



09 November 2023



Dear Clive

Request for Information – Local Government Official Information and Meetings Act 1987

We refer to your official information request dated 12 September 2023 for:

- Copies of all briefings, memos and aide memoires relevant to the decisions around the tobys, toby covers, and water backflow preventers installed as part of the Queen St upgrade in Wainuiomata.
- 2. All internal emails by Hutt City Council staff relating to the tobys, toby covers and water backflow preventers.
- 3. Copies of any correspondence between Hutt City Council and Wellington Water, or Queen St upgrade contractors about the tobys, toby covers, and water backflow preventers.

Answers:

- 1. Please see Appendix 1 of this response.
- 2. We don't have correspondence on the specific elements of the work as we rely on Wellington Water Limited (WWL) as our trusted advisors to handle all technical matters and we don't have any staff with that expertise. Therefore, we refuse the request under sections 17(e) or (g) of the LGOIMA (because the requested document/s do not exist, or the information is not held).
- 3. We don't have correspondence on the specific elements of the work as we rely on WWL as our trusted advisors to handle all technical matters and we don't have any staff with that expertise. Therefore, we refuse the request under sections 17(e) or (g) of the LGOIMA (because the requested document/s do not exist, or the information is not held).



You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at www.ombudsman.parliament.nz or freephone 0800 802 602.

Please note that this response to your information request may be published on Hutt City Council's website. Please refer to the following link:

www.huttcity.govt.nz/council/contactus/make an official information act
request/proactive releases

Yours sincerely

Lakna Siriwardena

Legal Operations Advisor

From:	
Sent: To:	Wednesday, September 7, 2022 12:04 PM @jfcltd.co.nz; @wellingtonwater.co.nz)
Cc:	@huttcity.govt.nz; @huttcity.govt.nz; @wellingtonwater.co.nz); @wellingtonwater.co.nz);
Subjec	@ccl.co.nz; @huttcity.govt.nz
Hi All,	
Minutes	s of today's meeting as below.
1.	 Updates about progress on site – Cut ins of new watermain at Fitzherbert Road end complete, old main disconnected, pressure testing and chlorination complete, backfilling in progress. Installation of new watermain towards Wainuiomata Road end will start in this week.
2.	Shutdowns –
	 Shutdown 1 last week was a success Next shutdown to happen possibly in the last week if September – <u>CCL to start planning for it</u>
3.	 Shutdown 1 - Some properties along Fitzherbert Road received wrong letters, CCL received few calls complaining about water shuts at night during the shutdown. Apology letters sent out this Monday. This could be avoided during next shutdown by having a single letter (noise + water shut) to all related properties with a map clearly indicating how they might be affected. Any complaints to be immediately notified to WWL.
4.	Small section of the street (Te Ara Raukura) off Queen Street – not owned by HCC – Temporary water supply connection to the Sushi shop has been proposed. No response from Countdown yet for site area extension – sent a follow up email The timing of connection to the sushi shop to be discussed between and Ideally to be done before the shutdown if possible. Shutdown could be moved accordingly. Dairy and takeaway shop and 2 resident flats on Wainuiomata Road side – currently having a manifold from the service connection to these properties, they have approached CCL for moving manifold into the service cupboard in their property. CCL and JFC to check for options
5.	Programme – • Watermain replacement work likely to finish by mid-October - review with
6.	Other updates – checked about the as-builts. confirmed that they are being done simultaneously by the sub-contractor.
Please	let me know if I have missed anything.
Thanks	

----Original Appointment---From:
Sent: Friday, August 5, 2022 8:45 AM
To:

@huttcity.govt.nz;
@ccl.co.nz;
@ccl.co.nz;

Subject: Queen Street watermain renewal - Weekly catch-up

@wellingtonwater.co.nz

When: Occurs every Wednesday effective 10-Aug-22 until 05-Oct-22 from 10:00 AM to 10:30 AM (UTC+12:00)

@wellingtonwater.co.nz);

@ifcltd.co.nz:

Auckland, Wellington.

