028214).

10.8 **ANZAC Day Services 2018** Report to Council 3 April 2018 (Trim No. 180321030283).

RECOMMENDATION

THAT the Woodend-Sefton Community Board receives the information in items 10.1-10.8.

Note: Matters for Information were circulated to members separately.

11 MEMBERS' INFORMATION EXCHANGE

11.1 **March Diary for R Mather** (Trim No. 180404035365)

65

12 CONSULTATION PROJECTS

Draft 2018-28 Long Term Plan –

Consultation Friday 9 March to Monday 9 April 2018.

http://www.waimakariri.govt.nz/have-a-say/lets-talk/consultations/lets-talk-about-the-long-term-plan-2018-2028

13 FOSTERING COMMUNITIES

14 REGENERATION PROJECTS

14.1 Town Centres, Woodend-Pegasus

Updates on the Woodend-Pegasus area projects are emailed regularly to Board members. These updates can be located using the link below:

http://www.waimakariri.govt.nz/your-council/district-development/woodend-pegasus-development

15 BOARD FUNDING UPDATE

15.1 Board Discretionary Grant

Balance as at 9 April 2018: $1,635.97.

15.2 General Landscaping Fund

Balance as at 9 April 2018 $10,533.

16 MEDIA ITEMS

17 QUESTIONS UNDER STANDING ORDERS

18 URGENT GENERAL BUSINESS UNDER STANDING ORDERS

NEXT MEETING

The next meeting of the Woodend-Sefton Community Board is scheduled for 7pm, Monday 14 May 2018 at the Woodend Community Centre.

Workshop

- *Feedback on the Public Spaces Policy (Business Zones) Advisory Group – Andrea Allen*
- *Members Forum*

MINUTES OF THE MEETING OF THE WOODEND-SEFTON COMMUNITY BOARD HELD IN THE WOODEND COMMUNITY CENTRE, SCHOOL ROAD, WOODEND ON MONDAY 12 MARCH 2018 AT 7.00PM.

PRESENT

S Powell (Chairperson), A Thompson (Deputy Chair), A Allen, J Archer, A Blackie, R Mather and J Meyer.

IN ATTENDANCE

C Sargison (Community and Recreation Manager), Grant Stephens (Greenspace Community Engagement Officer) and E Stubbs (Minutes Secretary).

Two members of the public were in attendance.

The meeting adjourned for a workshop from 7.32pm to 8.05pm.

1 APOLOGIES

Nil.

2 CONFLICTS OF INTEREST

Nil.

3 CONFIRMATION MINUTES

3.1 **Minutes of the Woodend-Sefton Community Board – February 2018**

Moved J Archer seconded R Mather

THAT the Woodend-Sefton Community Board:

(a) **Confirms** the circulated minutes of the Woodend-Sefton Community Board meeting, held 12 February 2018, as a true and accurate record.

(b) **Confirms** the circulated minutes of the Woodend-Sefton Extraordinary Community Board meeting, held 26 February 2018, as a true and accurate record.

CARRIED

S Powell thanked A Thompson for chairing the Extraordinary meeting in her absence.

4 MATTERS ARISING

Nil.

5 DEPUTATIONS AND PRESENTATIONS FROM THE COMMUNITY

5.1 C Sargison introduced Michael Sharpe and Rosie Oliver from the North Canterbury Sport and Recreation Trust (NCSRT) who spoke to the Board about the Trust and the proposed Multi Use Sports Facility. They showed a video presentation that highlighted the benefits of the stadium and types of activities that could happen in the building including; netball, basketball, futsal, badminton, volleyball, archery tag, indoor bowls, roller derby, table tennis, korfball, dodgeball, handball, gymnastics and tumbling, group fitness, fitness centre, community use, cultural events, corporate events and civil defence. R

Oliver noted that the activities available were greater as the community became more diversified.

It was highlighted that the building was designed for future expansion. It would be facilitated by NCSRT.

R Oliver commented that there were different perceptions of the NCSRT in the community. She explained that the Trust was an umbrella organisation to deliver sport in the area, which included from grass roots to elite athletes. They were in schools every day delivering programmes to all 29 schools in the Waimakariri District. They provided school holiday programmes and swimming lessons. There were four gyms in the area, which were the main source of revenue for the Trust. They provided ten scholarships per year for athletes who had made it to the elite level but were not being funded; four previous recipients were competing at this year's Commonwealth Games.

R Oliver explained that they were constantly being asked for indoor space and she noted that the Community Centre in Woodend was highly used. The stadium would provide a venue to host and deliver more to the growing community. She noted that many in the community, particularly the elderly did not want to drive to Christchurch for activities.

A Thompson thought the stadium was a very good idea and was supportive. He noted the establishment of Saxton Fields in Nelson and what a fantastic asset it was to Nelson, Stoke and Richmond. He believed the co-location would prove most beneficial, it would cost more and not be as well utilised if spread across the district.

J Archer asked whom the facility was for? Residents of Woodend, Pegasus and Kaiapoi would have to travel quite a distance to the facility. He asked how they would train to be fit and suggested there needed to be satellite-training areas. He could not see young people going from Woodend to train in Rangiora. He believed only the elite could afford to go, and as such, it did not service the youth of satellite towns.

C Sargison commented they were good points raised. Council had spent time looking at the options and could only afford one stadium. An Indoor Court working party had been set up at the time to analyse many different locations across the district and ranked as to preferred site. He noted the success of Dudley Park pool where the same concerns had been raised. Working with NCSRT, and Mainpower as sponsor had enabled schools across North Canterbury to receive lessons for $1.50 per student. He noted that the students across North Canterbury travelled to Dudley for 'learn to swim' lessons also. Currently parents of children playing basketball were required to travel to 8 different venues.

R Oliver advised that following the earthquakes parents did not like children to travel into Christchurch for school sport. In response to that, the Trust had set up a primary school sports programme which initially had 37 teams and had grown to 196 teams. Currently those children could only play outdoor sports. She noted that the programme had been driven by the schools; it had not been instigated by the Trust.

J Archer asked if they expected elderly to drive from Woodend for an exercise class. M Sharpe commented that there were two aspects. Firstly fitness – they had fitness centres in Kaiapoi, Amberley and Oxford for those residents. However for competition sport, large spaces were required. A big hub was required as well as the small facilities. He took the example of hockey where previously all teams had had to travel to Christchurch each week, now they had the opportunity for both home and away games.

S Powell asked in regard to the balance of usage through the day as there would be high demand on weekends and evening. M Sharpe noted there could be multiple activities during the day including indoor bowls and toddler groups.

A Allen thought the stadium was a wonderful idea, however she acknowledged the transport concerns and questioned if there had been discussions around how children could travel to the venue. C Sargison advised that there had been initial discussions however if approved the venue would not open until late 2020. ECan bus routes were constantly under review. Discussions could also be held with regard to Mainpower sponsorship to run buses for school teams, and with the North Canterbury Minibus Trust.

C Sargison commented that the stadium was designed to be complementary to existing facilities – he did not see those classes vanishing.

S Powell asked about the expense of running/operating costs and C Sargison advised that the model would be for Council to build the stadium and the NCSRT would operate on behalf of the community and also pay rent to the Council for the building. The concept was currently being worked through, however rates would not pay for operating costs.

A Blackie referred to the tabled Frequently Asked Questions booklet and asked why the $91 a year figure on rates was not included. C Sargison advised that the publication was complementary to other LTP publicity (which included the $91 figure) and had answers to supplementary questions.

6 ADJOURNED BUSINESS

Nil.

The meeting adjourned for a workshop from 7.32pm to 8.05pm.

7 REPORTS

7.1 Adoption of Community Board Standing Orders – Edwina Cordwell (Governance Adviser)

C Sargison spoke to the report. Council had adopted a revised set of Standing Orders. Community Boards were now being asked to consider an equivalent set for adoption. Technically boards could have different Standing Orders to those of the Council however any changes would need to be assessed against legislation.

J Archer asked how close the proposed Standing Orders were to the Local Government New Zealand version and C Sargison replied that these had been the basis for the proposed Standing Orders.

Moved A Blackie seconded R Mather

THAT the Woodend-Sefton Community Board:

(a) **Receives** report No. 180130008516.

(b) **Adopts** the Draft Waimakariri District Council Community Boards' Standing Orders (Trim 180124006310) effective from 20 March 2018.

CARRIED

A Blackie was happy to see the Standing Orders adopted.

R Mather liked that they were written in plain English and S Powell agreed.

7.2 Northern Pegasus Bay Advisory Group Membership – Chris Brown (Greenspace Manager)

S Powell commented that the group was important to the community that it represented and requested that the Board appointed representative provide regular updates to the Board on the work of the Advisory Group. C Sargison

commented that was the intention. A Blackie noted he was the Chair and J Archer was the Woodend Residents Association representative so the Board would have good coverage.

Moved R Mather seconded A Blackie

THAT the Woodend-Sefton Community Board:

(a) **Receives** report No. 180223019193.

(b) **Approves** Board member A Thompson to represent the Woodend - Sefton Community Board on the Northern Pegasus Bay Advisory Group.

CARRIED

7.3 **Application to the Woodend-Sefton Community Board Discretionary Grants 2017-2018 – Edwina Cordwell (Governance Adviser)**

Moved J Archer seconded A Blackie

THAT the Woodend-Sefton Community Board:

(a) **Receives** report No. 180222019062.

(b) **Approves** a grant of $500 to Waimakariri Arts Trust-Kaiapoi Art Expo towards running costs associated with the Kaiapoi Art Expo and Schools' Art Expo, particularly advertising in the North Canterbury News and the provision of music.

J Archer commented that he attended the event every year and was amazed by the number of people who attended from all over North Canterbury.

A Blackie commented that it was a great project every year and he believed it was a 'no brainer'.

Amendment

Moved R Mather seconded A Allen

THAT the Woodend-Sefton Community Board:

(a) **Receives** report No. 180222019062.

(b) **Approves** a grant of $300 to Waimakariri Arts Trust-Kaiapoi Art Expo towards running costs associated with the Kaiapoi Art Expo and Schools' Art Expo, particularly advertising in the North Canterbury News and the provision of music.

CARRIED

R Mather commented on the 15% attendance from the Woodend Sefton Ward and suggested on that basis there be a $300 grant approved. She noted that $300 had also been approved for the previous year.

A Allen provided feedback to the applicant commenting it was obviously a generic application to all the Community Boards and suggested effort be made to make applications to individual boards more relevant and unique.

S Powell commented that she believed $500 would be of more assistance to a local community group than the Kaiapoi Art Expo and she would not like the Arts Trust to see it as an annual contribution.

8 CORRESPONDENCE

S Powell tabled correspondence from V Spittal (Senior Policy Advisor) regarding the summary outcome from the submission process for the draft Northern Pegasus Bay Bylaw Implementation Plan (Trim 180309025187).

Moved J Meyer seconded Archer

THAT the Woodend-Sefton Community Board:

(a) **Notes** the letter to Safe Roads, NZTA regarding the proposed Ashley to Belfast Safety Improvements (Trim 180226019900).

CARRIED

9 CHAIRPERSON'S REPORT

9.1 Chairperson's Report for February-March 2018

- Attended Waimakariri Access Group meeting and noted it was a very proactive group with good support from staff. J Meyer concurred with observations.
- Advised she was following up on resident's issues.

10 MATTERS FOR INFORMATION

10.1 **Oxford-Ohoka Community Board meeting minutes –8 February 2018** (Trim No. 180201009687**).**

10.2 **Rangiora-Ashley Community Board meeting minutes –14 February 2018 (Trim No.** 180208012097**).**

10.3 **Youth Council meeting minutes – 28 November 2017** (Trim No. 180115002480)

10.4 **Risk Assessment and Financing Strategy relating to Major Natural Disasters** Report to Council 30 January 2018 (Trim No. 180112002169).

10.5 **Multi Use Sports Facility** Report to Council 30 January 2018 (Trim No. 180118003759).

10.6 **Herbicide, Glyphosate use for Waimakariri District Council weed control operations** Report to Council 30 January 2018 (Trim No. 180111001840).

10.7 **Additional Business and Centres Unit Resource** Report to Council 30 January 2018 (Trim No. 180109001129)

10.8 **Community Facilities Provision** Report to Council 30 January 2018 (Trim No. 171026115830)

10.9 **China Sister City Visit to Enshi & Establishment of an Advisory Group** Report to Council 7 February 2018 (Trim No. 180117003619)

10.10 **Capital Projects Report for the period ended 31 December 2017** Report to Audit and Risk Committee 13 February 2018 (Trim No. 180117003619)

10.11 **Library Update** Report to Community and Recreation Committee 13 February 2018 (Trim No. 180201010087)

Moved A Blackie seconded J Meyer

THAT the Woodend-Sefton Community Board receives the information in items 10.1-10.11.

CARRIED

11 MEMBERS' INFORMATION EXCHANGE

February/March Diary for R Mather, J Archer and A Thompson (Trim No. 180305022812)

11.1 J Archer

- Ongoing process to put information together regarding molluscs on beach.

11.2 **R Mather**

- Noted Easter Extravaganza for LTP and commented she would like to see an event in Woodend.
- Had contacted Council regarding painting yellow lines – the answer had been no.

11.3 **J Meyer**

- Attended opening of Passchendaele Walkway and noted it was already busy.
- Council was very busy with LTP and District Plan.

11.4 **A Blackie**

- Council had named the Rangiora-Woodend Cycleway the Rangiora-Woodend Path.
- Advised B Rice (Senior Transport Engineer) had had a workshop with Kaiapoi-Tuahiwi Community Board (KTCB) regarding speed limit issues and generally, that the KTCB was supportive of the discussions of the Woodend-Sefton Community Board. They were happy for this board to take the lead on speed limit consultation. A report would come back.

11.5 **A Thompson**

- Attended All Boards Briefing and was interested in the NZTA presentation highlighting the NZTA speed limit assessment and national trends.
- Noted that a group from Waikuku Beach was meeting on Thursday night to discuss water and drainage issues. They had contacted a number of people including Matt Doocey (MP). C Sargison advised that the Council had become aware of the meeting that morning and were trying to arrange for staff to attend, however, there were already a number of meetings scheduled for that evening.

11.6 **A Allen**

- Attended North Canterbury Neighbourhood Support meeting. People joining were not getting the attention they need and so an administration person would be hired. A job description was currently being put together.

12 CONSULTATION PROJECTS

The upcoming events for LTP consultation were noted. C Sargison advised that it was difficult to get a suitable booking in the Woodend Community Centre to use it as a venue.

