



Kawhia Community Board

# AGENDA

FRIDAY 24 JANUARY 2020

**1.00pm**

Members of the Kawhia Community Board

Board Member DM Walsh (Chair)  
Board Member K Briggs  
Board Member G Fletcher  
Board Member H Whiu  
Councillor Annette Williams

Meeting Secretary: Miss Natasha Martinsen (Minutes Secretary)

# KAWHIA COMMUNITY BOARD

24 JANUARY 2020

Notice is hereby given that an Ordinary meeting of the Kawhia Community Board will be held at the Kawhia Community Hall, Jervois Street Kawhia on Friday 24 January 2020 commencing at 1pm.

16 JANUARY 2020

Tanya Winter  
**CHIEF EXECUTIVE**

## AGENDA

### ORDER OF BUSINESS:

PRESENT

IN ATTENDANCE

APOLOGIES

DECLARATION OF INTEREST

PUBLIC FORUM (UP TO 30 MINUTES)

CONFIRMATION OF MINUTES – 20 NOVEMBER 2019

### REPORTS

ITEM 6	CHAIR REPORT – VERBAL	1
ITEM 7	ROUTINE WATER SERVICES & COMMUNITY FACILITIES REPORT - AUGUST TO NOVEMBER 19	1
ITEM 8	ROUTINE ROAD SAFETY REPORT – AUGUST TO NOVEMBER 2019	8
ITEM 9	ROUTINE REPORT ON ROADING – AUGUST TO NOVEMBER 2019	10
	BOARD MEMBER UPDATE	13

ITEM 6 CHAIRPERSONS REPORT (VERBAL)

ITEM 7 ROUTINE WATER SERVICES & COMMUNITY FACILITIES REPORT - AUGUST - NOVEMBER 19

TO: CHAIRPERSON AND MEMBERS KAWHIA COMMUNITY BOARD

FROM: GROUP MANAGER ENGINEERING

DATE: 24 JANUARY 2020

---

#### Relevant Community Outcomes

- The Otorohanga District is a safe place to live
  - Ensure services and facilities meet the needs of the Community
- 

#### Summary

The purpose of this report is to provide information on the activities of the water services and community facilities department from August to November 2019. This report contains matters of an activity nature and does not require any decision from council.

**THIS REPORT WAS RECEIVED BY THE OTOROHANGA DISTRICT COUNCIL ON 17 DECEMBER 2019**

#### Recommendation

That the report be received.

#### Financials

Are not contained within this document and are reported to council through the Finance Report.

#### Report

##### District Water

In September council received the Annual Report on Compliance with the Drinking Water Standards for New Zealand and duties under the Health Act 1956. The report measures all of our urban water treatment plants, Otorohanga, Waipa, Kawhia and our rural treatment plants, Tihiroa and Arohena. It also covers the respective distribution zones for each network.

The report covers our compliance with disinfection of Bacteria, removal of Protozoa and compliance with the duties under the Health Act, demonstrated by the maintenance and implementation of our Water Safety Plans. Water Safety Plans are only required for all supplies with populations over 500 people, but are encouraged for smaller supplies. We currently only have plans for Otorohanga and Kawhia.

Overall our performance was the same as last year, although we did not meet compliance for both Bacteria and Protozoa for the Otorohanga Treatment Plant this year, nor did we achieve compliance for Protozoa for the Kawhia treatment plant and Bacteria for the Kawhia distribution zone.

Non-compliance does not mean that the water we are supplying to the public is unsafe, it simply means that we have failed to maintain the required standard throughout the compliance period, and if you fail to maintain a sampling standard at any time you get an overall non-compliant result for the year.

##### Otorohanga Water and Water Treatment Plant

We are still striving to meet the stricter criterion of clause 2A of the Drinking Water Standards, which requires continuous monitoring for the Otorohanga Treatment Plant. Our level of compliance is improving from previous years and this is just another step in the process to reaching full compliance for Otorohanga in the 2019-20 year.

The number two sand filter refurbishment required more work than anticipated due to the original 1950's concrete surface not allowing for a straight filter rose replacement, and requiring a full underdrain replacement. The original cost of the first refurbishment was ≈\$23,000, when this was unsuccessful a further ≈\$42,000 was spent. The filter is back in full operation and the plant is at full capacity again. However, this does raise concerns for how long filter one will last given it was built at the same time. Filter three and four are not as old as they were built in the 1970s.

At this time it looks like we will only be able to achieve automated backwash on two filters in this financial year as further compliance work was needed on how the filters are brought back online to maintain our compliance. This was due to having to install a ripening system ( water passing through the filter is required to run to waste during start up until consent levels are reached) that automatically activates after back washes.

Other work that is going on at the plant at this time is the redesign of the intake screens, clear well access panels and security fencing around the low lift pumps next to the river.