Where: Microsoft Teams Meeting

Morning All,

Cc:

Apologies, I have been informed that the timing of this meeting overlaps with another weekly meeting HCC and JFC has for street scaping work.

So I am moving this meeting to every <u>Wednesday morning 10 a.m.</u> as Tuesdays are usually pretty full. Hope this suits everyone.



Hello everyone,

I am setting up a weekly catch-up meeting to discuss the on-going Queen Street watermain renewals work. This invite is being sent to all parties involved so everyone is on the same page.

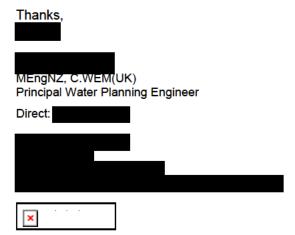
Rough agenda -

After a quick round of introduction in the first meeting, we will discuss about -

- 1. Updates about progress on site
- 2. Work program in coming week are we on track?
- 3. Stakeholder relationship and communications property owners, residents and public.
- 4. Shutdown Plans impact on commercial property owners
- 5. Current and Future Risks e.g.: coordination on site, shutdowns, impact on programme (incase of staff unavailability)
- 6. Any other issues.

Please note that the points of discussion above will be watermain renewals focussed (in addition to the wider streetscaping project)

Hope everyone can make it every Tuesday. Talk to you all soon.



Microsoft Teams meeting

Join on your computer or mobile app

Click here to join the meeting

Meeting ID: 219 054 204 874

Passcode: oT5nHE

Download Teams | Join on the web

Or call in (audio only)

<u>+1 587-414-2460,,609184067#</u> Canada, Edmonton

Phone Conference ID: 609 184 067#

Find a local number | Reset PIN



<u>Learn More</u> | <u>Meeting options</u>

From:

Sent: Wednesday, September 21, 2022 10:45 AM

To: @wellingtonwater.co.nz);

@wellingtonwater.co.nz);

Cc: @ccl.co.nz;

Subject: MOM 21/09/22 - Queen Street watermain renewal - Weekly catch-up

Hi All,

Minutes of today's meeting as discussed. Please reply to all if anything is missing or needs to be changed.

Updates about progress on site –

- Installation of new watermain towards Wainuiomata Road end hold off until this afternoon until JFC have cleared the area.
- Temporary supply to the Library for fixing shallow PVC pipe at the Intersection of Wainui Road and Queen Street – complete.
- Installation of laterals and chambers on going for Stage 2.
- Pressure testing stage 3 next Thursday.

2. Programme -

- Latest available programme as on 9 Sept sent by Wainuiomata road isolation at the Library. might be pushed by a day because of public holiday on Monday.

 This has taken into consideration the pushed by a day because of public holiday on Monday.
- Countdown connection to be considered in the programme for early October
- Backfilling Phase 1 and Phase 2 after the pressure testing

3. Shutdowns -

• Shutdown 2 to happen in the week of 10th October or 17th October after installation of manifolds at laterals, Charlie's sushi connection to be considered before the shutdown.

4. Communication -

- Social media posts weekly
- Shutdown 1 information to

5. Stakeholder relationship and communications -

- Small section of the street (Te Ara Raukura) off Queen Street not owned by HCC Need permission to work on their land. Received Ok from Countdown to carry out the work.
- Dairy and takeaway shop and 2 resident flats on Wainuiomata Road side currently having a
 manifold from the service connection to these properties, they have approached CCL for moving
 manifold into the service cupboard in their property. More complicated than originally thought.
 Property owners do not have any concerns. CCL and JFC to check for options.
- Harcourts awning clipped out Owner not in a rush to get information. Building owner back in the
 country.
 to follow up. Speedy signs to get inducted in H & S plan.
- New shop Coin Saver on Queen street No. 24 water supply connection at front door Shop normal opening hours from 9-6.
 and to have a chat with the owner to consider opening the shop at 10am on some morning so paving can be done from 7 to 10.
- Pricebusters temporary connection for now.
- Supersaver not happy about the work going on front of their shop parking still blocked off Thomas to look for parking to be freed as soon as possible.