13 FOSTERING COMMUNITIES

14 REGENERATION PROJECTS

14.1 **Town Centres, Woodend-Pegasus**

Updates on the Woodend-Pegasus area projects are emailed regularly to Board members. These updates can be located using the link below:

http://www.waimakariri.govt.nz/your-council/district-development/woodend-pegasus-development

15 BOARD FUNDING UPDATE

15.1 **Board Discretionary Grant**

Balance as at 8 March 2018: $1,935.97.

15.2 **General Landscaping Fund**

Balance as at 8 March 2018 $10,533.

16 MEDIA ITEMS

17 QUESTIONS UNDER STANDING ORDERS

18 URGENT GENERAL BUSINESS UNDER STANDING ORDERS

NEXT MEETING

The next meeting of the Woodend-Sefton Community Board is scheduled for 7pm, Monday 9 April 2018 at the Pegasus Community Centre.

THERE BEING NO FURTHER BUSINESS, THE MEETING WAS CLOSED AT 8.42pm

CONFIRMED

_____

Chairperson

_____

Date

Workshop – 7.06pm – 7.54pm.

1. *General Landscaping Fund Workshop: Grant Stephens (Greenspace Community Engagement Officer)*
   - *A number of potential General Landscaping projects raised.*
   - *Report requested on General Landscaping projects for Sefton and strategy for welcome signs.*
   - *General Community and Greenspace update and questions*

WAIMAKARIRI DISTRICT COUNCIL

REPORT FOR DECISION

FILE NO and TRIM NO:	RDG-32-67 / 180306023458
REPORT TO:	Woodend – Sefton Community Board
DATE OF MEETING:	9 April 2018
FROM:	Kieran Straw – Civil Project Team Leader
SUBJECT:	Gladstone Road Cycleway
SIGNED BY: **(for Reports to Council, Committees or Boards)**	Department Manager / Chief Executive

1. SUMMARY

1.1 The purpose of this report is to update the community board with the progress of the project, and to provide options for discussion so that the community board can make a decision as to which option to proceed with.

Attachments:

i. District Plan Map No. 129 (Trim 180328033535)
ii. Site Location Map (Trim 180404035447)

2. RECOMMENDATION

THAT the Woodend – Sefton Community Board recommends:

THAT the Utilities and Roading Committee:

(a) **Receives** report No. 180308023458.

(b) **Approves** Option One, the high level of service path, 2.3m wide surfaced with asphalt.

(c) **Notes** that 750m of the 950m length of the path will become redundant at the time the future Woodend Bypass is constructed

(d) **Notes** that the Bypass is unlikely to be constructed for at least ten years.

3. BACKGROUND

3.1. Council has allocated a budget of $300,000 for the design and construction of a new shared path this current financial year.

The proposed path is approximately 950m in length, and is intended to be constructed at 2.3m wide, surfaced with asphalt.

To date, the project has been scoped and an initial issues / options report was written for the Client. This report highlighted two potential issues to overcome to progress the construction of the new cycleway. Those issues are discussed in the next section, and are as follows:

- Approximately 740m of the 950m length of the shared cycleway is within the NZTA designation for the Woodend Bypass Project.
- The preferred option requires a 5.0m strip of land to be purchased from No. 129 Gladstone Road.

3.2. Enabling works is due to commence at No. 145 Gladstone Road where the existing fence line and paddocks are occupying road reserve. To construct a cycle path in this vicinity, the existing Polar hedge, and boundary fencing will need to be removed, and relocated to the legal property boundary.

Quotations have been sought to carry out the following works associated with this property:

- Establish and mark the legal boundary
- Construct a new fence on the legal property boundary
- Remove the existing Poplar hedge
- Plant a new Poplar hedge on the legal property boundary

4. ISSUES AND OPTIONS

4.1. NZTA Designation

The proposed Woodend Bypass project crosses Gladstone Road through the eastern portion of No. 145 Gladstone Road, approximately 500m into the 950m site. In addition to this, NZTA are planning on constructing an over bridge on Gladstone Road, that crosses the proposed bypass. The earthworks for proposed overbridge extend from 160m beyond Petries Road to 900m beyond Petries Road (near Gladstone Park).

This means that 740m of the proposed shared path sits within the NZTA designation, and will become redundant with the construction of the proposed overbridge.

NZTA have indicated that there is no funding in the current 10 year LTP for the by-pass project, and it is unlikely to be accelerated.

Any shared path facility shall be constructed with the knowledge that the likely lifecycle of the asset is significantly less than what is expected due to the requirement to construct an overbridge in the future.

Please refer to Attachment i. District Plan Map No. 129 for a visual representation of the NZTA designation on Gladstone Road between Petries Road, and Gladstone Park.

4.1.1. Options

Given that the path is not likely to be a long term option, consideration should be given to the Level of Service that the shared path is to provide over the next 10 years. The following options have been provided for discussion, with the decision to be made by the Woodend – Sefton Community Board at their upcoming meeting on 10 April 2018

- Option One: High Level of Service

  The project was initially to have a high level of service, achieved by constructing the path at 2.5m, with an asphalt surface.

  Due to budget constraints, the path is now proposed to be constructed at 2.3m wide, the narrowest acceptable shared path width.

Note that some “pinch points” along the length of the path will remain due to the width of the path, and the high cost of removing the obstruction (e.g. overhead lines poles)

This option is the recommended option as the path is likely to be used for 10 years and provides a good level of service with minimal ongoing maintenance costs.

- Option Two: Reduced Level of Service

  Public perception may be against the concept of constructing the shared path to a high level of service if there is a risk that it will become obsolete in 10 years. A reduced level of service that still provides an off-road link to pedestrians and cyclists can still be achieved by providing a 2.0m unsealed shared path. The reduction in width also minimises the severity, and the number of “pinch points” along the length of the path.

  This option provides an adequate level of service, but is not desirable for members of the community who may be elderly, or disabled. The existing cycle path between Kaiapoi and Pines Beach is constructed to this level of service.

- Option Three: Defer the Project

  There is an option to do nothing until after NZTA has constructed the proposed over bridge. NZTA plans show that the proposed overbridge includes provision for a 3.0m shared path on the bridge. The initial concept plans show this path on the northern side of the bridge, but this is not confirmed.

  This option is not recommended as 10 years is a long time without any off-road links between Woodend and Pegasus.

4.2. Existing Road Corridor Width

The existing road reserve width east of Petries Road is just 10.m wide for a distance of 160m. This width is not sufficient to install a shared off-road path without the need to carry out significant enabling works, such as undergrounding the existing overhead lines, and installing kerb and channel to provide vertical separation.

The road reserve remains at 10m wide across the frontage of No. 129 Gladstone Road, before widening to 15m at No. 145 Gladstone Road.

Council staff are proceeding with negotiations to purchase this land.

It is important to note that this section of road corridor falls outside the NZTA designation for the proposed by-pass and will not be affected by any future works.

4.3. The Management Team have reviewed this report and support the recommendations.

5. COMMUNITY VIEWS

5.1. Groups and Organisations

This project is supported by both the Pegasus Residents Group, and the Woodend Community Association. It benefits both groups by providing an off road walkway / cycle link between Gladstone Park, and Woodend (Petries Road)

5.2. Wider Community

This project is of benefit to the immediate communities rather than the wider community.

6. IMPLICATIONS AND RISKS

6.1. Financial Implications

There is a budget of $300,000 to complete the project this financial year. All going well, the project could be completed this financial year without need to carry funding over to the 2018 /2019 financial year.

The current high-level estimates for each of the options described in section 3 is as follows:

Council staff will need to continue to engineer the design to ensure that the construction costs fit within the budget, as there is only a 7.5% contingency in the estimate below:

	Option One *2.3m Asphalt Path*	*Option Two* *2.0m Unsealed Path*
Total Estimated Cost	***$299,493.69***	***$236,257.49***

6.2. Community Implications

There is no negative implications on the community associated with this project.

6.3. Risk Management

The Woodend – Sefton Community Board is being asked to consider the options raised in section 4.1 of this report in regards to the level of service they wish to accept with the knowledge that this site is subject to a NZTA designation for the proposed Woodend By-pass project.

6.4. Health and Safety

This project is still in the design phase, and will be subject to a full safety audit, and safety in design review process.

In order to ensure the project sits within the existing budget, it is proposed that a single Safety Audit be carried out. This may be either during the design phase, or post construction, but not both.

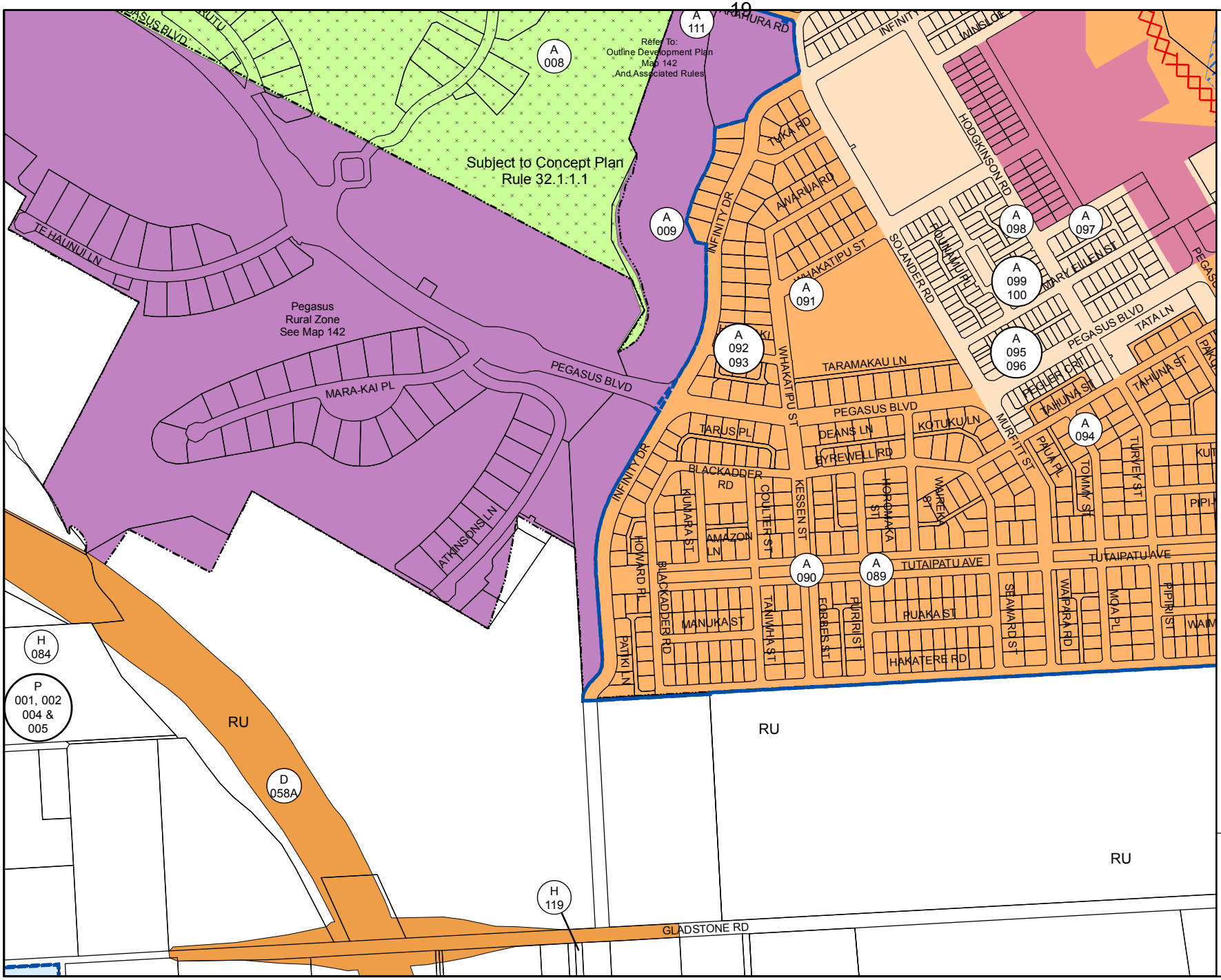
7. CONTEXT

7.1. Policy

This matter is not a matter of significance in terms of the Council's Significance and Engagement Policy.

7.2. Community Outcomes

- The accessibility of community and recreation facilities meets the changing needs of our community.
- There are wide-ranging opportunities for people of different ages, abilities and cultures to participate in community life and recreational activities.
- The centres of our towns are safe, convenient and attractive places to visit and do business.
- Our rural areas retain their amenity and character.



WAIMAKARIRI DISTRICT COUNCIL

NOTE:
Disclaimer - refer to map legend sheet.

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Pegasus

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1/07/2016

WAIMAKARIRI DISTRICT COUNCIL

ISSUE	AMENDMENT	APPD.	DATE
A			

	NAME	DATE
SURVEYED	-	-
DESIGNED	-	-
DRAWN	KS	04 2018
CHECKED	-	-
RECOMMENDED	-	-

ORIGIN OF LEVELS: LYTTELTON 1937 MSL

ORIGIN OF COORDINATES: NZTM

SCALES 1:2500 @A3

PLAN	1:2500
DETAILS	-
LONG SECT hor.	-
LONG SECT vert.	-
REFERENCE	FB: - LB: -

PROJECT TITLE: GLADSTONE ROAD CYCLEWAY

SHEET TITLE: GLADSTONE ROAD CYCLEWAY PROPOSED PLAN

PROJECT No.	PD001209
FILE No.	CON201733
SHEET No.	01
PLAN No.	3900
ISSUE	Ⓐ B C D E F

A3

PLOT DATE: 04/04/2018 FILE: S:\PDU\PDU JOBS\PD001200-1299\PD001209 GLADSTONE ROAD CYCLEWAY\07 DRAWINGS\REPORT ATTACHEMNT.DWG

WAIMAKARIRI DISTRICT COUNCIL

REPORT FOR DECISION

FILE NO and TRIM NO:	WAT-05-23-02-03 / 180323031876
REPORT TO:	Woodend-Sefton Community Board
DATE OF MEETING:	9 April 2018
FROM:	Colin Roxburgh, Water Asset Manager Kalley Simpson, 3 Waters Manager
SUBJECT:	Bramleys Road Well Viability Assessment

SIGNED BY:
(for Reports to Council, Committees or Boards)

Department Manager | Chief Executive

1. SUMMARY

1.1. This report is to update the Woodend-Sefton Community Board with investigations into the feasibility of connecting the Bramleys Road well to the Woodend-Pegasus water supply scheme. Note that a similar update report will be presented to the Kaiapoi-Tuahiwi Community Board meeting on the 16 April 2018.

1.2. A number of potential benefits were originally identified with the Bramleys Road well. These are listed below, as well as a summary of other developments and investigation outcomes that have occurred since the project conception.

1.3. It was originally assumed that the well could achieve a yield in the order of 20 – 30 L/s based on the previous testing in order to provide additional capacity for the Woodend-Pegasus scheme in the future.

