

# Corban Reserve Stormwater Upgrade – Watercare Consultation

**When:** 2 August 2018, 2 - 3pm

**Attendees:** Amelia Cunningham, Brian Parker, Freya Xu, Graham Nairn, Lakshmi Nair, Lana Nikolic, Suresh Mudliar, Tim Barry

**Apologies:** None

**Minutes Taker:** FX

## Discussion and action points

### Introductions and Roles

- Lana Nikolic – Watercare, Works Over Engineer
- Suresh Mudliar – Watercare, Water Network Planning Engineer
- Graham Nairn – Watercare, Wastewater Operations Engineer
- Tim Barry – Watercare, Project Manager North Harbour No.2 Watermain
- Brian Parker – Watercare, Project Engineer North Harbour No.2 Watermain
- Freya Xu – Auckland Council Healthy Waters, Design Engineer for Corban Reserve Stormwater Upgrade
- Amelia Cunningham – Auckland Council Healthy Waters, Design Manager for Corban Reserve Stormwater Upgrade
- Lakshmi Nair – Auckland Council Healthy Waters, Project Manager for Corban Reserve Stormwater Upgrade

### Proposed Stormwater Upgrade Works

- Corban Reserve is a closed landfill, there is an existing stormwater culvert under the reserve created from piping a section of Waitaro Stream in the 1980's.
- Gas and leachate from the landfill is infiltrating into the stormwater culvert under Corban Reserve, then into the downstream environment.
- Directly downstream of the Corban Reserve culvert is an egg-shaped brick section crossing Henderson Valley Road. Further downstream is an Armco culvert that is known to have ovality issues and sections of the invert missing.
- Healthy Waters is planning to divert the majority of the flow upstream of Corban Reserve from 18 Imperial Place, along Border Road, to Opanuku Stream so that the majority of the downstream network (culvert under landfill, egg shaped section and Armco culvert) can be decommissioned.
- It has been brought to Healthy Water's attention that Watercare's North Harbour No.2 watermain is designated along Border Road with a cathodic protection test point within Border Road Esplanade.

### Watercare North Harbour No.2

- North Harbour No.2 will be a 1.2m diameter CLS watermain; the total length of the line is 32kms long from West Auckland to North Auckland.

## Discussion and action points

- The watermain is intended to be installed over a 5 year period, commencing 2020 and is intended to be completed by 2025.
- Apart from the plan and information provided to support the designation, not too much work has been done around the Border Road section. Some geotechnical investigation has been carried out in the Opanuku Stream by the proposed pipe bridge.
- There is some flexibility around the exact location of the watermain within Border Road; could potentially move the line from the centre of the road to the western side of the road, but the location of the pipe crossing Opanuku Stream is fixed. Possibility of crossing on the western side of the bridge was explored and was found not to be feasible due to existing services, hence the proposed crossing on the eastern side of the bridge.
- It is intended to close half the road and construct the pipe via open cut; the pipe will be placed with standard cover of 1.5m along Border Road. There will be less cover at the bridge approach, possibly around 1m.
- The crossing of the future North Harbour No.2 watermain by the proposed stormwater pipe along Border Road does not immediately appear to be a problem, as the stormwater pipe will be at a much greater depth. The section around the bridge crossing would require some consideration, but looking at the available plans a crossing in this location should be workable.

## Collaboration Opportunities

- Healthy Waters have carried out a series of investigations that may be of some use to Watercare including:
  - o Geotechnical bores and CPT's within the project site
  - o As-builts for the Border Road/Palomino Drive Road Bridge
  - o Topographic survey of the project site.
- Both the proposed stormwater outlet structure and watermain / pipe bridge is within the Significant Ecological Area, would be good to collaborate and carry out the works in this area at the same time to reduce disruption. This could extend to collaborative procurement.