We have only had minor water leak repairs within the Otorohanga reticulation this quarter.

The Project and Design team are currently putting together the contract for the renewal of approximately one kilometre of water main on Mountain View Road as part of our long term renewal of Fibre Cement Pipes. We have approximately 38 kilometres of Fibre Cement Pipework that will need replacing in the next 20 - 30 years. Current estimates are that it will cost approx. \$200 - \$400 per lineal metre depending on the location and complexity of the work.

### Waipa Rural Water Scheme

The Waipa Scheme suffered a severe water leak on the 21<sup>st</sup> of November which resulted in the network losing all water from 4 am. The leak was not found until 7.30pm that evening and a full repair was completed by staff and contractors by 3 am the following morning. It took another two days for the network to fully recover.

Any unscheduled interrupted water supply for more than 8 hours requires the District Health Board to be notified.

I wish to acknowledge the water services team and contractors, Waipa Plumbing and Manga Roach who worked tirelessly to firstly find the leak within the 49 kms of network and then work through the night to get the water back on.

This leak has highlighted how early detection is critical at this time of year and staff are working on ways to improve how leaks can be found earlier. Staff are also liaising with the Waipa Water Scheme Committee to ensure that the users of that scheme understand the terms and conditions of the Agreement for Supply of Water that is in place, and how they can assist staff with finding leaks like this sooner in the future. This information will be circulated to all water schemes in due course.

There was a second leak on the 26<sup>th</sup> of November as a result of a farmer digging up a 40mm water line in his property.

### Kawhia Community Water Supply

Kawhia water was also determined non-compliant in the Annual report for 2018-19. Although it was compliant for Bacteria at the plant it was not compliant within the network due to a not enough water samples being taken during the Christmas period when there is an increased population.

We are required to do weekly sampling from the months of December to January when the population exceeds 500 and this was inadvertently overlooked by our contractor.

Kawhia also did not meet compliance with Protozoa, which was due to the location of our turbidity sensor and how our data was being recorded. We are rectifying these issues.

Work on the replacement clarifier tank has been stopped at this time due to design issues with the new tank being too big to function correctly. We are now awaiting a subsequent design to replace the existing clarifier.

This work will not take place until after the New Year. The newly purchased clarifier tank is to be repurposed either at Kawhia or somewhere else throughout the Otorohanga District, possibly as a settling tank for the Otorohanga Plant.

### Arohena Rural Water Supply

The Arohena scheme achieved full compliance for Bacteria in the Annual Report but again failed to reach compliance for Protozoa. Although the Kahorekau, Taupaki and Huirimu plants produce good water, the level of filtration they have will not reach the required level of Log Credits to be Protozoa compliant. For this to happen there will need to be significant investment in the filtration and UV systems in the coming years, or a rethink in the actual purpose of these schemes and what level of service that is provided.

Arohena supplies continue to operate at normal capacity, with exception of Kahorekau which is starting to exceed its raw water take, this is something we will have to monitor as we head into the summer months. I have met with the Chairman of the water scheme to discuss factors that may be contributing to this and options on how to reduce this issue.

Ranginui continues to function well as a stock only system, we are currently looking at ways to improve the water intake.

### Tihiroa Rural Water Supply

Tihiroa had to go under a boil water notice on the 27<sup>th</sup> of November as a result of the sand filter trying to partially backwash, and as a result we were losing almost 50% of the water we were taking from the river.

The filter was getting blocked because the clarifier was not cleaning automatically. Both matters have been rectified and the plant is now operational. At the time of writing this report the boil water notice is still in place because staff want to ensure that the plant operation is stable before taking steps to remove it. Once staff are confident of this samples from the treatment plant and distribution system have to test free of E.coli on three successive days before the boil water notice can be lifted.