1.4. It has been since identified that there would be a significant number of affected bore owners that would make it very challenging to gain a consent to take the required volume of water from this well.

1.5. It was previously thought that the well could be used without any treatment based on its location and depth.

1.6. Further analysis on the well, in addition to the Havelock North Drinking Water Inquiry Stage 2 Report recommendations, indicate that the well would likely require treatment for bacteria, protozoa, and some form of treatment to reduce biofilm growth (either chlorination, filtration or both).

1.7. Based on the findings of the report, the Bramleys Road well is no longer considered a viable additional source for the Woodend Pegasus water supply scheme.

2. RECOMMENDATION

THAT the Woodend-Sefton Community Board recommends:

THAT the Council:

(a) **Receives** report No. 180323031876.

(b) **Notes** that previously it was expected that water of a suitable quality and quantity could be abstracted from the Bramleys Road well to be distributed to the Woodend Pegasus water supply scheme, via Tuahiwi, without any treatment.

(c) **Notes** that the Bramleys Road well is no longer considered to be a viable future source for the scheme, as the water source would likely require significant treatment and gaining consent to abstract water from the well would be very difficult.

(d) **Notes** that some Tuahiwi residents opposed the joining of the scheme with Pegasus for cultural reasons, and that the future connection of the Bramleys Road well would have potentially mitigated these concerns.

(e) **Notes** that staff will write to the local Runanga and discuss this matter at the next Runanga meeting on the 17 May 2018, to advise them of the reasons that this well is no longer considered to be a viable future source.

(f) **Approves** the replacement of the $2.2M capital works budget in 2022/23 and 2023/24 to connect the Bramleys Road well, with a $0.5M capital works budget in 2023/24 to connect the EQ4 well to provide additional capacity on the Woodend Pegasus water supply scheme.

3. BACKGROUND

3.1. In October 2016, the Council resolved to join the Woodend and Pegasus water supplies (refer to report 160927099778).

3.2. The Woodend, Tuahiwi and Pegasus communities were consulted on this, and the proposal to join the schemes was supported by 73% of those that submitted feedback.

3.3. There were some concerns raised by Tuahiwi residents that they did not want their water to pass through the Pegasus water treatment plant for cultural reasons (four submissions noted this as a concern).

3.4. A potential mitigation, to these concerns raised, was the potential connection of the Bramleys Road well, which is situated south-west of Tuahiwi. If this well was connected to the greater scheme, while this well was running, all of Tuahiwi's water would be sourced from this well and would not pass through the Pegasus water treatment plant.

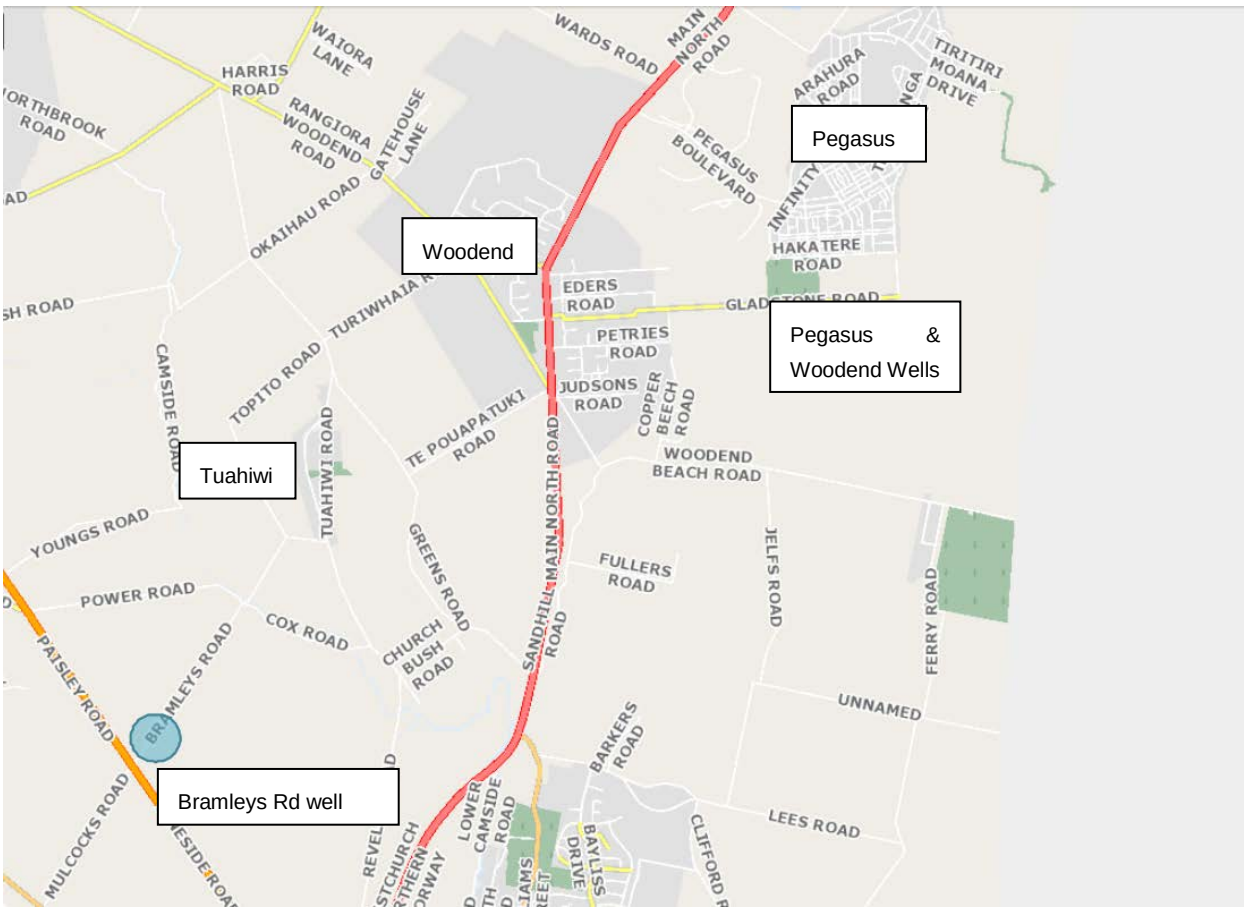


Figure 1: Location of Bramleys Road Well Relative to Tuahiwi, Woodend and Pegasus

3.5. Other benefits that were noted regarding the Bramleys Road well were:

- It would likely improve the water quality, as it was expected that this water would not require any additional treatment, and would not result in potential biofilm growth.
- It would potentially reduce treatment costs (as it was assumed that this water would not require treatment)
- It would offset potential future reservoir upgrades (as this water would not pass through a reservoir).
- It would offset potential future surface pump upgrades (as this water would not need to be pumped other than at the well site).

3.6. It was noted in the report to Council that while there were significant potential benefits associated with the Bramleys Road well, there would be a significant cost in forming the connection. It was noted that it was likely that the Bramleys Road well would be connected if the yield achievable from the well was sufficient to justify the cost.

3.7. Based on the above, a budget to bring that Bramleys Road well online was included in the 2017/18 Annual Plan in the year 2021/22 to the value of $1,600,000.

3.8. Upon re-assessing this budget as part of the 2018-28 draft Long Term Plan, it was increased to $2,200,000 based on the assumption that UV treatment would be needed at this source (following the Havelock North Stage 2 Inquiry Report). Although this was included in the draft Long Term Plan for a future year, it was intended that the viability of this source be investigated further prior to committing to the expenditure. The timing of the project was also changed to the 2022/23 and 2023/24 year at this point.

3.9. This subsequent re-evaluation of the viability of this source is covered within the Issues and Options section of this report.

4. ISSUES AND OPTIONS

4.1. The key items evaluated as part of this report to determine the viability of this source are:

- The quantity of water that could be abstracted from the well (taking into account potential consenting issues)
- The quality of water from the source both in terms of microbiological treatment and also aesthetic values (associated with potential biofilm growth).

Assessment of Amount that could be Abstracted from Bramleys Road Bore

4.2. The amount that could be abstracted from the well was assessed by Pattle Delamore Partners (PDP) from the pump test results. The key output from this assessment was to determine what flowrate could be abstracted from the well without causing unacceptable drawdown effects on existing private wells.

4.3. The results from PDP's analysis are summarised below in terms of the number of potentially affected bores at a range of flowrates. It is noted that affected bores is defined by Environment Canterbury (Ecan) as those where the proposed pumping rates contributes to the drawdown in the well to give a cumulative total drawdown of more than 20% of the total available drawdown (this makes them an affected party as part of a consent application). This way that this is assessed is summarised on Figure 2.

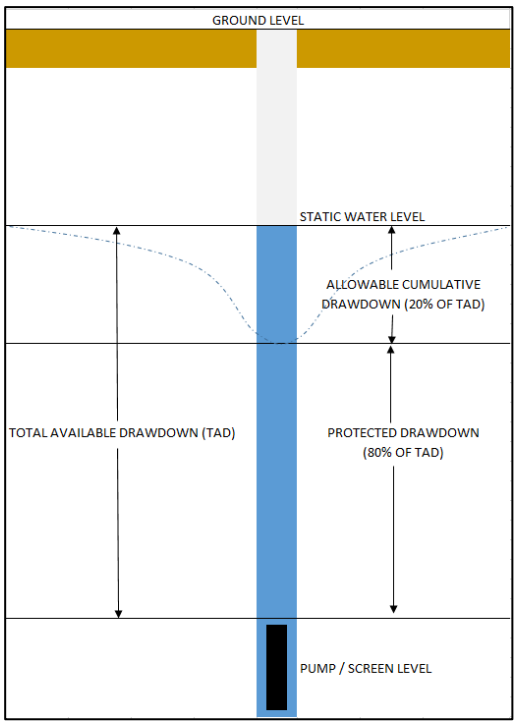


Figure 2: Diagrammatic Summary of how Drawdown is Assessed by Ecan

4.4. Table 1 summarises the number of affected bores at a range of flow rates.

Table 1: Summary of potentially affected bores due to pumping of Bramleys Road bore

Pumping rate (L/s)	Number of potentially affected bores	Additional Drawdown Caused by Council Bore (m)
5	35	0.5 – 1.4
10	43	1.0 – 2.8
20	48	2.1 – 5.5

4.5. The conclusion from the above is that it would be very challenging to gain a consent to take water from the well at the desired flow rate of 20 L/s, or even at a substantially reduced flowrate such as 5 L/s.

4.6. One of the key reasons for the large number of affected bore owners is that it was found that pumping of the Bramleys Road bore induced drawdown in shallow bores (as shallow as 26m deep), as well as deeper bores. If the effects had been limited to just deeper bores, the number of bores affected would be significantly less.

Assessment of Microbiological Compliance of Bore

4.7. Consideration was given to whether the Bramleys Road bore would comply with the Drinking-water Standards for New Zealand in terms of protozoal and bacterial compliance. It was originally assumed that under the current standards the bore water would be able to be deemed as a secure groundwater source, meaning that it would be able to be distributed with no treatment for bacteria or protozoa.

4.8. The findings from PDP indicate that it would be questionable whether the bore could be certified as secure under the current standards, given that it induced drawdown in bores as shallow as 26m below ground level. This indicates that the bore is hydraulically connected to the shallow aquifers, and potentially not free from risk of contamination from surface contaminants.

4.9. If the source was not able to be deemed to be secure, it would require treatment for bacteria and protozoa (such as UV disinfection).

4.10. Further to the above, the Havelock North Stage 2 Inquiry Report, that was released in December 2017, has recommended that the secure section of the current Drinking-water Standards be abolished. The interpretation therefore is that all drinking water would need to be treated for bacteria and protozoa.

4.11. Therefore, based on both the fact that the well is hydraulically linked to shallow aquifers, and the Havelock North Stage 2 Inquiry Report, the initial assumption that the bore water would be able to be distributed without treatment is unlikely to be accurate. It is considered far more likely that the water would have to be treated by UV disinfection as a minimum.

4.12. In addition to providing treatment for protozoa with UV disinfection, there is a reasonable likelihood that chlorination would be required to be added in the future as well. This is based on a further recommendation of the Havelock North Stage 2 Inquiry Report recommending that there be a residual disinfectant in all drinking water.

Assessment of Aesthetic Water Quality (and potential for biofilm growth)

4.13. Initial assessments of the chemical water quality data for the bore indicated it would be unlikely to result in biofilm growth within the Tuahiwi and Woodend reticulation if it were connected. This is because it was previously thought that the water was more similar to the water delivered to Rangiora and Kaiapoi compared to the water sources for Woodend and Pegasus which are treated to minimise biofilm growth.

4.14. A test was carried out in which the water from the Bramleys Road bore was passed through a clear canister to monitor biofilm growth over time. This data was compared to growth rates from treated Woodend water and Pegasus water.

4.15. The results from the test are shown on Figure 2 below. This showed a very high rate of growth of biofilm from this bore. The rate of biofilm growth was approximately 20 times greater than the rate of growth in the filtered Woodend water for example.

4.16. This high rate of biofilm growth would likely be reduced by UV treatment, but would still become a significant risk if this source was to be used. The only way in which this risk could be adequately managed would be through the implementation of chlorination of the water (in addition to UV treatment), and filtration such as at the Woodend and Pegasus treatment plants, or both.

Figure 3: Biofilm growth test on Bramleys Road well after growth of biofilm

Figure 4: Example of biofilm growth canister with no biofilm

Conclusion of Assessments

4.17. Based on the assessments carried out in terms of the flow that could be abstracted from the bore, the microbiological compliance of the bore water both with current standards and possible future standards, and also the potential for biofilm growth, it is no longer recommended that this bore be used.

4.18. A preferential option in order to provide future capacity to the Woodend-Pegasus water supply scheme would be to connect the Equestrian 4 (EQ4) well. This is a well that is drilled within the Pegasus well field, but was never completed as the developer for Pegasus achieved the yield they required from the existing three Equestrian wells that had already been drilled. The connection of the EQ4 well would have the advantages over the Bramleys Road well that:

4.18.1. This well is close to existing infrastructure and could easily be connected into the delivery main from the well field to the Pegasus water treatment plant.

4.18.2. By this well being easily able to be connected into the central treatment plant, it would not require a separate treatment system which would be required for the Bramleys Road bore.

4.18.3. There are unlikely to be significant issues gaining consent to take water from this well given that Council already holds consents to take water from a number of other wells in this area. It is likely that the consent that Council already holds could be modified to include this bore as well, rather than requiring a new consent.

4.19. The recommended option to provide additional capacity for the Woodend-Pegasus scheme is to provide allowance for the future connection of the EQ4 well as opposed to the Bramleys Road well. This will reduce the amount allowed for in the Long Term Plan from $2.2M to approximately $0.5M.