## Watercare Wastewater Crossing

- The proposed stormwater pipe will cross a 600mm RCRRJ wastewater line by 53 Border Road.
- Based on the drawing and details provided by Healthy Waters (005802.800 - 005802.820) Watercare is happy with the proposed cover of 500mm over the wastewater pipe and construction method in principal. Details of pipe support should be added to the protection details for Works Over approval.

## Works Programmes

- Healthy Waters is intending to lodge resource consent for this project in the next 4-6 weeks pending specialists reports.
- At the moment construction for the stormwater works is scheduled to commence in October 2019. Council management has recently requested acceleration to start in April 2019 if at all possible.

## Discussion and action points

- Watercare to consider bringing forward construction of the pipe bridge and works within the Border Road Esplanade to be concurrent with the stormwater outlet works. Could be a single consent and/or contract to include both works.

## Watercare Approvals

- Works Over approval is required for the wastewater crossing by 53 Border Road, but this is normally obtained by the Contractor at the time of construction. Watercare can provide an approval in principle to Healthy Waters to support resource consent.
- Healthy Waters also need to consider any service diversion or relocation required by the inlet structure at Spode/Imperial Place.
- s176 approval will be required as the proposed works will be within Watercare's designation area. Best to not include any commercial arrangements as part of the s176 agreement. Watercare agreed to start drafting up s176 approval for Healthy Waters.

## Next Steps

- Healthy Waters to share investigations / information with Watercare.
- Healthy Waters to provide updated drawings.
- Watercare to consider whether there is value in constructing the pipe bridge at the same time as the stormwater pipeline / outlet and having a combined consent. Procurement options at a project level to be determined if this proceeds. Watercare to come back to Healthy Waters.
- Watercare to commence drafting s176 and liaise with Healthy Waters for required supporting information.
- Watercare to draft letter for approval in principle for crossings/diversions for water / wastewater affected by the proposed stormwater upgrade.

## Contacts

- Build over related issues - Lana & Graham.
- Service relocation/diversion - Lana & Suresh.
- North Harbour No.2 - Tim & Brian.
- Lakshmi will coordinate correspondence from Healthy Waters.

**From:** [Laurence Jones \(AT\)](#)  
**To:** [Freya Xu](#)  
**Cc:** [Jane Harris \(AT\)](#)  
**Subject:** RE: Corban Reserve Proposed Stormwater Upgrade  
**Date:** Friday, October 12, 2018 9:44:39 AM

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Hi Freya

Thanks for coming in and discussing this.

Your project as outlined should not create more than minimal impact to the major roads of Border and Henderson Valley Road. The closure of Murillo Place for the receiving shaft would be acceptable subject to a suitable alternative access road being created and maintained and stakeholder management being undertaken with the affected residents.

Jane will try and find out whether AT owns or maintains the cycle path affected.

No TIA would be required for the works as proposed as there would not be any significant impact to any but minor roads.

Thank you both for giving me the opportunity to comment and providing a well thought out proposal to carry out the work while having the least possible impact on the community.

Regards  
Laurence

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**From:** Freya Xu <freya.xu@aucklandcouncil.govt.nz>  
**Sent:** Thursday, 11 October 2018 6:00 p.m.  
**To:** Laurence Jones (AT) <Laurence.Jones@at.govt.nz>; Johan Swanepoel (AT) <Johan.Swanepoel@at.govt.nz>  
**Cc:** Tom Kiddle (AT) <Tom.Kiddle@at.govt.nz>; Amelia Cunningham <Amelia.Cunningham@aucklandcouncil.govt.nz>; Lakshmi Nair <Lakshmi.Nair@aucklandcouncil.govt.nz>  
**Subject:** RE: Corban Reserve Proposed Stormwater Upgrade

Hi Laurence,

Thank you for taking the time to meet with us this morning to discuss our proposed stormwater works around Border Road. Just a quick note of our discussion this morning below.