### Otorohanga Sewerage and Waste Water Treatment

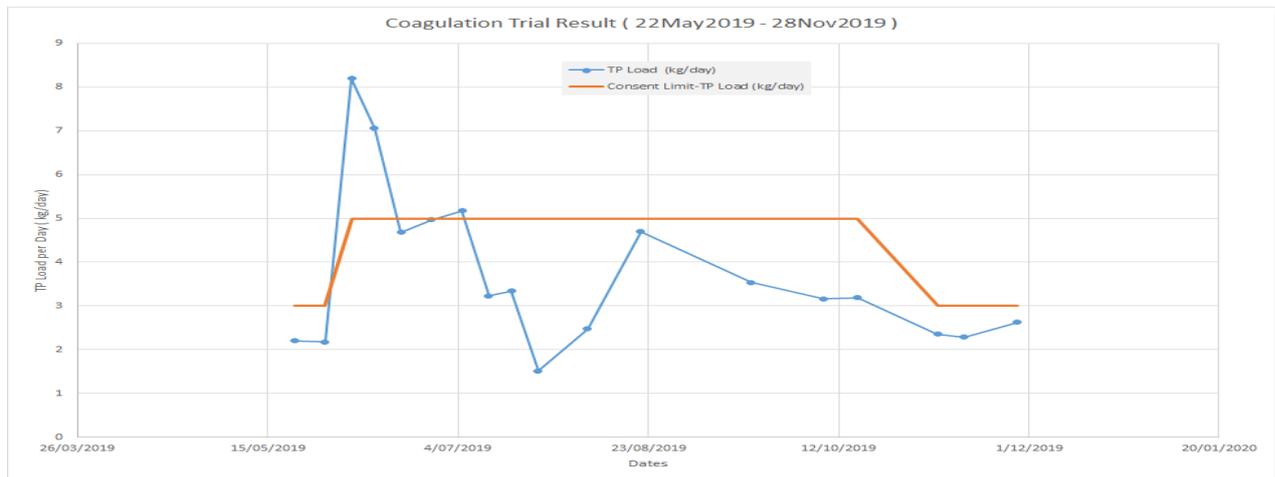
C1092 Mountain View Sewer replacement has been successfully tendered and awarded to Camex Civil for \$109,745.88. The Engineer's Market Assessment was \$132,119.80 and tenders of \$123 855.32 and \$124 543.00 were also received from the McIndoe Group and Allens United Drainage respectively. This contract involves the replacement of ≈330 metres of 150mm sewer main leading into the waste water treatment plant.

Sewer reticulation is performing as expected with only one blockage to report.

A property on Hinewai Street has had an issue with its private lateral and an historic build over. Council are working closely with the contractor to install a new sewer manhole through a neighbouring property.

The Otorohanga Medical Centre has installed a reflux valve to stop high flows in the sewer network effecting their building. The high flow levels in the network are added to by the infiltration of stormwater into damaged sewer pipes during rain events. This will not be fixed in the near future, as it will require a large scale infrastructure renewal programme.

The chemical coagulate trial at the waste water treatment plant continues to deliver pleasing results in reducing the Total Phosphorous that we discharge from the wetlands to the river, which is now within resource consent conditions. We continue to fine tune the dose ratios of chemical. We can report that the system is working as predicted but are still a in a trial phase until an annual cycle is completed



There was an accidental discharge from one of the manholes at the waste water plant that resulted in some treated sewage entering the nearby drain. Waikato Regional Council were informed and the repair sorted quickly with minimal environmental issues.

Under the capital works budget for this financial year there is an amount of \$80,000 allocated to a new screw press which was put into the budget to deal with the discharge of tankers emptying septic tanks. This was in reaction to health and safety concerns meaning the tankers are no longer able to discharge at the Main North Road pump station. On further investigation by staff and subsequent improvements made to the discharge process in collaboration with the contractors discharging the waste, it had been established that adding a new screw press is unnecessary. The current thinking is that the funds would be better spent increasing the size of the existing step screen on the inlet to the oxidation pond when it is due for replacement. This means that the planned capital work in this regard will not be completed as a result of the further investigation leading to a more prudent decision. This will result in a positive variance to the capital budget of \$80 000 at year end.

#### Otorohanga Community Stormwater Drainage and Flood Protection

There has been several maintenance issues within the stormwater reticulation this quarter, the first was a small sink hole that opened up in a carpark at the Otorohanga College Hostel which left the car parked above it in a precarious position. Investigations revealed that the side of the manhole had collapsed and the water had eroded the soil around it to the point where there was no dirt under the hot mix seal. Contractors had to dismantle the carpark to enable the manhole to be replaced

The stormwater line from Kakamutu Road which extends out to the western side of the Otorohanga College sports field was blocked and required large jetting equipment from Hamilton to clear.

Contractors also undertook a much needed clean of the open drain between the NIMT and Gray Site Construction. This line was blocked with self-seeding trees, causing upstream drainage issues.

#### **OTOROHANGA COMMUNITY FACILITIES**

##### Parks and Reserves

The parks and reserves department have been busy in the last quarter with the weather improving and everything starting to grow quickly.

Work will start in the New Year on the renewal of the Otorohanga Gardening contract as it expires in July 2020.

The Otorohanga Domain was verti drained again this year as well as aerated recently to improve the drainage. It also received a good replenishment of lime.

The cricket pitch received a new synthetic surface in time for the summer of cricket, this was a joint project with the Otorohanga Cricket Club and Council.

The annual street and park tree prune was completed within the last quarter, which is always a large project every year, it involves the Parks team and Town and Country Trees of Te Kuiti inspecting and trimming any limbs of trees within the Otorohanga community requiring attention, it also encompasses an inspection of any issues that may arise in the future.