4.20. The Management Team have reviewed this report and support the recommendations.

5. COMMUNITY VIEWS

5.1. Groups and Organisations

5.2. It is noted that a similar update report will be presented to the Kaiapoi-Tuahiwi Community Board meeting on the 16 April 2018.

5.3. This issue will be of particular interest to the local Runanga. There were cultural concerns expressed with water that passes through Pegasus being distributed to Tuahiwi, and the potential future connection of the Bramleys Road well was seen as mitigating this issue.

5.4. A letter will be written to the Chairperson of Te Ngai Tuahuriri Runanga to advise them of the findings of the Bramleys Road well assessment and to provide a copy of this report. This also will be discussed with Runanga at their next meeting with Council staff on the 17 May 2018.

5.5. Residents with adjacent wells close to the Council's well on Bramleys Road have expressed their concerns that the Council well may have an adverse effect on their private wells.

5.6. Wider Community

5.7. The wider community was consulted on the project to join the Woodend and Pegasus water supplies in October 2016. The outcomes from this consultation are summarised on the Background section of this report. Of particular relevance is that four parties submitted that they had concerns about their water passing through the Pegasus water treatment plant, for which the Bramleys Road well connection was identified as a potential mitigation.

6. IMPLICATIONS AND RISKS

6.1. Financial Implications

6.2. It has been identified that by utilising the EQ4 well as opposed to the Bramleys Road well, the capital cost for the project to bring another source online could be reduced from $2.2M to $0.5M. This project is currently programmed for the 2022/23 and 2023/24 financial year. It is proposed that staff make a submission to the Long Term Plan to change this budget.

6.3. The reduction in budget above is calculated as reducing rates by approximately $30 per connection per year.

6.4. There is a future reservoir budget of $3.0M recommended in 2040 and a surface pump upgrade budget of $50,000 in 2038. These projects may be required to occur earlier based on the Bramleys Road project not going ahead. The reason being that by having a source that pumps directly into reticulation (such as what was proposed for Bramleys Road), the need for storage and surface pumping reduces.

6.5. How the timing of these future projects changes due to the Bramleys Road project not progressing will be modelled by the Network Planning Team prior to the next Annual Plan, however the changes are not expected to be significant.

6.6. **Community Implications**

6.7. There is a risk that the residents that opposed the joining of the schemes on grounds that they did not want the water supplied to Tuahiwi passing through Pegasus may be disappointed with the findings presented in this report. It is proposed that this be mitigated by conveying the reasons for the recommendations to the local Runanga.

6.8. **Risk Management**

6.9. The analysis that fed into this report identified a number of risks associated with the connection of the Bramleys Road source in terms of microbiological compliance with the Drinking-water Standards, as well as a risk of biofilm growth. The proposal to manage this risk is not to proceed with the connection of this well, and to instead connect the EQ4 well which could be treated centrally with the other sources for the scheme.

6.10. **Health and Safety**

6.11. There are no significant health and safety issues associated with this assessment.

7. CONTEXT

7.1. **Policy**

This matter is not a matter of significance in terms of the Council's Significance and Engagement Policy.

7.2. **Legislation**

7.3. Section 69 of the Health (Drinking Water) Amendment Act 2007 is relevant in this matter.

7.4. **Community Outcomes**

7.5. The following community outcomes are relevant in this matter:

- *There are wide ranging opportunities for people to contribute to the decision making that effects our District*
- *There is a safe environment for all*
- *Core utility services are provided in a timely and sustainable manner*
- *People have wide-ranging opportunities for learning and being informed*

7.6. **Delegations**

7.7. The Community Board, under deregulation 1041, has been kept informed on these matters so that they can be responsible for;

1. Representing, and acting as an advocate for, the interests of its community.

2. Maintaining an overview of services provided by the Council such as road works, water supply, sewerage, stormwater drainage, parks, recreational facilities, community activities, and traffic management projects within the community.

3. Communication with community organisations and special interest groups within the community.

WAIMAKARIRI DISTRICT COUNCIL

REPORT FOR DECISION

FILE NO and TRIM NO:	WAT-05-23-02-03 / 180322031093
REPORT TO:	Woodend-Sefton Community Board
DATE OF MEETING:	9 April 2018
FROM:	Alicia Klos, Project Engineer Colin Roxburgh, Water Asset Manager
SUBJECT:	Combining of Woodend and Pegasus Water Supplies - New Water Supply Main Concept Design

SIGNED BY:
(for Reports to Council, Committees or Boards)

Department Manager | Chief Executive

1. SUMMARY

1.1. The purpose of this report is to seek the Woodend-Sefton Community Board's endorsement of the recommended alignment of the new supply pipe from Gladstone Road to the Pegasus water treatment plant, particularly the section of pipe by Gladstone Park.

1.2. The new supply pipe is part of the project to join the Woodend and Pegasus water supplies and will deliver raw water from the wells on Gladstone Road to the Pegasus water treatment plant.

1.3. Following an options assessment there are two viable options for the Gladstone Park section of the project, these are as follows;

- Option 1 – alignment through the trees (within the road reserve)
- Option 2 – alignment through Gladstone Park (within greenspace reserve)

1.4. Key points to note for these options are as follows;

- Option 1 - constructing the pipe within the road reserve is generally the preferred long term option. However, for this option all of the large pine trees along the western side of Gladstone Park would need to be removed. This option is estimated to cost $61,000 more than Option 2.
- Option 2 - would run along the western side of the park through an easement, and work could be undertaken without affecting the playing surface of the rugby fields.

1.5. The Council's Greenspace team has taken these two options to the Gladstone Park Advisory Group. The Advisory Group's preferred option is Option 1, constructing the pipe through the trees (within the road reserve).

1.6. Council Staff support the Gladstone Park Advisory Group views, as in the medium to long term (10 – 15 years) this section of land will most likely be converted into a connector road

once the planned Woodend Bypass is constructed and for maintenance reasons it is preferred that any new 3 Waters infrastructure is constructed within a road reserve.

2. RECOMMENDATION

THAT the Woodend-Sefton Community Board recommends:

THAT the Utilities and Roading Committee:

(a) **Receives** report No. 180322031093.

(b) **Notes** that this project to install a new raw water pipe is part of the wider project to join the Woodend and Pegasus water schemes.

(c) **Notes** that design work is scheduled to be undertaken this financial year, 2017/18, and construction is scheduled to be completed next financial year, 2018/19.

(d) **Endorses** that the section of pipe immediately north of Gladstone Road be installed in the road reserve land, rather than through Gladstone Park.

(e) **Approves** the removal of the trees along the preferred route, in road reserve land.

(f) **Notes** that the recommended route is supported by the Gladstone Park Advisory Group.

(g) **Recommends** to Council that an additional capital works budget of $231,000 is included in the 2018/19 financial year, split 30% to growth and 70% to level of service, to give a revised total budget of $811,000 for the Gladstone Road to Pegasus WTP raw water main.

3. BACKGROUND

3.1. In 2016, following public consultation, the Council resolved to join the Woodend and Pegasus water supplies both physically and financially (TRIM reference No. 160927099778).

3.2. The planned joining of the Woodend and Pegasus water supplies generally involved the following.

1. Conversion of the existing chemical filter at Pegasus to a biological filter for the removal of manganese and iron (complete January 2018).

2. Divert all Woodend source wells to the new biological filter at Pegasus, via a new water supply pipeline (in progress - this report is part of this project)

3. Cease chlorination of the Pegasus water supply (to be assessed following Government decision on Havelock North Drinking Water Inquiry Stage 2 report).

4. Abandon the existing biological manganese removal filter at Chinnerys Road, Woodend (future project, 2018/19 financial year).

5. Pump treated water from the new central treatment plant at Pegasus to the Chinnerys Rd headworks by way of the existing Gladstone Road raw water main (future project, 2018/19 financial year).

6. Join the Woodend and Pegasus networks by way of a link main between Infinity Drive and the Ravenswood Development (future project, 2018/19 financial year).

New water supply pipeline

3.3. The next phase of the work is to construct a new raw water supply pipeline from Gladstone Road to the Pegasus WTP. The purpose of this new pipeline is to take both the Woodend (Gladstone Park wells) and Pegasus (Equestrian Park wells) raw water to the Pegasus water treatment plant for treatment.

3.1 This project has a budget of $80,000 for design and $500,000 to construct the new raw water pipeline. The construction budget is split $398,850 for level of service and $181,150 for growth.

3.2 Design work is scheduled to be undertaken this financial year, 2017/18, and construction is scheduled to be completed next financial year, 2018/19.

3.3 The existing Pegasus supply pipeline would be utilised to deliver water back to the existing Gladstone Road supply main (Woodend water supply's supply main), which would deliver treated water to the Woodend headworks.

3.4. The following figure presents the concept plan for this work.

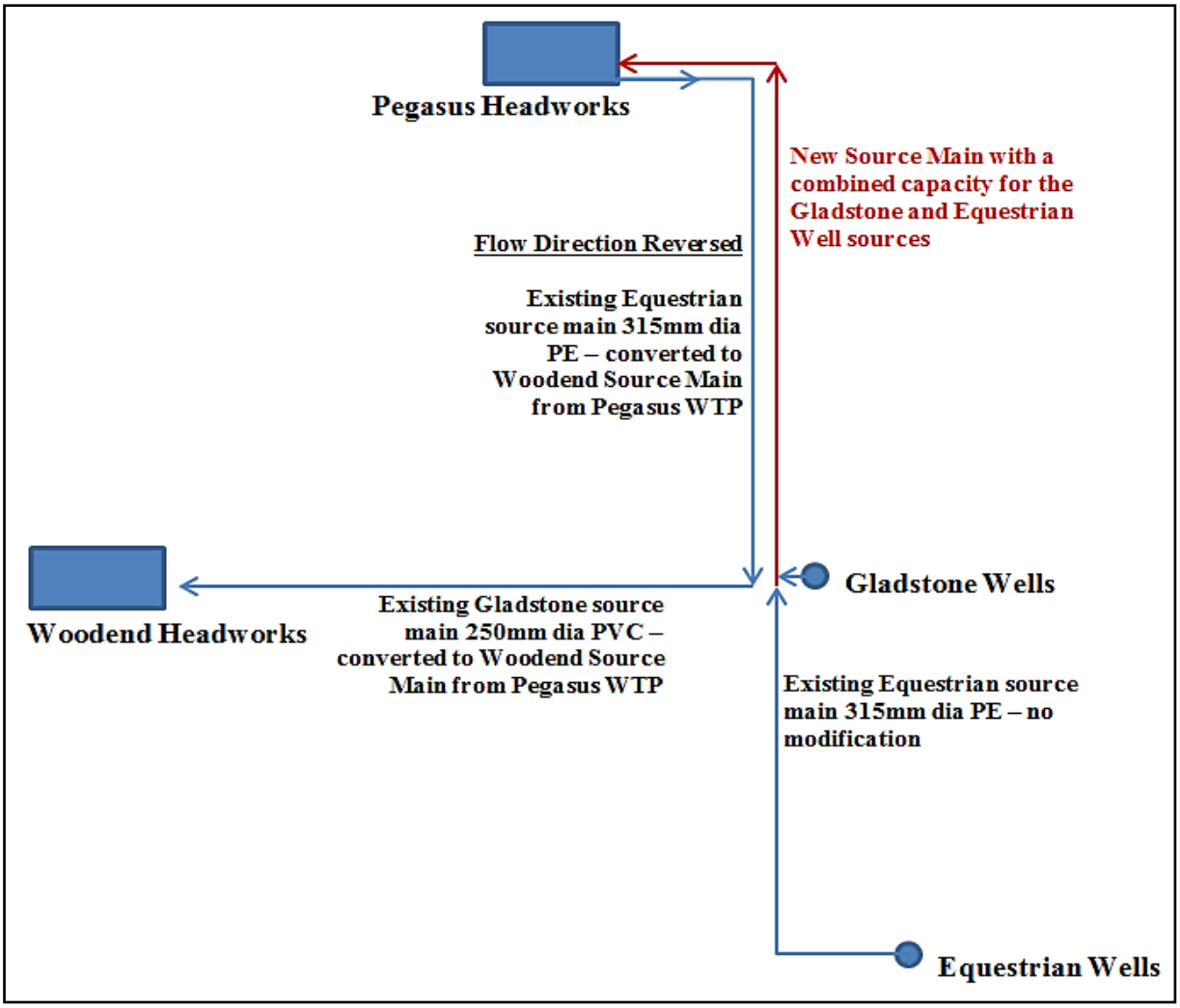


Figure 1: concept plan for joining the treatment of the Pegasus and Woodend water sources

3.4 Note that the existing Woodend filter is reaching the end of its useful life and will be decommissioned when this connection is made. The Pegasus water treatment plant will treat all Woodend and Pegasus water.

4. ISSUES AND OPTIONS

4.1. The new pipeline has been designed to be a 400mm diameter PN12.5 polyethylene (PE) main. This will connect into the existing (Gladstone Park and Equestrian Park) supply mains, from the wells, at Gladstone Road and take the supply water to the Pegasus water treatment plant for treatment.

4.2. Note that as part of this construction, connections will be made to utilise the existing 315mm diameter Pegasus supply pipeline to carry treated water from the Pegasus water treatment plant to the Gladstone Road Woodend supply pipeline.

4.3. This report discusses the findings from the conceptual design options assessment, refer to Appendix A for a summary of this assessment.

4.4. Several conceptual design options have been considered, and the majority of them have been dismissed for practicality and financial reasons. The concept design was split into two sections, the northern section and southern section. See Figure 2 for extents.

4.5. The northern section of the work, from the north side of Gladstone Park to the Pegasus water treatment plant, had one sensible pipe alignment. There are several options however for the southern section through Gladstone Park. Council staff are seeking the Woodend-Sefton Community Board's endorsement of the recommended route for this section.

4.6. The reason for the Board's involvement is that both options may be of some interest to the community that utilises the park. One option would involve excavation within the park, and the other would involve removal of the large pine tree wind break adjacent to the park.

4.7. The following figure shows the preferred pipe alignment options for the new pipeline from Gladstone Road to the Pegasus Water Treatment Plant.