#### Overview

- Auckland Council is in the process of designing stormwater upgrade works in and around Corban Reserve. There are significant health and safety risks associated with the existing pipe passing through this site - methane and leachate are currently being collected in the existing culvert through the reserve (in 1996 a worker was killed during pipe upgrade works).
- To eliminate the risk, stormwater must be permanently diverted upstream of the reserve. This

requires a new 2.1m diameter pipeline to be tunnelled from 18 Imperial Place, down Border Road, to the Opanuku Stream.

- Two alignment options are being pursued to keep the construction method open and allow for a more competitive tender process.

#### Alignment 1

- Alignment 1 consists of two tunnel drives from a central launch shaft near Murillo Place, in this case reception shafts will be required in the Border Road Esplanade and at 18 Imperial Place (18 Imperial Place has been acquired by Auckland Council to facilitate the proposed works and the house has already been demolished).
- Two options for the central shaft location near Murillo Reserve are being explored. Option A has the central launch shaft outside 29-31 Border Road with the slurry plant within Murillo Reserve. In this case the western lane on Border road and the berm will be taken up by the works, two way traffic can be maintained on Border Road utilising the existing median and Contraflow. An appropriate traffic management plan will be submitted as part of the CAR application. This option should not cause too much disruption and is acceptable to AT.
- Option B considers a central launch shaft at the intersection of Murillo Place and Border Road, this will require closing off Murillo Place and alternative access for residents will be provided through Murillo Reserve. There are only a handful of residences affected by this proposed alternative access and so a single lane road with passing bays is proposed to be provided within Murillo Place. AT have commented that this is probably best sealed with something sufficient to last the duration of construction. A new footpath through Murillo Reserve will provide alternative pedestrian access and will be maintained as a permanent new walkway. Given adequate consultation with residents on Murillo Place and appropriate traffic management plan at CAR stage, this option is also acceptable to AT.

#### Alignment 2

- Alignment 2 is a one drive option where the launch shaft will be set up within Border Road Esplanade, most of the site will be within Border Road Esplanade with just truck movements on Border Road. The shaft itself is not expected to be within the carriageway. Truck movements in and out of the site will be tight, proper stop/go traffic management should be provided. Alternatively, with some consideration the existing traffic signal by the park entrance could be altered to allow truck movement. Traffic management here should also be relatively straight forward as very few truck movements per day are expected.

#### Other points

- Traffic at 18 Imperial Place is not expected to have much impact, as most of the works are in private property.
- Plans of the existing road bridge by Border Road Esplanade has been obtained from AT (Sunil.K), the proposed works are designed to have 2-3m of clearance from the bridge abutment, this should not be an issue. AT will raise any concerns otherwise.
- Carriageway resealing is shown in the forward works planner for the bridge between Border and Palomino, unless urgent these works can be shifted following stormwater works to avoid damage and reduce disruption to residents.

### Staging and timing, other possible works

- The proposed stormwater tunnel is Stage 1 of Healthy Water's Corban Reserve Stormwater Upgrade.
- Stage 2 of the works consists of works to decommission the existing culvert under Corban Reserve (a closed landfill).
- Stage 3 of the works consists of lining the downstream steel pipe between 139a Henderson Valley Road and 32 Coburg St. This pipe is in very poor condition and is at risk of collapse. The existing brick lined culvert between Corban Reserve and 139 Henderson Valley Road will also be replaced and the existing network along Henderson Valley Road upgraded as part of this stage of the works
- As the steel pipe is at risk of collapse, Healthy Waters is exploring the possibility of advancing Stage 3 works, Healthy Waters will be in touch with any updates.
- Resource Consent for Stage 1 works will be lodged before the end of the year; Contractor's will be invited to express their interests early 2019; construction for Stage 1 is planned for Sep/Oct 2019, dependent on contractor availability. There is a possibility of advancing the works to fit in with other tunnelling works across Auckland - Healthy Waters will advise AT as early as possible if this is likely.