As part of the stopbank pathway work the parks team has been water blasting and cleaning bridge pillars on SH3 and SH31 so that decorative murals can be painted on them.

They have also been busy preparing the two prominent swimming holes at the SH3 Bridge and the weir, clearing tracks at Rotary Park, and cleaning playgrounds ready for the summer.

We have carried out 25 playground inspections of our District Playgrounds, Broad leaf sprayed all the prominent parks (Reg Brett, Windsor Park, Otorohanga Domain), and unfortunately the contractor did accidentally kill a large piece of grass on the road verge of SH3 outside the Reg Brett Reserve, which they have repaired.

Our new lawn mowing contractor in Kawhia is going well with staff happy with the level of service given during inspections.

The parks team had a large gum tree to dispose of that fell over the Polocrosse pens at the Island Reserve this quarter.

Sadly staff have had to remove some flaxes at Lake Huiputea due to them suffering from yellow leaf disease. We don't know how it has happened but it is believed to be caused by a phytoplasma bacterium, carried by plant hopper insects. We have removed the bad ones and the less infected have been sprayed with an insecticide. We will continue to monitor them and spray them again in January.

#### Public Conveniences

Work will be starting on the renewal of the Otorohanga Toilet Cleaning Contract in the New Year, as it is due to expire in July 2020. This will be a substantial contract with the inclusion of the extra work around Reg Brett Reserve since the construction of the Jim Barker Memorial Playground and inclusion of the Domain Toilets.

The Waipapa Toilet suffered further vandalism this quarter after the actual fibreglass toilet was set on fire, which resulted in the toilet needing to be closed. The toilet required replacing and there was only smoke damage to the interior of the toilet block that required a special clean.

Contractors have had to repair hammer damage to the water tank that feeds the toilets at the Tom French Reserve near Kawhia this quarter. Staff were notified when there was no water at the toilets.

Our new toilet cleaning contractor is going well in Kawhia with good results from inspections carried out by staff.

#### Buildings

New CCTV has been installed on the exterior of the main Council Office as part of the improved security measures since the two burglaries earlier this year.

All new LED lighting has been installed on the first floor of the main office and new LED lighting has been carried out in the I-Site Building.

WSP/Opus carried out a Condition assessment of the Girl Guide Hall. A report on this will come to Council in the New Year.

Pensioner Housing

Staff are investigating an issue with subsidence of the exterior wall on of Flat 10 Windsor Court, it would appear the foundations are sinking on the exterior wall. Building control and community facilities are working on a way forward. Early indications show that a geotechnical report may be needed on the land below the building and underpinning required. There is no immediate issue with the building from a tenancy point of view except for some windows needing to be eased.

Otorohanga Cemetery

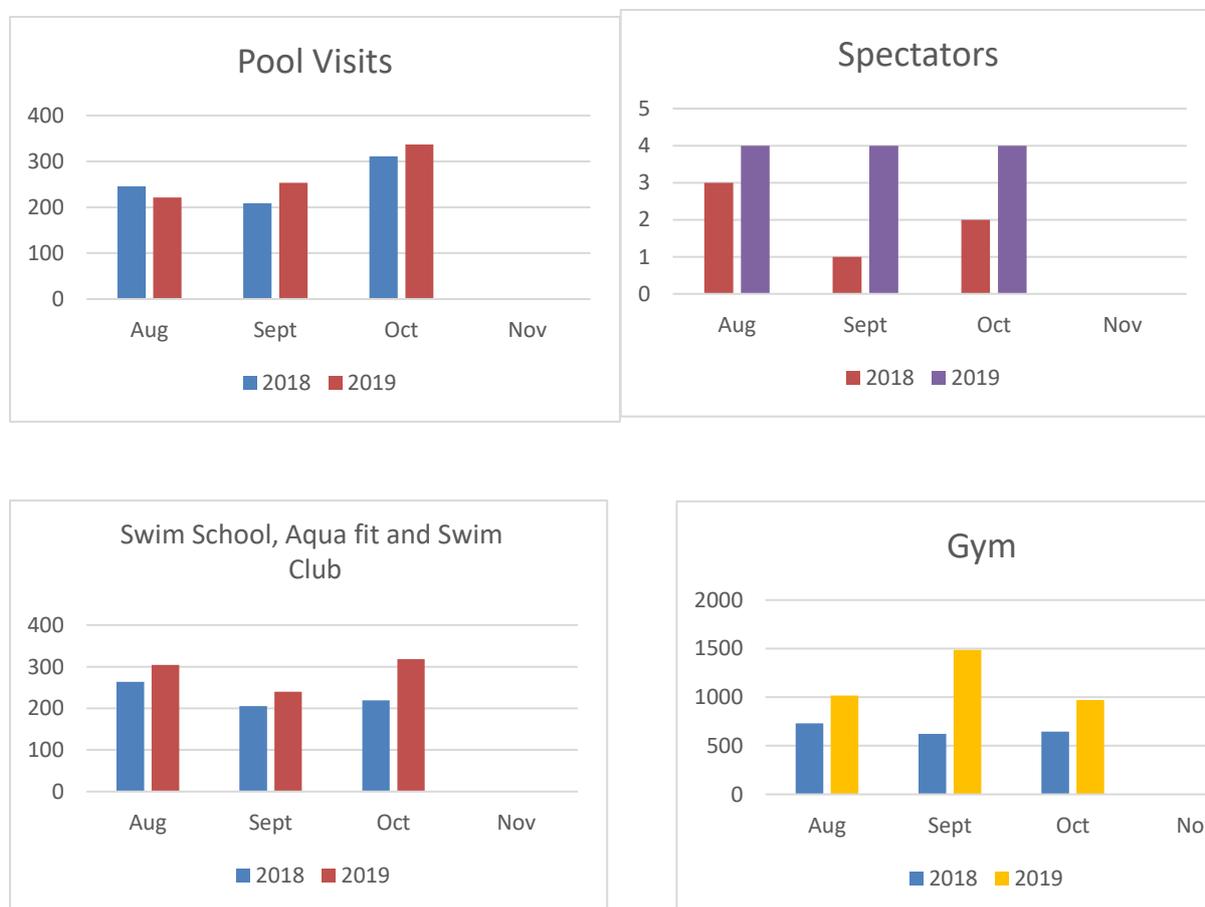
Broad leaf spraying has been carried out.