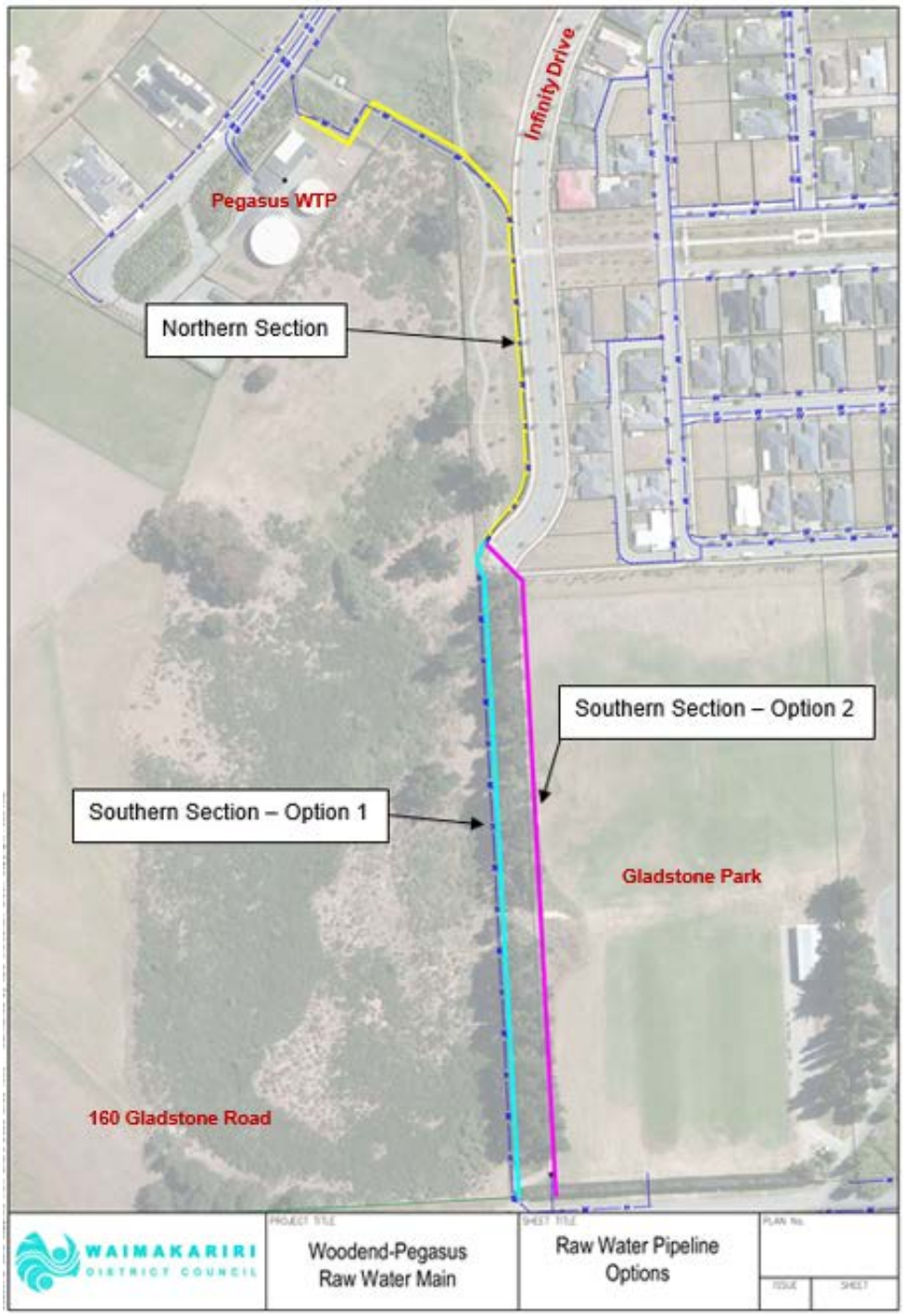


Figure 2: The preferred pipe alignment options for the new pipeline from Gladstone Road to the Pegasus WTP

Northern Section

4.8. Following an options assessment, the preferred alignment was selected for the northern section of the work. It follows the alignment of the existing supply main. The pipe will be trenched along the berm on the western side of the existing water supply pipe along infinity drive. It will then take an alignment to the north of the existing water supply pipe and then cross into the Pegasus water treatment plant. Refer to Appendix A for the full options assessment on the northern section.

4.9. This northern alignment is the most sensible alignment as it has lower reinstatement costs and is the only practical alignment available along most of the northern section of the works. It does however require obtaining an easement from Te Kohaka O Tuhaitara Trust.

4.10. The northern section of the works is estimated to cost approximately $350,000 including contingency and professional fees.

Southern Gladstone Park Section

4.11. The Gladstone Park section had several matters to consider for the options assessment:

4.11.1. There are live (in service) power, water and sewer mains running north-south along the western side of the trees. Due to the where these services are located there are no alignment options available west of the trees within the road reserve.

4.11.2. Drilling the new pipeline under the trees was considered but as it is a large diameter pipe it would mean the construction cost would be approximately double the cost of open trenching.

4.11.3. An alignment was considered west of the road reserve, however the land owner at 160 Gladstone Road does not want to sell land to the Council. Therefore an alignment along the west side of the road reserve is not viable.

4.11.4. In Gladstone Park, there is 8 metres between the newly planted trees and the rugby field. Therefore there would be enough space to install the new water pipe without damaging the rugby field. It is noted however there is still a risk the contractor may damage the field during construction.

4.11.5. The Council's Greenspace team were consulted on the matter of removing the trees. They commissioned Treetech to undertake an assessment to see if it would be possible to remove only some of the large pine trees (TRIM reference 180314027354, Appendix B). Treetech recommended that all of the large pine trees be removed, as the inner trees are weaker than the outer trees and may collapse in high winds if just the outer trees were removed. Therefore the cost estimates have allowed for all of the trees to be removed.

4.11.6. Removing all of these trees would mean that the park would no longer have a wind break from the western side. It is noted however that the Greenspace team have planted some smaller trees within Gladstone Park which will act as a windbreak in the future.

4.11.7. Through the trees the pipe would be installed with a cover of approximately 1m. It is noted that both a water and sewer main have been installed along this utilities reserve in the past, these needed to have both scour points and air vales installed to account for the uneven ground.

4.11.8. If the trees are removed the stumps would be ground down to ground level so that a mower could pass over them. The exception to this would be stumps near the pipe alignment, these would be removed entirely. This area would be reinstated with grass.

4.11.9. The large trees may also have some aesthetic and recreational values to the community.

4.11.10. Gladstone Park has a Fee Simple title, meaning an easement should be sought if the pipe were to be constructed through the Park. This would restrict future development of this area of the land (e.g. no building or planting over the pipe alignment).

4.11.11. Constructing the pipe within the road reserve is generally the preferred option over installing the pipe within a park. This is so that maintenance and repairs can be carried out without involving external stakeholders. Undertaking maintenance of the pipeline in the park in the future could lead to conflicts between recreation users of the field and could lead to the field becoming unusable for short periods.

4.11.12. Construction would need to be undertaken in summer if the pipe is installed on the park land, when rugby is not being played. This timing would impact the joining Woodend and Pegasus water supplies project's schedule.

Refer to Appendix A for the full options assessment.

4.12. Following the options assessment two viable options remain, these are as follows;

1. Option 1 – alignment through the trees (within the road reserve)
2. Option 2 – alignment through Gladstone Park (within Greenspace reserve)

4.13. The following figure shows a more detailed drawing of the Gladstone Park section pipe alignment options.

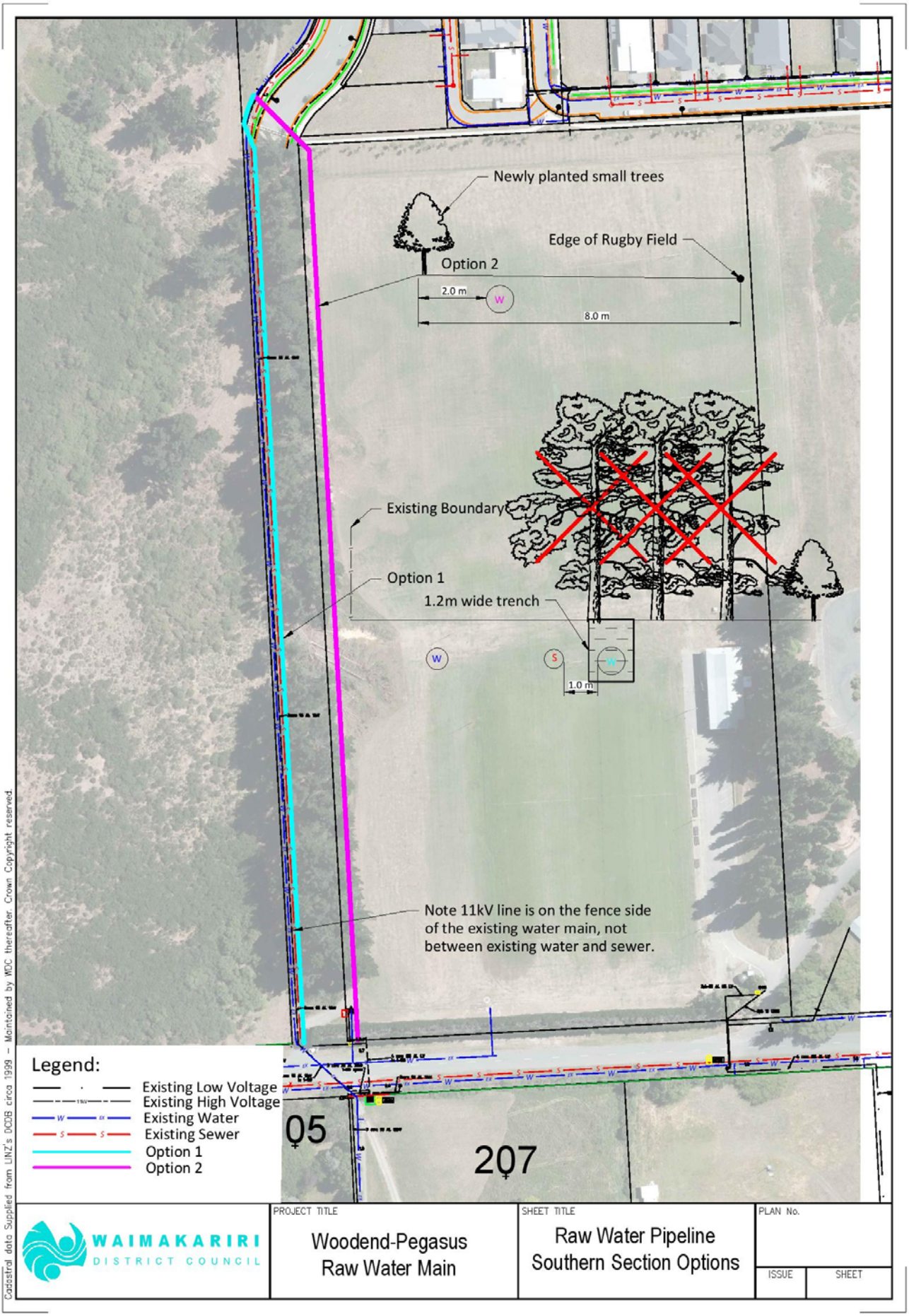


Figure 3: Detailed drawing of the Gladstone Park section pipe alignment options for the Southern Section.

4.14. The engineer's estimate for the options are as follows:

Option 1 (alignment though the trees) - $461,000

Option 2 (alignment though Gladstone park) - $400,000

4.15. The costs above include a construction contingency and professional fees. Note that the cost to remove the trees has been sought by getting quotes from arborists/forestry companies known to Council staff.

4.16. It is noted that the alignment through the trees does not include the costs to level out the undulations, rather an allowance has been made to install air valves and scour points. When the connector road is constructed, this area would be releveled.

4.17. The Greenspace team took these two options to the Gladstone Park Advisory Group. The Group would prefer that Council proceed with Option 1, constructing the pipe through the trees. The following information, from the WDC greenspace team, explains the reasons for the Group's decision.

> *"We showed the Gladstone Park Advisory Group the two proposed options along with the attached tree report and asked what their preferred option would be. The response from those present was that they would prefer option 1 with the removal of all of the large mature pines and the pipe within the road reserve. Option 2 was only favourable if there was insufficient funds to remove the mature pines. They did want to ensure that the juvenile pines and cypress were protected though as a wind break for the fields. I then emailed the rest of the group who were not at the meeting for additional comment and received a verbal response from the rugby club that they agree with the above preference of the group."*

4.18. Council Staff support the Gladstone Park Advisory Group views, as in the medium to long term this section of land will most likely be converted into a connector road once the planned Woodend Bypass is constructed and for maintenance reasons it is preferred that any new 3 Waters infrastructure is constructed within a road reserve (as opposed to greenspace reserve).

4.19. Although there is some additional cost to the recommended option, this is seen as preferential over the disruption that would be caused to the park in the long term, as well as due to the long term benefits of having the pipe installed within road reserve land.

4.20. The Management Team have reviewed this report and support the recommendations.

5. COMMUNITY VIEWS

5.1. Groups and Organisations

5.1.1. The Gladstone Park Advisory Group would prefer that Council proceed with Option 1, constructing the pipe through the trees. See section 4.16 for more detail on the Group's decision.

5.2. Wider Community

5.2.1. The wider community has not been consulted specifically on the new water pipe alignment options assessment. The Gladstone Park Advisory Group however are seen as representing the views of the community who use this park.

6. IMPLICATIONS AND RISKS

6.1. Financial Implications

6.1.1. A shortfall in budget to complete this work has been identified. There is a budget of $580,000 allocated to this project and the engineers estimate is $811,000. The shortfall is $231,000.

6.1.2. The reason for this shortfall is mainly due to there being an alignment available at the time of creating the budget, however the Ravenswood rising main wastewater alignment was prioritised over this pipeline. This has meant that a new alignment needed to be sought for this supply pipeline.

6.1.3. Additional costs have come from gaining legal easements, removing trees and more complicated connection details.

6.1.4. It has been calculated that the additional budget of $231,000 will increase rates on the Woodend-Pegasus water supply scheme by approximately $6.40 per connection per year due to additional capital repayments.

6.1.5. It is recommended that an additional capital works budget of $231,000 is included in the 2018/19 financial year, split 30% to growth and 70% to level of service, to give a revised total budget of $811,000 for the Gladstone Road to Pegasus WTP raw water main.

6.2. Community Implications

6.2.1. Removing all of the large pine trees would mean that the Park would no longer have a wind break from the west side. It is noted however that greenspace have planted some smaller trees within Gladstone Park which will act as a windbreak in the future. Additionally it is noted that the large trees may have aesthetic and recreational values to the community.

6.2.2. Constructing the pipeline along the park would mean the formation of an easement (as this is a Fee Simple Title), which may restrict building in this area of the park in the future.

6.3. Risk Management

6.3.1. If the construction was to occur within Gladstone Park, the contractor would need to put measures in place to reduce the risk of the field getting damaged during construction.