Other issues/updates –

 Connection to community centre – toby box in the pathway. Service connection will also be replaced (not included in the IFC set of drawings) – confirmed new chamber can be installed but it must have a recessed XPAVE lid when located in the new concrete paving. CCTV of wastewater line – CCL to carry out CCTV of the whole line, only flow monitoring is being
done as of now.

Thanks,

From				
Sent:	Wednesday, September 14, 2022 11:01 AM			
To:	@huttcity.govt.nz>;	@hutt	city.govt.nz>;	
	@jfcltd.co.nz>;	@stantec.com>;		@xtra.co.nz>;
	@wellingtonwater.co.nz)	@wellingtonwater.d	co.nz>;	
	@perceivesc.co.nz>			
Cc:	@huttcity.govt.nz>;		@stantec.co	om>;
	@wellingtonwater.co.nz>;	<pre>@ccl.co.nz>;</pre>		
	@wellingtonwater.co.nz) @wel	lingtonwater.co.nz>;	@ccl.co.nz;	
	@ccl.co.nz>			

Subject: MOM 14/09/22 - Queen Street watermain renewal - Weekly catch-up

Hi All.

Minutes of today's meeting as discussed.

1. Updates about progress on site -

- Installation of new watermain towards Wainuiomata Road end on going.
- Temporary supply to the Library for fixing shallow PVC pipe at the Intersection of Wainui Road and Queen Street – on going.
- Installation of laterals and chambers hold up until Monday.

2. Programme -

• Latest available programme as on 9 Sept sent by Wainuiomata road isolation at the Library.

3. Shutdowns -

• Shutdown 2 to happen in the week of 10th October after installation of manifolds at laterals. Shutdown will impact only those who are still connected to old watermain (best case scenario – won't impact anyone).

**The state of the stat

4. Communication –

- Social media posts weekly
- Letters to retailers update for this week.
- Shutdown Letters apology letters went out to the properties getting wrong letters and this has been closed off.

5. Stakeholder relationship and communications -

- Small section of the street (Te Ara Raukura) off Queen Street not owned by HCC Temporary
 water supply connection to Charlie's Sushi shop has been proposed. Need permission to work on
 their land. No response from Countdown yet for site area extension This will happen after the
 Shutdown as per the Programme, however ideally it is good if it happens before.
- Dairy and takeaway shop and 2 resident flats on Wainuiomata Road side currently having a
 manifold from the service connection to these properties, they have approached CCL for moving
 manifold into the service cupboard in their property. More complicated than originally thought.

 Property owners do not have any concerns. CCL and JFC to check for options.
- Harcourts awning clipped out being followed up.
 email on the process to rectify damage.

 <u>and</u>
 <u>to provide more information to provide more information to the process to rectify damage.</u>

· Library happy with the temporary supply.

6. Other issues/updates -

- Existing water lateral burst outside hair dresser at no. 30 isolated incident old lateral connected to old main.
- Connection to community centre toby box in the pathway.
 be installed. Service connection will also be replaced (not included in the IFC set of drawings)

Thanks,



Subject: MOM 07/09/22 - Queen Street watermain renewal - Weekly catch-up

Hi All,

Minutes of today's meeting as below.

Updates about progress on site –

- Cut ins of new watermain at Fitzherbert Road end complete, old main disconnected, pressure testing and chlorination complete, backfilling in progress.
- Installation of new watermain towards Wainuiomata Road end will start in this week.

2. Shutdowns -

- Shutdown 1 last week was a success
- Next shutdown to happen possibly in the last week if September <u>CCL to start planning for it</u>

3. Communication -

Shutdown 1 - Some properties along Fitzherbert Road received wrong letters, CCL received few calls
complaining about water shuts at night during the shutdown. Apology letters sent out this Monday.
This could be avoided during next shutdown by having a single letter (noise + water shut) to all related
properties with a map clearly indicating how they might be affected. Any complaints to be immediately
notified to WWL.