Kawhia Cemetery

The new screen planting has been completed

Otorohanga Swimming Pool/Gym

Statistics for the last quarter as provided by CLM



CLM continue to give good service to Otorohanga and appear to be building the business according to their records.

This quarter, prior to filling the main pool, staff were alerted to some cracking in the wall of the pool at the deep end. A structural engineer from Beca was brought in to give an opinion on what the issue was, and the risk in continuing to operate the pool.

The preliminary opinion is that pool is showing signs of “spalling”. Spalling is a term used to describe areas of concrete which have cracked and delaminated from the substrate. However, the most common cause of spalling is the corrosion of embedded steel reinforcement bars or steel sections. Corroding steel can expand up to ten times its original volume, exerting stress on the surrounding concrete.

It is believed this is the issue we have and the engineer has given the following recommendations:

As far as risk, staff were assured there was no risk to the public or catastrophic failure of the pool and has given the all clear to fill for the summer with the following recommendations to do in the off season.

The area should be appropriately investigated in the next pool off season period, this should include:

- A contractor should be engaged to expose the rebar where the concrete is “drummy”.
- An inspection of the area should be conducted by an engineer with a report to be prepared recommending remedial works.
- The ODC should digitise the pool records and seek information on the existing coating system to inform on coating repairs.
- Potentially chemical tests may be required to assess the impact of ground water or pool water on the concrete to assess the remaining life of the structure.
- Ultimately a specialist mortar repair system and recoating of the pool liner will be required to repair the pool.
- We would recommend a window of at least 4 months to allow this to be done to avoid conflict with Council’s Nov fill dates.

The pool was constructed in 1957 and is now 62 years old to give context to the age of the structure.

#### Solid Waste and Recycling

Otorohanga continues to provide a good waste management service to our broad community. Our recycling centres continue to be well used by our rural community. The 2018-19 year we have seen an increase in recycling, which coupled with a decrease in refuse shows as a positive sign that we are diverting more recyclable waste away from landfills to be recycled. Glass continues to be our biggest recycled item.

Staff are currently working with Maihihi and Ngutunui School on assisting in the repairs or replacement of their recycling sheds, which in both cases are old bus sheds. Council staff have been donated a MRC (Mobile Recycling Container) from EnviroWaste which may be used in either of these situations but discussions are ongoing. The MRC is currently sitting in Tokoroa.

Staff have only received one service request this quarter about our waste collections, however staff have fielded several enquiries about recycling.

The EnviroWaste contract has a term of 3 + 3 and will come up to its 3 year renewal next year in June 2020.

**Mark Lewis**  
**SERVICES MANAGER**

**ITEM 8**                    **ROUTINE ROAD SAFETY REPORT FOR AUGUST TO NOVEMBER 2019**  
**TO:**                        **CHAIRPERSON AND MEMBERS KAWHIA COMMUNITY BOARD**  
**FROM:**                    **ROAD SAFETY COORDINATOR**  
**DATE:**                    **24 JANUARY 2020**

---

**Relevant Community Outcomes**

- The Otorohanga District is a safe place to live
  - Ensure services and facilities meet the needs of the Community
  - Foster an involved and engaged Community
- 

**Executive Summary**

This is a routine report on road safety matters for the period August to November 2019.