6.3.2. A risk worth noting is that Te Kohaka O Tuhaitara Trust may not agree to us obtaining an easement from them for the northern section. If this easement cannot be obtained the pipe would need to be placed around the road reserve on Infinity Drive and Atkinsons Lane, which would be significantly more expensive. The Trust will be contacted in the next stage of the design work after a survey of the utilities in the area has been carried out.

6.3.3. There is another risk is that population growth may be more than Council staff have projected. This pipe has been designed to take all of the existing Equestrian Park and Gladstone Park supply water, and the future Equestrian Park 4 well water to the Pegasus water treatment plant. Council staff have undertaken future growth (50 year) water supply modelling which projected that another well would need to be constructed in approximately 35 years. It is uncertain where this well would be located, however this pipeline has capacity to take the additional flow if the well were to be constructed in this area.

6.3.4. The road reserve has several undulations though it, which will be releveled when the connector road is constructed. This releveling would mean that the water pipe

may be deeper than necessary in places. This will be considered as part of the detailed design. However it is noted that it is unnecessary for the ground to be releveled as part of this work and the pipeline would be constructed by welding polyethylene (PE) pipe, which is a very resilient construction method (so it would not need to be dug up often).

6.4. Health and Safety

6.4.1. Contractors would need to provide the a health and safety plan for constructing the pipeline and the removal the trees. This would need to include elements of protecting the public and workers from the hazards of the construction site.

6.4.2. Safety in design would be considered during the design phase, where considerations will be made for the public's health, to ensure redundancy and resilience with the pipework layout (valves, connections and pipe material).

7. CONTEXT

7.1. Policy

This matter is not a matter of significance in terms of the Council's Significance and Engagement Policy.

7.2. Legislation

The following acts are relevant in this matter:

- The Local Government Act.
- The Health (Drinking Water) Amendment Act.

7.3. Community Outcomes

This report relates to the following community outcomes:

- There is a safe environment for all.
- Core utility services are provided in a timely, sustainable, and affordable manner.

7.4. Delegations

The Community Board, under deregulation 1041, has been kept informed on these matters so that they can be responsible for;

1. Representing, and acting as an advocate for, the interests of its community.

2. Maintaining an overview of services provided by the Council such as road works, water supply, sewerage, stormwater drainage, parks, recreational facilities, community activities, and traffic management projects within the community.

3. Approving, on behalf of the Council as landowner, proposed developments or activities on parks, reserves and waterways and within existing budgets; Approving consultation plans for new developments on parks, reserves or waterways which may include planting plans and play equipment.

4. Where referred to the Board, the authority to approve the removal of street and recreation reserve trees; unless deemed an urgent Health and Safety matter.

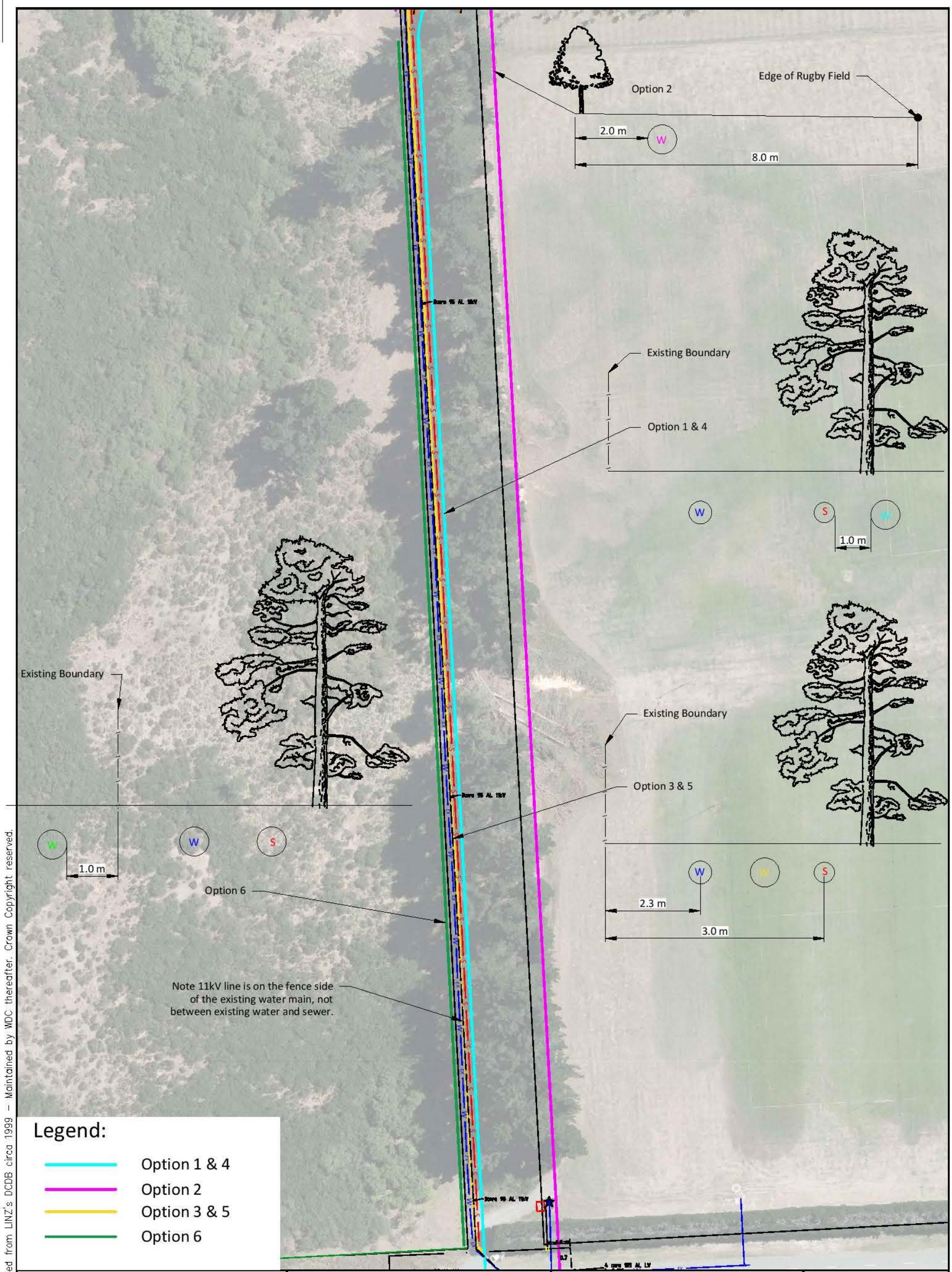
8. APPENDIX

Appendix A - Concept Design Options Assessment – TRIM 180314027357

Southern Gladstone Park Section Analysis

Option Number	**1**	**2**	**3**	**4**	**5**	**6**
Option Title	**Trench East of Sewer and Water Pipes**	**Trench in Gladstone Park, between the rugby field and tree line**	**Trench between the Sewer and Water Pipes**	**Drill East of Sewer and Water Pipes**	**Drill between the Sewer and Water Pipes**	**Trench West of Sewer and Water Pipes - Farmers Land**
Description	- A new 400mm diameter PE pipe to supply water to the Pegasus WTP. -Connection to the Gladstone and Equestrian wells supply lines at Gladstone Road - Connect the existing Equestrian well supply pipe to the Gladstone supply line, including cleaning and flushing the line. - Pipe would range from 1.4 - 2m depth to invert (based on previous raw water design and ground undulations).					
	- Clearance between the existing sewer and existing water pipes is 1.4m (1.7m to the pipe centres)	- Approximately 8m between the tree line and the rugby field - Clearance to the rugby field is required to be 3m. And no driving on the field during construction	- Clearance between the existing water and new water line would be 1m	- Clearance between the existing sewer and existing water pipes is 1.4m (1.7m to the pipe centres)	- Clearance between the existing water and new water line would be 1m	- Clearance between the existing water and new water line would be 1m
	- Trees within 2.5m of trench noted to be removed.	- This option is dependent on Greenspaces sign off, however Greg Barnard seem to think that green spaces would be more interested in this option than removing the trees		- Tree root depth is approximately 0.6m deep. - Can drill 90-100m, 4 pits would be needed therefore some trees would need to be removed.	- Tree root depth is approximately 0.6m deep (greenspaces). - Drill pit width generally is 2m wide, there is only 1.4m - therefore this would need to be discussed with a drilling company. - Can drill 90-100m, 4 pits would be needed.	- Assumed 2.5m of land would be purchased, cost for land has been estimated and is dependent on negotiation - Could purchase more land so that the new road could be installed to and the trees remain.
Construction technique	Trenching	Trenching	Trenching	Directional Drilling	Directional Drilling	Trenching
Construction Engineers Estimate	$383,000.00	$327,000.00	$351,000.00	$899,000.00	$846,000.00	$360,000.00
Construction Contingency 10%	$38,300.00	$32,700.00	$35,100.00	$89,900.00	$84,600.00	$36,000.00
Construction Total	$421,300.00	$359,700.00	$386,100.00	$988,900.00	$930,600.00	$396,000.00
Professional Fees (half of budget)	$40,000.00	$40,000.00	$40,000.00	$40,000.00	$40,000.00	$40,000.00
Total Capital Cost (including professional fees and contingency)	**$461,300.00**	**$399,700.00**	**$426,100.00**	**$1,028,900.00**	**$970,600.00**	**$436,000.00**
Operational Cost ($/annum)	n/a	n/a	n/a	n/a	n/a	n/a
Assumptions			- Can use a similar design to the original raw water design. Pipe would range from 1.4 - 2m depth to invert (based on previous raw water design and ground undulations).			
		- Clearance to the rugby field is required to be 3m. And no driving on the field during construction	- Clearance between the existing sewer and existing water pipes 1.4m (1.7m to the pipe centres). Install of the new pipe would be tight.			- Clearance between the existing water and new water line would be 1m
	- All trees would need to be removed as recommended by Greenspace and Tree Tech	- Approximately 8m between the tree line and the rugby field - This option is dependent on Greenspaces sign off, however Greg Barnard seem to think that green spaces would be more interested in this option than removing the trees		- Tree root depth is approximately 0.6m deep. - Can drill 90-100m, 4 pits would be needed therefore some trees would need to be removed.	- Tree root depth is approximately 0.6m deep. - Drill pit width generally is 2m wide, there is only 1.4m - therefore this would need to be discussed with a drilling company. - Can drill 90-100m, 4 pits would be needed.	- Assumed 2.5m of land would be purchased due to constraints in section 2, cost for land has been estimated and is dependent on negotiation - Could purchase more land so that the new road could be installed to and the trees remain.

Water Quality Considerations	- Rather than using a valve, remove a section of pipe so that a connection between the raw and treated cannot occur accidentally - Scour point - Clean out the raw line with a pig before commissioning, also flush and sterilise.					
Backup Capacity	**Yes** - There will be a connection at to take water from the wells to the Woodend WTP if needed. The Pegasus WTP has PW1 well for backup supply					
Resilience	**Good** - Pipe material is PE, which is best in liquefaction prone soil. The pipe alignment would comply with the ECOP 1m clearance from sewer - therefore lower risk of contamination from the sewer.	**Good** - Pipe material is PE, which is best in liquefaction prone soil. The pipe alignment would comply with the ECOP 1m clearance from sewer. The pipe would not be in a utilities reserve.	**Average**- Pipe material is PE, which is best in liquefaction prone soil. However it would be within the recommended clearance of the engineering code of practice (1m from sewer).	**Average** - Pipe material is PE, which is best in liquefaction prone soil. Trees would mostly remain which would mean that if a tree was to fall over it may compromise the water pipe. The pipe alignment would comply with the ECOP 1m clearance from sewer - therefore lower risk of contamination from the sewer.	**Average** - Pipe material is PE, which is best in liquefaction prone soil. However it would be within the recommended clearance of the engineering code of practice (1m from sewer).	**Best** - Pipe material is PE, which is best in liquefaction prone soil. The pipe alignment would comply with the ECOP 1m clearance from sewer. The pipe would be in a utilities reserve (once land is purchased)
Risks	- There could be some resistance from the community, greenspaces and the rugby club - Soil moisture content is low (according to ECAN soil moisture) and soil is Deep Sandy Loam therefore shielding will likely be required to stop the other pipes from moving	- Pipe would not be in the road reserve - May not get agreement from greenspaces - possible conflict if repairs are needed - Potential restriction on future development of field - e.g. no building - Would need to be very careful during construction and maintenance to not have vehicles on the field - Soil moisture content is low (according to ECAN soil moisture) and soil is Deep Sandy Loam therefore shielding will likely be required	- Risk of damaging/moving the water or sewer pipes (both important pipelines) - Difficult to construct - Water Supply alignment would be within 1m of a live sewer line. Non-compliant with the ECOP. - * May not be feasible. GS and MA seem to think it may not be a feasible option with shields etc. - Soil moisture content is low (according to ECAN soil moisture) and soil is Deep Sandy Loam therefore shielding will likely be required to stop the other pipes from moving	- Difficult to construct (directional drilling) - there still could be some resistance from the community, greenspace and the rugby club due to the removal of some trees.	- Risk of damaging/moving the water or sewer pipes (both important pipelines) - Difficult to construct - Water Supply alignment would be within 1m of a live sewer line. Non-compliant with the ECOP. - Feasible, but I need to check on allowable drill pit width - 1.4m wide rather than 2m. - Clearance to other pipes for drilling is slightly less than ideal. The drilling companies would like 0.5m clearance. However in some places this would be 0.45m.	- Farmer may not want to sell the land for a reasonable price - Could take a long time to negotiate, which would mean a delay in the works - Soil moisture content is low (according to ECAN soil moisture) and soil is Deep Sandy Loam therefore shielding will likely be required
Advantages (additional to those stated above)	- Easier to construct after the trees are removed - Within Road Reserve - Achieve ECOP clearances from sewer rising main	- Lowest total capital cost - Easier to construct - Achieve ECOP clearances from services, good separation - Do not need to remove trees, therefore maintain the wind protection for the rugby club	- Within Road Reserve - Do not need to remove trees, therefore maintain the wind protection for the rugby club	- Reduced reinstatement cost - Within Road Reserve - Do not need to remove as many trees (only for drilling pit and equipment) , therefore maintain the wind protection for the rugby club - Achieve ECOP clearances from sewer rising main	- Reduced reinstatement cost - Within Road Reserve - Do not need to remove trees, therefore maintain the wind protection for the rugby club	- Easier to construct - Within Road Reserve (once land is purchased) - Achieve ECOP clearances from services, good separation - Do not need to remove trees, therefore maintain the wind protection for the rugby club
Disadvantages (additional to those stated above)		- Construction would be best in Summer when rugby is not being played - schedule change - If maintenance such as flushing was required the water would need to be managed so it would not scour the field		- High Total Capital Cost - Maintenance access to the water pipe once constructed could be an issue, as trees would need to be removed.	- High Total Capital Cost	
Reason for dismissing			The pipes either side of this pipe are critical trunk mains and the clearance is less than optimal, the risk of damaging these pipe is too high. Therefore this option was dismissed.	This option is double the price of the other options.	The pipes either side of this pipe are critical trunk mains and the clearance is less than optimal, the risk of damaging these pipe is too high. Therefore this option was dismissed. Additionally, this option is double the price of the other options.	The landowner was contacted by council staff and offered generous compensation for their land. They did not want to sell their land to the WDC, as they were concerned that their property would be left in a messy state.