### Key Actions

Laurence to:

- Confirm that the approaches above are generally acceptable to AT in principle
- Confirm that traffic impacts are minor and can be dealt with by CARs prior to construction (i.e. that a Traffic Impact Assessment is not required)
- Check ownership of the Twin Stream Cycleway for us and confirm any consultation required
- Provide contact person for the planned bridge reseal

Freya/Amelia to:

- Send through the staging plan (please find attached).
- Send through consent information for lodgement
- Keep Laurence informed as the project progresses

We will in touch once closer to time of the tender and keep AT updated as the project progresses.

Thanks again for your time this morning, let me know if I missed anything in the summary above.

Ngā mihi | Kind regards,

**Freya Xu | Healthy Water Specialist**  
**Healthy Waters – Design Office**  
**Infrastructure & Environmental Services**

Mobile: 021 718 176

Auckland Council, Level 3, Bledisloe House, 24 Wellesley Street, Auckland

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**From:** Laurence Jones (AT) <[Laurence.Jones@at.govt.nz](mailto:Laurence.Jones@at.govt.nz)>

**Sent:** Wednesday, 12 September 2018 9:32 a.m.  
**To:** Johan Swanepoel (AT) <[Johan.Swanepoel@at.govt.nz](mailto:Johan.Swanepoel@at.govt.nz)>  
**Cc:** Tom Kiddle (AT) <[Tom.Kiddle@at.govt.nz](mailto:Tom.Kiddle@at.govt.nz)>; Freya Xu <[freya.xu@aucklandcouncil.govt.nz](mailto:freya.xu@aucklandcouncil.govt.nz)>  
**Subject:** RE: Corban Reserve Proposed Stormwater Upgrade

Thanks Johan

No I was not aware of it.

This will have serious implications for traffic and residents in the area and will need appropriate impact assessment done as well as stakeholder liasing.

Regards  
Laurence

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**From:** Johan Swanepoel (AT)  
**Sent:** Wednesday, 12 September 2018 8:59 a.m.  
**To:** Laurence Jones (AT) <[Laurence.Jones@at.govt.nz](mailto:Laurence.Jones@at.govt.nz)>  
**Cc:** Tom Kiddle (AT) <[Tom.Kiddle@at.govt.nz](mailto:Tom.Kiddle@at.govt.nz)>; Freya Xu <[freya.xu@aucklandcouncil.govt.nz](mailto:freya.xu@aucklandcouncil.govt.nz)>  
**Subject:** FW: Corban Reserve Proposed Stormwater Upgrade  
**Importance:** High

Hi Laurence

Not sure if this was send to you but it looks like a serious project that will have significant impact on properties as well as traffic.

We cannot do much about it going down the carriageway and can only ask that the road be reinstated.

Be good if you can comment too.

Kind regards  
Johan

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**From:** Freya Xu <[freya.xu@aucklandcouncil.govt.nz](mailto:freya.xu@aucklandcouncil.govt.nz)>  
**Sent:** Tuesday, 11 September 2018 2:25 p.m.  
**To:** Johan Swanepoel (AT) <[Johan.Swanepoel@at.govt.nz](mailto:Johan.Swanepoel@at.govt.nz)>  
**Cc:** Amelia Cunningham <[Amelia.Cunningham@aucklandcouncil.govt.nz](mailto:Amelia.Cunningham@aucklandcouncil.govt.nz)>; Lakshmi Nair <[Lakshmi.Nair@aucklandcouncil.govt.nz](mailto:Lakshmi.Nair@aucklandcouncil.govt.nz)>  
**Subject:** Corban Reserve Proposed Stormwater Upgrade  
**Importance:** High

Hi Johan,

Freya here from Healthy Waters Design, hope you are still the correct person to speak to in about stormwater works within the road corridor in West Auckland?