**THIS REPORT WAS RECEIVED BY THE OTOROHANGA DISTRICT COUNCIL ON 17 DECEMBER 2019**

**Staff Recommendation**

It is recommended that the report be received.

**Fatigue**

Fatigue is an issue of high priority within the Otorohanga area.

Eight stops are planned for the 19/20 year. Stops will be held on SH39 at the intersection of Te Kawa Road in the car park of the old café. The Christmas fatigue stop will be taking place on 20 December at our usual spot. This Christmas we'll be handing out water bottles with fatigue messages on them.

The number of vehicles which stopped at the fatigue stops are:-

July 26	151
August 30	91
Oct 25	64

**Defensive Driving Courses**

It was noted there were no defensive driving courses being organised in the district, four have now been held since March. The courses help support the youth driver training programmes and high school driver training programmes.

Youth Driver Training,

Street Talk (Defensive Driving Course)

July 30 August 1, 6, 8                    17 participants

November 12, 14, 19, 21            13 participants

**Restraints**

25% of people killed on NZ roads were not wearing a seat belt. Correct child car restraints use also needs improvement. Our local road policing team organises regular restraint checks and at the beginning of each school term a joint checkpoint around local schools and preschools is held. NZTA is also funding "Baby on the Move" programme? Where facilitators will come into our district and run clinics to educate locals groups.

**Restraint Stops / Clinics**

During the November 4 restraint check, we had a lady drop in and inform us she had dropped in at the October restraint check where we had helped her secure her seat for her 9-month-old baby girl. Two days later she was involved in a bad accident and she believes her baby only survived because we had tightened the restraint and advised her on how to secure her baby correctly. This helps support what we are doing the in community.

TK 21 May	32 Restraints checked
Oto 23 Oct	Cancelled due to bad weather
Oto 4 Nov	23 Restraints checked
Dec 4 Dec	9 Restraints checked

### **Project Worm**

This is a joint campaign with local roading police targeting tourists traveling through our district to get to the Waitomo Village. All drivers entering and exiting the village are stopped and spoken to about staying left. They are given a wrist band to put on their left wrist as a reminder to stay left.

Senior Sergeant Vaughn Lasplie from Canterbury Highway Patrol-Serious Crash Unit has contacted the Road Safety Coordinator about using our "Stay Left campaign" on Canterbury Highways. We are now working with the Christchurch Road Safety Officer and Sergeant Vaughn to help them get the programme working over the Christmas period.

### **Driver Refresher Courses**

Senior drivers need to be kept updated with law changes and rules around driving. Each year we run two driver refresher courses to help keep our seniors safe on the road.

29 March	7 participants
10 December	7 participants

### **Road side message boards**

Audit and replacing old and damaged message boards across the District continues throughout year. New boards have been designed and are ready to replace the old worn out ones, this will be happening in the New Year. The new "target" boards have been shot at a number of times but they are holding up to the damage and do not need to be replaced.

### **Road Safety Coffin Display**

The Coffin Display was used at the latest TRAFINZ Conference held in Hamilton in early November. It was set up for the three days of the conference and used as point of reference many times during discussions and sessions on the numbers of people dying on our roads.

The display is now in Taupo for Christmas and will then be travelling to Matamata-Piako and Thames Coromandel in the New Year.

### **Youth Driver Training Programme:**

The staff from Number Twelve Youth Hub are busy keeping our youth on track with their licences. Youth from the ages of 16-25 can now utilise the youth hub to get all the way through their licences. Results for the first quarter are tracking well and are as follows: -

#### *Months Jul/Aug/Sep*

Learners Programme (30) per year  
Total passed -11 - ODC 4 / WDC 7

Restricted Programme (50) per year  
Total passed - 21 - ODC 14 / WDC 7

Full Licence Programme (30) per year  
Total passed – 7 - ODC 4 / WDC 3

### **Christmas Campaign**

38 Christmas Trees which represent the number of people who died on the road last December have been produced and will be travelling the district over the next few weeks. The trees display road safety messages and again are a visual display which helps people to understand the loss that is happening on our roads.

We have also decorated the tree outside council and will hang Christmas decorations with road safety messages on it.

### **Speed Management**

Speed management is starting to become a major talking point, and staff have been attending meetings with other Waikato councils, NZTA and the Waikato Regional Council to discuss the implementation of the process throughout the Waikato. A draft speed management plan for Ōtorohanga District Council is currently underway.