WAIMAKARIRI DISTRICT COUNCIL

PROJECT TITLE	SHEET TITLE	PLAN No.
Woodend-Pegasus Raw Water Main	Raw Water Pipeline Southern Section Options	ISSUE / SHEET

Northern Section Options Assessment

The northern section had several matters to consider:

- The existing Pegasus water supply pipe runs through easements on Te Kohaka O Tuhaitara Trust and Pegasus Golf Limited land. Unfortunately some of these easements are full with services and easement extensions would be required to get the new pipe to the WTP.
- The land owner at 160 Gladstone Road does not want to sell land to the council. Therefore the alignment along the west side of the Te Kohaka O Tuhaitara Trust reserve (135 Infinity Drive) is not attainable.
- WDC owns the section of land at 7 Atkinsons Lane (two properties north of the WTP). As it is not possible to acquire land from 160 Gladstone Road and the easement through Pegasus Gold Course land is full, the pipe would need to be constructed though the WDC land to the north (7 Atkinsons Lane).
- The reinstatement cost to construct the pipeline in the road is more than constructing the pipe in the berm. Additionally there appears to be an alignment available in the Te Kohaka O Tuhaitara Trust reserve which the new pipe could be constructed in.

Option Number	**A**	**B**	**C**	**D**
Option Title	**Road Reserve and WDC land**	**Berm Easement and WDC land**	**Berm Easement and Farmers land**	**Farmers land**
Description	A new 400mm diameter PE pipe to supply water to the Pegasus WTP - Pipe would range from 1 - 1.8m depth to invert (based on previous raw water design and ground undulations).			
	- Alignment along the Road Reserve, extend easement in Todds Properties land to the North of the existing easement, get an easement in WDC reserve land to the north, use easement across 11 Atkinsons Drive into the WTP - Road Reinstatement and Traffic Management	- Alignment along the Berm Easement parallel to Infinity Drive, extend easement in Todds Properties land to the North of the existing easement, get an easement in WDC reserve land to the north, use easement across 11 Atkinsons Drive into the WTP	- Alignment along the Berm Easement parallel to Infinity Drive, extend easement in Todds Properties land to the south of the existing easement, buy a strip of 160 Gladstone Roads land, use easement across 11 Atkinsons Drive into the WTP	- Alignment along the farmers land (160 Gladstone Road) and use easement across 11 Atkinsons Drive into the WTP.
	- Several services to avoid (3 major crossings) - Liaison with two parties - Todds Property Group (11 Atkinsons Lane is owned by them too) and WDC Greenspaces		- Liaison with two parties - Todds Property Group (11 Atkinsons Lane is owned by them too) and 160 Gladstone Road Land Owner	- Liaison with the land owner of 160 Gladstone Road
Construction technique	Trenching	Trenching	Trenching	Trenching
Construction Engineers Estimate	$ 297,940.00	$ 284,724.00	$ 269,170.00	$ 285,500.00
Construction Contingency 10%	$ 29,794.00	$ 28,472.40	$ 26,917.00	$ 28,550.00
Construction Total	$ 327,734.00	$ 313,196.40	$ 296,087.00	$ 314,050.00
Professional Fees (half of budget)	$40,000.00	$40,000.00	$40,000.00	$40,000.00
Total Capital Cost (including professional fees and contingency)	**$368,000.00**	**$353,000.00**	**$336,000.00**	**$354,000.00**
Operational Cost ($/annum)	n/a	n/a	n/a	n/a
Assumptions	- The existing tee connection and stacker pipe at the WTP could be reused for this design.			
	- We could get easements		- We could get an easement and buy some land from the farmer	- We could buy some land from the farmer
Water Quality Considerations	- Clean out the raw line with a pig before commissioning, also flush and sterilise.			
Backup Capacity	**Yes** - There will be a connection at to take water from the wells to the Woodend WTP if needed. The Pegasus WTP has PW1 well for backup supply			
Resilience	**Good** - Pipe material is PE, which is best in liquefaction prone soil. Pipe would be within an easement or in WDC Utilities land.		**Good** - Pipe material is PE, which is best in liquefaction prone soil. Pipe would be within an existing easement or in WDC Utilities land (once purchased from farmer.	**Best** - Pipe material is PE, which is best in liquefaction prone soil. Pipe would be within WDC utilities land (once purchased from farmer).

Risks	- Three service crossings (Gas, HV, LV, Sewer and Chorus) - Need to apply for two easements which need to be agreed by WDC and Todds Property Group - Soil moisture content is low (according to ECAN soil moisture) and soil is Deep Sandy Loam therefore shielding will likely be required		- Need to apply for an easement which need to be agreed by Todds Property Group - Farmer may not want to sell the land for a reasonable price - Could take a long time to negotiate, which would mean a delay in the works - Soil moisture content is low (according to ECAN soil moisture) and soil is Deep Sandy Loam therefore shielding will likely be required	- Farmer may not want to sell the land for a reasonable price - Could take a long time to negotiate, which would mean a delay in the works - Soil moisture content is low (according to ECAN soil moisture) and soil is Deep Sandy Loam therefore shielding will likely be required
Advantages (additional to those stated above)	- Within Road Reserve	- Trenching in Berm	- Trenching in Berm - No Services would need to be crossed - Lowest Total Capital Cost	- Trenching in Berm - No Services would need to be crossed - Within a utilities reserve (once the land is purchased)
Disadvantages (additional to those stated above)	- Trench along the road, reinstatement of road surface and increased Traffic Management Costs - Pipe Construction in an easement which would need liaison for Maintenance and Construction - Acquiring an easement may impact the time of construction	- Pipe Construction in an easement which would need liaison for Maintenance and Construction - Acquiring an easement may impact the time of construction		
Reason for dismissing Option	The reinstatement cost would be slightly more in this option as the reinstatement is along the road, rather than the berm.		The landowner was contacted by council staff and offered generous compensation for their land. They did not want to sell their land to the WDC, as they were concerned that their property would be left in a messy state.	The landowner was contacted by council staff and offered generous compensation for their land. They did not want to sell their land to the WDC, as they were concerned that their property would be left in a messy state.

WAIMAKARIRI DISTRICT COUNCIL

ISSUE	AMENDMENT	DRAWN	CHKD	APPD	DATE
A	FIRST ISSUE	CPS	XXX	XXX	31/01/2018

SCALE 1:XXXX (A3)

N

SHEET TITLE: Woodend-Pegasus Raw Water Main Northern Section

PROJECT TITLE: Woodend-Pegasus Raw Water Main

PLAN No. XXXX

ISSUE A | SHEET 1

PLOT DATE: 31/01/2018 FILE: C:\USERS\CHRISS\DESKTOP\WOODENDPEGASUS.DWG

Appendix B - TreeTech Development Site Impact Assessment Tree Report Gladstone Park – TRIM Reference 180314027354

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urban forest management

TREETECH
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Development Site Impact Assessment

Client	Grant Stephens, Waimakariri District Council
Site Address	Gladstone Park
	Gladstone Road, Woodend
Date & Time of Visit	15th February, 2.00 pm
Attendees	Alan Parker
Report Author	Alan Parker
Version	Final

NZARB

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2

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Contents

1.0 SCOPE OF REPORT

1.1 Survey Brief

To carry out a survey of trees located at the western aspect of Gladstone Park in context with the proposed Woodend – Pegasus Raw Water Main installation, see Appendix 1, details as provided by WDC.

The survey has identified the condition of tree assets within the Park boundary, in order to provide the client with details of tree condition and potential impacts of the proposed Raw Water installation.

1.2 Background

Mr Grant Stephens commissioned Treetech Specialist Treecare Ltd™ to undertake a tree survey in accordance with the guiding principles of a Level 2* Basic Assessment upon the linear group of Pines (*Pinus radiata)* and Macrocarpa (*Cupressus macrocarpa),* located along the western aspect of Gladstone Park.

1.3 Report References

As a progressive company, we keep abreast of research data relating to Arboriculture. All observations, recommendations and works are based on current industry standard reference material and extensive FA Bartlett research findings, derived from the company's facilities at the University of Reading in England as well as in Charlotte, North Carolina, in the USA.
Specific tree survey methodologies and references applied by Treetech Specialist Treecare Ltd for this project include:

- Smiley, T, Fraedrich, B & Hendrickson, N. (2011) *Tree Risk Management*. Bartlett Tree Research Laboratories. Charlotte, NC.
- Dunstar, J.A, Smiley. T, Matheny. N, Lilly. S. (2013) *Tree Risk Assessment Manual.* International Society of Arboriculture. Champaign, IL.
- Lonsdale, D. (1999) *The Principles of Tree Hazard Assessment & Management (Research for Amenity Trees)* Department of the Environment. London.
- Schwarze, F. W. M. R, Engels. J, Mattheck. C. (2000) *Fungal Strategies of Wood Decay in Trees*. Springer-Verlag. Berlin. Heidelberg. New York.
- Schwarze, F. W. M. R. (2008) *Diagnosis & Prognosis of the Development of Wood Decay in Urban Trees*. ENSPEC. Pennsylvania State University. State College, PA.
- Shigo, A. (1991) *Modern Arboriculture*. Shigo & Trees Associates. Durham, NH.
- Mattheck, C, Breloer, H. (1994) *The Body Language of Trees (Research for Amenity Trees)* Department of the Environment, London.
- Mattheck, C, Bethge K, Weber K. (2015) *The Body Language of Trees – Encyclopaedia of Visual Tree Assessment* Karlsruhe Institute of Technology Campus North.

1.0 SCOPE OF REPORT (Continued)

1.4 Report Methodology and Limitations

This report is restricted to those trees shown on Appendix 1: Tree Location Plan attached to this report. The statements, findings and recommendations made within the report do not take into account any effects of extreme climate and weather incidences, vandalism, changes in the natural and built environment around the trees after the date of this report nor any damage whether physical, chemical or otherwise.

Treetech Specialist Treecare Ltd cannot accept any liability in connection with the above factors nor where recommended tree management is not carried out in accordance with modern tree health care techniques, within the timelines proposed.

The trees were not climbed at the time of the tree survey.

All tree information and dimensions are accurate as captured on the day.

* **Levels of Tree Assessment**

Level 1 Limited Visual Assessment:
A visual assessment of an individual tree or a population of trees near a specified target, conducted from a specific perspective, in order to identify certain obvious defects or specified conditions. Observations are made from ground level and the tree is not climbed.

Level 2 Basic Assessment:
A detailed visual inspection and assessment of a tree and the surrounding site, found to possess a hazard. The basic assessment requires the tree risk assessor to walk completely around the tree. Tree dimensions are recorded using hand tools such as a diameter tape, laser range finder and a measuring tape.

Level 3 Advanced Assessment:
An advanced assessment is performed to provide detailed information about specific tree parts, defects, targets or site conditions. Methods of advanced assessment can include climbing inspections, decay detection, root excavations, lean monitoring and pull tests.

It is important to understand that as trees are living and dynamic organisms, it is not possible to maintain them totally free of risk. Some level of risk must be accepted in order to experience the full range of benefits that trees provide. As such, we reference the recently published document by the National Tree Safety Group (NTSG): Common Sense Risk Management of trees (Forestry Commission 2011). This document provides guidance on trees and public safety in the UK for owners, managers and advisors.

2.0 TREE PROTECTION STATUS

The Resource Management Act (RMA) 1991 promotes the sustainable management of natural and physical resources such as land, air and water in New Zealand. The RMA – in particular the purpose and principles in Part 2, which emphasise the requirement to sustainably manage the use, development and protection of the natural and physical resources for current and future generations, taking into account the 'four well beings' (social, economic, cultural and environmental).

The Local Government Act 2002 - in particular section 14, Principles relating to local authorities. Sub-sections 14(c), (g) and (h) emphasise a strong intergenerational approach, considering not only current environments, communities and residents but also those of the future. They demand a future focussed policy approach, balanced with considering current needs and interests. Like the RMA, the provisions also emphasise the need to take into account social, economic and cultural matters in addition to environmental ones.

2.1 Protected Trees

No information has been provided relevant to Tree Protection for the subject assets, apart from ownership of the reserve area by WDC.

3.0 GENERAL SITE DETAILS

3.1 Weather Conditions at Time of Survey

At the time of the tree inspection, the weather was fine and dry, with a gusty north-westerly wind, providing optimal surveying conditions.

3.2 Site Location

Gladstone park is located north-east of Woodend, bordering Pegasus, within Waimakariri District Council. The subject site is rugby sports fields, with private property to the north and west, Gladstone Road along the southern boundary and reserve area to the east

3.3 Local Landscape Evaluation

The site features a predominance of Pine and Macrocarpa, trees and maintained hedge. Adjacent properties contain a diverse mix of trees including deciduous and evergreen species.

3.4 Slopes and Boundaries

The site is predominantly level, with the southern sports field elevated approximately 1.5 metres above the northern sports field.

Pine and Macrocarpa planting along the western aspect is on a raised mound which descends to the western property boundary.

3.5 Underlying Soils

(Ref: S-map Soil Report, Landcare Research New Zealand Limited 2011-2015, Manaaki Whenua, dated: 14th August 2017). Using the S-mapOnline, 'soil map viewer' (http://smap.landcareresearch.co.nz) is has been determined that the underlying soils are:

• Kairakif – deep, well drained, sandy loam

Soil name (factsheet)	Area %	Description	Confidence
Kairakif (Sib 1)	100	deep, well drained, sandy loam	High

Easting/Northing: 1574958 5293468

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4.0 TREE DETAILS, Photographic overview

Figure 1;

Root plate failure, tree supported by neighbours.

Figure 2:

Apical stem failure, upward growth maintained by secondary lateral branch, with decay at point of attachment.

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Figure 3;

Entire tree failure, only stump remaining.

*Figure 4; (*above left) shows new Macrocarpa planting, eastern aspect of line of trees, middle of northern field.

Above right shows Macrocarpa-Pine-Macrocarpa, eastern aspect of line of trees, middle of southern field.

4.0 TREE DETAILS (Continued)

The tree line, oriented north-south along the western edge of the park is predominantly mature Pine, height up to 32.0 metres, DBH up to 700mm, – canopy spread is difficult to quantify as the group of trees has a unified canopy, with individual trees suppressed by those adjacent.