Not sure if you would be aware Corban Reserve, located at 130-136 Henderson Valley Road, is a closed landfill. There is a stormwater culvert going under it at the moment, it is suspected that landfill associated leachates and gasses are being brought to the downstream environment via the subject stormwater pipe. We are currently working to divert the upstream network, so we can decommission the pipe under closed landfill, along with this the surrounding network will also be upgraded following elimination of landfill associated gas risks.

It is proposed to construct a 2100mm stormwater pipe tunnel along Border Road to enable diversion of upstream catchment. Two alignments have been developed allowing for different construction methods and use of different tunnelling machine. Please find attached draft design drawings. I have also included in link below the proposed construction set up and traffic diversion plans, as these were too large to attach.

[https://1drv.ms/f/s!AIOTDtCkHPdwhiT\\_R0hvMH053ypH](https://1drv.ms/f/s!AIOTDtCkHPdwhiT_R0hvMH053ypH)

We have been in touch with Sunil Kariyawasam from AT's Asset Structure Team regarding the works around the Border Road/Palomino road bridge. Would be great if we could also get AT's thoughts on the proposed pipe alignment, manhole locations, traffic diversion during construction (up to 12 month due to size of pipe) and any other concerns AT may have.

As part of the works a steel pipe downstream will be lined, this steel pipe currently consist of missing inverts and ovality issues, it is in similar condition to the one at Clark St (New Lynn) not long before its collapse. Due to the condition of this steel pipe, diversion works has become urgent, any help to progress the works is much appreciated. Happy to meet to go through the proposed works and discuss if that helps.

Looking forward to hearing back from you.

Ngā mihi | Kind regards,

**Freya Xu | Healthy Water Specialist**  
**Healthy Waters – Design Office**  
**Infrastructure & Environmental Services**

Mobile: 021 718 176

Auckland Council, Level 3, Bledisloe House, 24 Wellesley Street, Auckland

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22 October 2019

Gerhard Van Rooyen  
Healthy Waters | Infrastructure and Environmental Services  
Auckland Council  
Level 8 South, Bledisloe House  
Auckland

Watercare Services Limited  
73 Remuera Road, Remuera,  
Auckland 1050, New Zealand  
Private Bag 92521, Wellesley Street,  
Auckland 1141, New Zealand  
Telephone +64 9 539 7300  
[www.watercare.co.nz](http://www.watercare.co.nz)

Dear Gerhard,

**Proposed Works in Watercare Designation for new storm water line as part of Corban Reserve Stormwater Upgrade Project**

Thank you for your request dated 18 July 2019 for approval to undertake works in the following Watercare designation at Border Road, Henderson:

- Reference 9376 in the Auckland Unitary Plan Operative in part

Future Watercare's North Harbour No. 2 Watermain (WMNH2) alignment is proposed within the designated land. There is also a transmission waste water line, Henderson Valley Branch, and a number of water and waste water assets belonging to Watercare local network, that will be affected by the proposed works.

As described in your request, you are seeking Watercare's S176 approval to attain support for your resource consent application. There is no contractor appointed to undertake the works at this stage.

Subject to the conditions below, Watercare hereby provides its approval as a Requiring Authority under Sections 176 (1)(b) and 178 (2) of the Resource Management Act 1991, to Healthy Waters/Auckland Council for the proposed works in land designated by Watercare.

This approval is granted subject to the following conditions:

1. The proposed works are limited to the designation portion running along Border Road only, shown on the drawing submitted to Watercare and attached to this letter.
2. All works proposed within the reserve/along the bridge should be discussed with Watercare's WMNH2 project team.
3. An application for Works Over approval should be applied for by the contractor prior to construction works commencing.
4. Construction drawings and cross section drawings should meet Watercare standards and works over requirements.
5. Any alterations to Watercare existing assets are subject to further Watercare approval.

Please contact the writer if you should require any further information.

Yours faithfully,

A handwritten signature in blue ink, appearing to read 'Lana Nikolic', written in a cursive style.

Lana Nikolic  
Asset Protection Engineer  
Watercare Services Limited