### **R Stubbs**

### **ROAD SAFETY COORDINATOR**

**ITEM 9      ROUTINE REPORT ON ROADING - AUGUST TO NOVEMBER 2019**  
**TO:            THE CHAIRPERSON AND MEMBERS KAWHIA COMMUNITY BOARD**  
**FROM:        ROADING MANAGER**  
**DATE:         24 JANUARY 2020**

---

#### **Relevant Community Outcomes**

- The Otorohanga District is a safe place to live
  - Ensure services and facilities meet the needs of the Community
- 

#### **Executive Summary**

This is a routine report on Roading matters for the period August 2019 to November 2019.

**THIS REPORT WAS RECEIVED BY THE OTOROHANGA DISTRICT COUNCIL ON 17 DECEMBER 2019**

#### **Staff Recommendation**

It is recommended that the report be received.

#### **Report Discussion**

##### **Contract 1070 – Roads Maintenance (Inframax Construction Ltd)**

Contract 1070 is progressing well. Cyclic maintenance work is by and large being completed within timeframes specified. As with any contract work there are exceptions and these are dealt with on a case by case basis. Where residents call in a service request these are investigated, prioritised and dealt with.

- Several culverts blocked and these were cleared or replaced as required. Aotea Road and Kahorekau Road culverts were worked on. A culvert in Bush Road also needed extensive work. A culvert pipe in Honikiwi Road slumped and is being priced to be repaired. Moerangi Road and Turoto Road are also being priced for repair work and this work involves the complete replacement of the existing, failed pipes.
- Puketawai Road culverts were extended. This work remained from the previous Maintenance Contract and was programmed for completion.
- Work to repair road pavements prior to reseals is due to be completed in December prior to the commencement of the annual reseal programme.
- Vegetation control has commenced on time this year and the contractor has completed a large portion of the programmed mowing, as well as tree removal and high level trimming.
- Mangatutu Bridge on Lethbridge Road has been repaired with additional bolts and plates installed to reduce the movement of the bridge deck.
- Morrison Road causeway has received some maintenance work. A more detailed account will be provided later in this report.

##### **Contract 1051 – Second Coat Sealing and Reseals 2017 – 2019 (Higgins Construction Limited)**

This is the final year of this contract and the Project and Design Team are underway to rewrite the document to call for tenders. For the current contract Higgins has been requested to provide a detailed programme for the work to be completed. A map of the roads being resealed is on the Council website.

**Contract 1053 – Footpath Construction and Maintenance 2017/18  
(Whitaker Civils Limited)**

The contractor has completed the sealing of the exposed areas and the only work that remains is the driveway work on Tuhoro Street which will tidy up an historical issue. The Contractor, has indicated they will return to complete this work in January 2020.

**C1063 - Huiputea Drive - Lowering and Associated Car Park and Stormwater Works  
(Inframax Construction Limited)**

This work has commenced again and it was found that the 11 KV cable, previously thought as a newer type, was in fact an old paper lead cable. Special conditions are attached to these, in that they are not allowed to be disturbed even in the ducting that they have been laid. Any work has to be a minimum of 300 mm away. This is forcing a deviation from the original design, as the cable was originally meant to be relocated. Both the contractor and The Lines Company are working on a solution to satisfy the road lowering. This has delayed the construction work which is still programmed to be completed in this construction season.

**Contract 1026 – Mangaorongo Road Rehabilitation  
(Inframax Construction Ltd)**

The Defects liability period has now been completed. The contractor has not yet dealt with all the outstanding items and have been instructed to complete this work as soon as possible. The retention monies are being withheld until all the work has been satisfactorily completed. NZS 3910:2013 makes provision that another contractor can be appointed to complete the work and the retention money used to offset the work being done. However, most of the work is of a non-critical nature and can be accommodated through time. The contractor is, however, disadvantaged financially by not receiving their retention monies. The Roading Manager is in talks with their Contracts Manager in this regard.

**Contract 1049 – Bridge Painting Contract  
(Inframax Construction Ltd)**

To date approximately 18 bridges out of 83 have been completed. The NZTA Investment Advisor to our region has complimented Council on how good the bridge painting appears.

**Contract 1071 – Stopbank Pathway**

The soft opening and blessing of the pathway has been completed. Minor work is still being done to the pathway, notably the bridge pier cleaning for potential murals. The 6 bench seats along the path have been installed with just the plaques to be added which will take place before the opening. A successful method of mowing the sides of the stopbank has been found and work is now underway to analyse the cost effectiveness and level of service requirements.

**Contract 1028 – Bulk Metalling Contract**

All roads have now been completed that were scheduled in the Bulk Metalling contract for the current year. This contract has one more year remaining.