Along the eastern edge of the group Macrocarpa have been planted, (see figure 4). Considering their size, I can only assume that this planting may have been an attempt at establishing replacement shelter, as currently afforded by the larger Pines.

The Pines vary considerably in;

- Height and DBH, considerable variation in individual trees due to the close proximity planting which has suppressed many of the inner trees
- Health, generally consistently fair health throughout the group, exception being smaller trees that have failed to establish and are now dead, standing
- Structure, considerable variation in structure from well-established single leader trees, to root plate failure, (see figure 1), failed leader above ground level (see figure 2) and total tree failure (see figure 3) The failures to date provide an indication of the potential failures from hereon.

The Macrocarpa are generally in good health and structure, with the onset of phototropic suppression along the western aspect due to the close proximity of the Pines. The size of the Macrocarpa varies between 1.0 – 6.0 metres in height, and it is possible that the planting has taken place on separate occasions, with several years between planting.

5.0 DISCUSSION and CONCLUSION

The proposed Raw Water installation per WDC information provides 2 options, see Appendix 1;

- Option 1 – this will require the removal of many of the western Pines from the group – a consequence to this will be that the remaining trees will be susceptible to wind throw, as the wind dynamics within the group will have been altered by removal of some of the trees.

- Option 2 – Trenching at 2.0 metres east of the Macrocarpa trees will not affect the root plate of the group, and is the preferable option from a tree perspective.

- Option 3 – This option would include removal of the Pines, with the Raw Water installation per Option 1. The benefit of this option is that the Pines, which are close to becoming over-mature, with increased failure potential, would no longer be an issue, allowing the newly planted Macrocarpa to spread and become the primary wind break. The Macrocarpa have established well generally, and the removal of the Pines would stimulate both calliper (secondary trunk thickening) and root spread into the hospitable soil type, to provide a line of trees that could be managed as a hedge, in the future. Pine removal would also allow for the planting of a second line of suitable species, west of the existing Macrocarpa, to provide a long-term rotation with screening.

The above options have considered only the arboricultural factors for this site, and have not included any comment or preference from a costing aspect.

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Report classification:	Arboricultural Report – Development Site Impact Assessment
Report Status:	Final
Report completed by:	Alan Parker, Cert Arb. Advanced Senior Consultant Arborist Treetech Specialist Treecare Ltd
Signature:	
Date:	Monday 19th February, 2018

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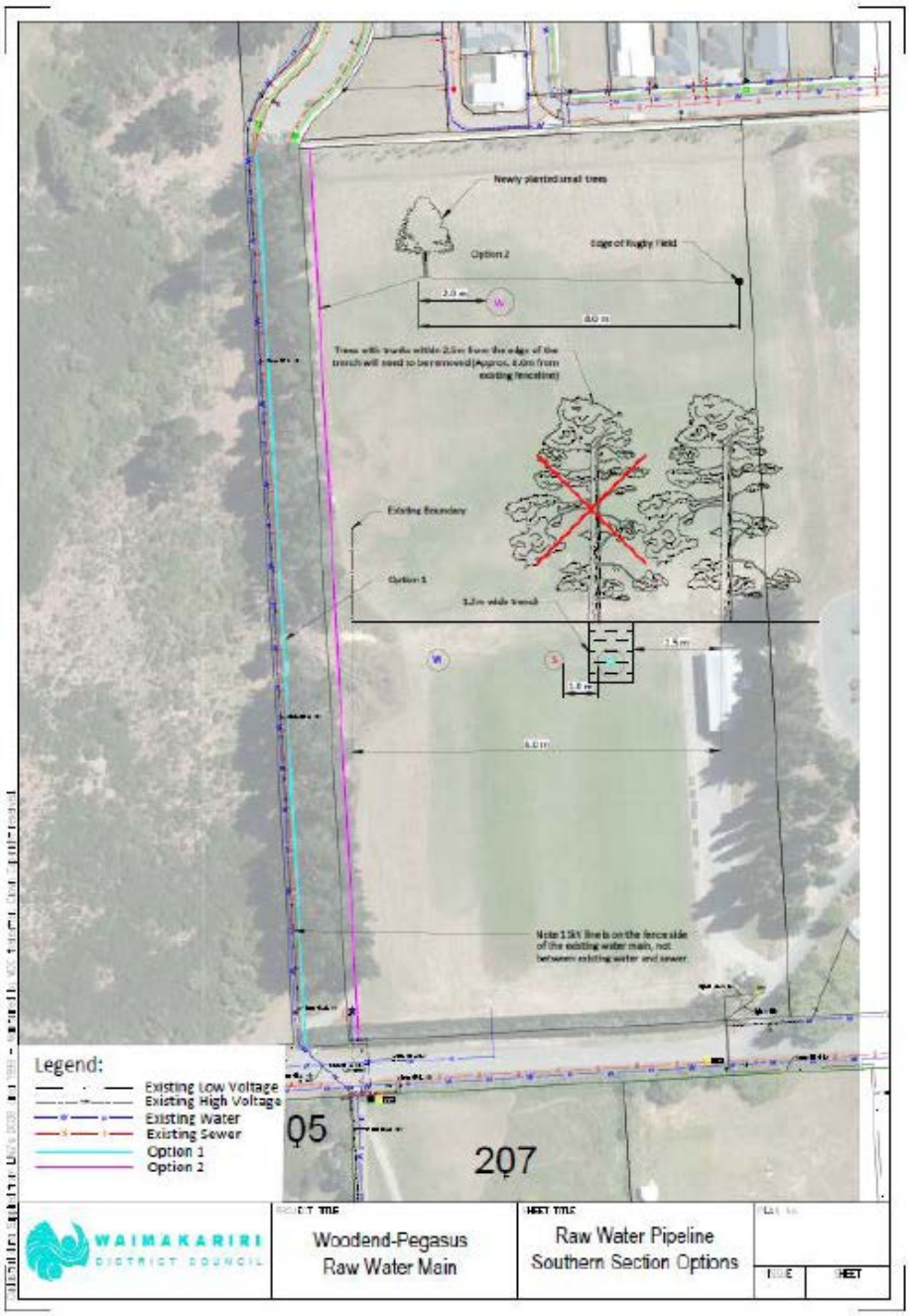
Appendix 1 – Installation options provided by WDC



WAIMAKARIRI DISTRICT COUNCIL

REPORT FOR DECISION

FILE NO and TRIM NO:	GOV-26-09-06 / 180326032222
REPORT TO:	Woodend-Sefton Community Board
DATE OF MEETING:	9 April 2018
FROM:	Edwina Cordwell, Governance Adviser
SUBJECT:	ANZAC Day Services 2018
SIGNED BY: (for Reports to Council, Committees or Boards)	Department Manager / Chief Executive

1. SUMMARY

1.1 The purpose of this report is to seek approval of Board representation at wreath laying services within the Woodend-Sefton community area on ANZAC Day 2018.

2. RECOMMENDATION

THAT the Woodend-Sefton Community Board:

(a) **Receives** report No. 180326032222.

(b) **Appoints** Board member(s) …… to lay a wreath on behalf of the Board at the Sefton Cenotaph at the ANZAC Day service on Tuesday 24 April 2018 in the Sefton Domain.

(c) **Appoints** Board member(s) ……..to attend the ANZAC Day service on Tuesday 24 April 2018 at the Woodend Community Centre, in conjunction with the Council representative.

OR

(d) **Appoints** Board member(s) ……..to attend the ANZAC Day service on Tuesday 24 April 2018 at the Woodend Community Centre and to lay a wreath on behalf of the Board.

3. BACKGROUND

3.1. Anzac Day is on Wednesday 25 April 2018 and it is normal for a representative of the Council to be in attendance at each service to lay the wreath on behalf of the district. Wreathes are also laid at Rangiora and Kaiapoi on behalf of the people of Zonnebeke, Belgium to support the twinning relationship between the two districts. A reciprocal arrangement is made with the District of Zonnebeke.

3.2. Wreaths will also be laid by the Community Boards at Kaiapoi, Rangiora, Oxford, West Eyreton, Cust, Ashley War Memorial, Sefton and Tuahiwi. The Boards will be also represented at Ohoka, Fernside, Rangiora High School and Woodend services in conjunction with the Council representatives and wreath laying.

4. ISSUES AND OPTIONS

4.1. All services are on Wednesday 25 April unless otherwise stated.
The times of the services are:

Kaiapoi Cenotaph Dawn Service	6.30am	
Kaiapoi Cenotaph (Trousselot Park)	10.00am	(assemble cnr Davis and Sewell St by tennis courts 9.45am)
Rangiora High School	9.30am	(assemble 9.20am)
Rangiora Cenotaph	11.30am	(assemble at RSA 11.15am)
Oxford Town Hall	9.30am	
Cust Community Centre	10.00am	
Fernside Hall	10.00am	
Tuahiwi (Urupa)	2.00pm	
Ohoka Hall	11.00am	(Tuesday 24 April) Ohoka Hall
Sefton Cenotaph	6.00pm	(Tuesday 24 April) Sefton Domain
Woodend Community Centre	6.00pm	(Tuesday 24 April).

4.2. The Rangiora service will be held at the Cenotaph. The Rangiora RSA will also lay wreaths at the Rangiora High School.

4.3. The Kaiapoi service will be held in Trousselot Park. Members are also invited to the dawn service being held at the war memorial, Raven Quay at 6.30am. Community participation will be welcomed at this service. A breakfast for 100 people will follow the dawn service at the Kaiapoi Club. This is a pre-ticketed event.

4.4. The Oxford service will be held at the Oxford Town Hall and the Cust/West Eyreton service is held at the Cust Community Centre.

4.5. Four services are held in the district prior to ANZAC with one being at the Ohoka Hall (Mill Road), and another at the Sefton Domain. This year a new service will occur at the Woodend Community Centre at the same time as the Sefton service. Members of the Woodend-Sefton Community Board will also support the Sefton and Woodend services.

4.6. A service is also held at the Ashley war memorial on Tuesday 24 April and supported by members of the Rangiora-Ashley Community Board.

4.7. The Management Team have reviewed this report and support the recommendations.

5. COMMUNITY VIEWS

5.1. Groups and Organisations

Staff assist the local RSA representatives with traffic management plans, advertising of services and service sheets. There is public expectation of ANZAC Services occurring.

5.2. Wider Community

Advertising will be made prior to the day outlining the time and place of ceremonies in the district and inviting all members of the community to attend one or more service.

The community anticipates that ANZAC services will be held in the District.

6. IMPLICATIONS AND RISKS

6.1. Financial Implications

The costs for wreaths, advertising and incidental costs are met from the Governance budget. Advertising will be made prior to the day outlining the time and place of ceremonies in the district and inviting all members of the community to attend one or more service. Service sheets are also produced in-house for several of the smaller community services.

6.2. Community Implications

Not applicable.

6.3. Risk Management

Not applicable.

6.4. Health and Safety

Local RSAs host the services and are responsible for traffic management plans and all associated organisation.

7. CONTEXT

7.1. Policy

This matter is not a matter of significance in terms of the Council's Significance and Engagement Policy.

7.2. Legislation

Not applicable.

7.3. Community Outcomes

People are friendly and caring, creating a strong sense of community in our district.

7.4. Delegations

Not applicable.

Edwina Cordwell
Governance Adviser

WAIMAKARIRI DISTRICT COUNCIL

REPORT

FILE NO and TRIM NO: GOV-26-09-06/180329034371

REPORT TO: Woodend-Sefton Community Board

DATE OF MEETING: 9 April 2018

FROM: Shona Powell, Chair, Woodend-Sefton Community Board

SUBJECT: Chair's Report for March 2018

1. SUMMARY

13th March	Waimakariri Access Group Meeting	Presentation from Civil Defence.
14th March	Pegasus Coffee Morning – Long-Term Plan (LTP) consultation	Spent two hours at the drop-in with Councillors Blackie and Meyer for people to find out more about the LTP consultation. Very worthwhile to listen to residents about LTP and several other issues.
20th March	LTP Workshop for WSCB	Started work on the WSCB submission to Council on the LTP
25th March	LTP Consultation at Pegasus Residents' Group Easter Eggstravaganza	Three hours at the drop-in with Councillor Williams. Good to see people that are planning to submit and also talk with people about their issues, not just around the LTP.

Planned events for coming month:

9th April – Closing date for submissions on LTP
18th April – Chair's meeting
30th April – All Board's Briefing

2. RECOMMENDATION

THAT the Woodend-Sefton Community Board:

(a) **Receives** report No.180329034371.

Shona Powell
Chair
Woodend-Sefton Community Board

WAIMAKARIRI DISTRICT COUNCIL

MEMO

FILE NO AND TRIM NO:	GOV-26-09-06 / 180404035365
DATE:	9 April 2018
MEMO TO:	Woodend-Sefton Community Board
FROM:	Board member Rhonda Mather
SUBJECT:	Members' Information Exchange – March 2018

Rhonda Mather

- Attended Pegasus Residents' Group (PRG) committee meeting 13 March
    - Easter Eggstravaganza went well on 25 March with hundreds of sweet-toothed children enjoying the games and treats.
    - PRGI approached Visit Waimakariri about 18 months ago with regard to a street map for Pegasus. Visit Waimakariri have been unsuccessful in finding a funder for the map, so PRGI will now look into funding it themselves.
    - PRGI have prepared a submission for the LTP

Other

7 March – attended All Boards Briefing. Very informative, though these meetings always seem too rushed with information having to be cut out of presentations to fit the time schedule. Perhaps the All Boards meetings need to be more frequent?

13 March – Attended all day LinC (Leadership in Communities) programme at ARA. I will be attending this programme once a month until November in the hope of making valuable connections and gaining information on how to better serve my community.

14 March – Ronel's Community Cuppa and LTP consultation. Approximately 35 people attended with several taking the opportunity to speak with the Council representatives present.

20 March – LTP workshop for WSCB. A good discussion covering many aspects of the Draft LTP

22 March – Annual Hui at WDC

25 March – PRGI Easter event at Pegasus Bay School. Thanks to Matt Mcilraith, Cr. Paul Williams and Shona Powell for coming along to talk to the few people who wanted to discuss the LTP.

26 March – I met with Kathy Graham and Ian Kennedy to discuss the installation of a passive speed reduction and Welcome to Pegasus sign near the Infinity Drive roundabout. This is a project being undertaken by the Pegasus Residents' Group with a sign similar to that at the entrance to Ohoka. We also discussed visibility problems for pedestrians crossing just east of the roundabout and Ian Kennedy will follow up on that to see if the Greenspace team can remove some of the greenery that is blocking the sight line.

- A portable speaker system has been purchased for the Pegasus Community Centre.