**Contract 1083 – Wharepuhunga Road Rehabilitation**

Four tenders were submitted, ranging from \$588,378.92 to \$843,691.22. Below is a breakdown of the tender price range:

CAMEX Civil	\$588,378.92
Inframax Construction Ltd.	\$663,681.57

Schick Civil Construction	\$695,054.30
Broadspectrum Ltd.	\$843,691.22

The tender evaluation process confirmed CAMEX Civil as the preferred contractor at the tender amount of \$588,378.92 inclusive of a contingency amount of \$100,000 to provide for the risk of an unforeseen quantity of hard rock in the embankment. The Engineer's Estimate came to \$636,067.90 inclusive of the contingency sum.

#### **Contract 1091 – Raglan Road Traction Sealing**

Three tenders were submitted, ranging from \$289,187.02 to \$432,964.99. Below is a breakdown of the tender price range:

Inframax Construction Limited	\$289,187.02
CAMEX Civil	\$364,271.31
Broadspectrum Ltd.	\$432,964.99

The tender evaluation process confirmed Inframax Construction Limited as the preferred contractor at the tender amount of \$289,187.02 inclusive of a contingency amount of \$20,000. The Engineer's Estimate came to \$292,950.56 inclusive of the contingency sum.

#### **General Roding Matters**

- The Project and Design team are investigating the replacement of the damaged crash protection at the Waipapa Dam at the end of Waipapa Road. They are busy with an appropriate guardrail design and the possibility of ACC funding being approved to construct the replacement guardrail seems likely.
- The Honikiwi Road slump repair, approximately 2km from the intersection with SH31/39, is underway.
- Car rallies on metal roads which have taken place over the last year have not caused excessive damage and the road maintenance team have co-ordinated routine grading of these roads with the rallies. No damage to property such as signs and fences has occurred which has meant that no additional maintenance costs have been incurred and hence bonds taken from the rally organisers have been refunded in full.

#### **Roding Budgets**

Roding budgets will be covered in the quarterly Financial Report.

#### **Morrison Road Culvert**

Since a big storm event in 2017 the "new swamp" to the south of Morrison Road has been moving toward the Aotea Harbour. This is due to the fluid nature of the material over the silt bed of the tidal area on the land side of the Morrison Road causeway. Immediately after the storm event a second culvert was designed to be installed closer to the Aotea Road end however should this have been constructed it would have been engulfed by the moving swamp mass that encroached onto the road.

To assess a more permanent solution a test was done with sheet piles to determine the effective depth of the silt. At the start of the causeway it was approximately 6 m and at the existing culvert the 9 m sheet pile could still go down. A cost estimate was done to determine how much it would cost to install the 120 m sheet pile retaining wall. This rough cost estimate came to approximately \$350,000.00 and this price excluded any special conditions placed on the work by the Waikato District Council.

To alleviate the pressure from the moving swamp on the causeway a short sheet pile retaining wall was installed in front of the existing culvert entrance and the side drain was formed to deviate the water from the road. The movement of the swamp is being monitored and maintenance will be increased to keep the side drain flowing and away from the road surface.

The proposed additional culvert is not required at this stage, as the existing culvert has sufficient capacity and the water from the swamp can be deviated to flow into the existing culvert. There is minimal tidal movement of water through the swamp. However, should the movement of the swamp toward the harbour accelerate and negatively infringe on the causeway then it will be necessary to look for alternative engineering solutions, one of which is to construct a retaining wall.

### **Stopbank Pathway Mowing**

The Stopbank Pathway is a co-funded NZTA asset and as such, the maintenance responsibility now rests with the Roading Department. One significant aspect of this maintenance is the mowing of the stopbank sides. For the “soft opening” and blessing of the Stopbank Pathway, the mowing was done with the normal road maintenance long-reach mowers that are used for mowing the rural roadside. A test was done with some industrial class ride-on mowers from Downer, but these proved only effective on a very small area at the edge of the path with the stopbank. The long-reach mower could only reach about half way up the embankment when traveling along the base with the rest having to be done while travelling on top of the embankment on the pathway proper. Due to the size of the long-reach mower it became clear that this activity introduced an unacceptable measure of risk to the public and it would be necessary to close off sections of the Stopbank Pathway for Health and Safety reasons. In addition, the size of the tractor creates a risk of damage to the pathway itself and, although no damage was done, the possibility of damage to the stopbank was evident. The use of the tractor on the incline also become a Health and Safety risk to the tractor driver.

For this reason, a remote controlled tracked mower was trialled. However, the first unit trialled proved ineffective and the mass of the unit on the inclined stopbank made it slip, causing gouges.

Another unit was then proposed by the contractor that proved more effective. It was a wider and lower profile that had a much lower centre of gravity and it was about half the mass at only 450 kg. This unit can crawl all along the embankment without a problem. Benefits of this also means that the unit can be operated without closing any areas of the Pathway off to the public. The unit comes with a wide range of failsafe programmes built in to prevent or minimise potential hazards.

**A Senger**

**ROADING MANAGER**

**BOARD MEMBER UPDATE**