4. Stakeholder relationship and communications -

- Dairy and takeaway shop and 2 resident flats on Wainuiomata Road side currently having a
 manifold from the service connection to these properties, they have approached CCL for moving
 manifold into the service cupboard in their property. CCL and JFC to check for options

5. Programme -

Watermain replacement work likely to finish by mid-October - review with

 to send updated program after
 review with

6. Other updates – checked about the as-builts. confirmed that they are being done simultaneously by the sub-contractor. Please let me know if I have missed anything.
Thanks,
Original Appointment From: Sent: Friday, August 5, 2022 8:45 AM To: @huttcity.govt.nz; @huttcity.govt.nz; @ifcltd.co.nz; @ccl.co.nz; @ccl.co.nz; Cc: @wellingtonwater.co.nz); Subject: Queen Street watermain renewal - Weekly catch-up When: Occurs every Wednesday effective 10-Aug-22 until 05-Oct-22 from 10:00 AM to 10:30 AM (UTC+12:00) Auckland, Wellington. Where: Microsoft Teams Meeting
Morning All,
Apologies, I have been informed that the timing of this meeting overlaps with another weekly meeting HCC and JFC has for street scaping work.
So I am moving this meeting to every <u>Wednesday morning 10 a.m.</u> as Tuesdays are usually pretty full. Hope this suits everyone.
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- Any other issues.

Please note that the points of discussion above will be watermain renewals focussed (in addition to the wider streetscaping project)

Hope everyone can make it every Tuesday. Talk to you all soon.

Thanks,

MEngNZ, C.WEM(UK) Principal Water Planning Engineer

Direct:

Stantec New Zealand Stantec House Level 15, 10 Brandon Street Wellington Central, Wellington 6011, New Zealand



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Phone Conference ID: 609 184 067#

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From:

Sent: Monday, November 2, 2020 11:54 AM

To: <u>McLatchie & Sharp Limited</u> <u>@mclatchieandsharp.co.nz); action@actioncivil.co.nz;</u>

@ccl.co.nz; @actioncivil.co.nz;

<u>groundworks@xtra.co.nz;</u> @higgins.co.nz; @higgins.co.nz;

wgtn.pipelines@xtra.co.nz; ivesplumbing@gmail.com

Cc: @huttcity.govt.nz;

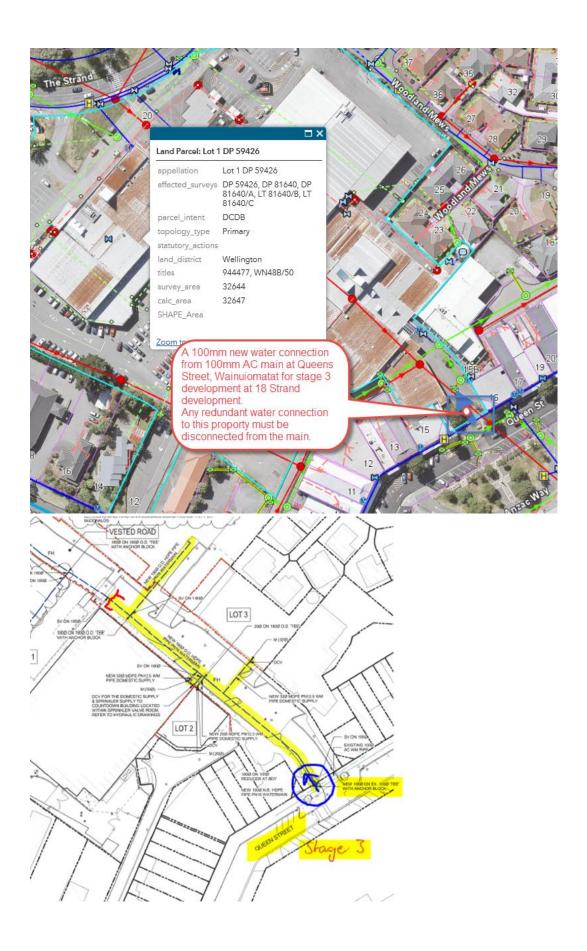
Subject: FW: 20HNC 108, 18 The Strand, Stage 3 development., Lower Hutt; water connection approval.

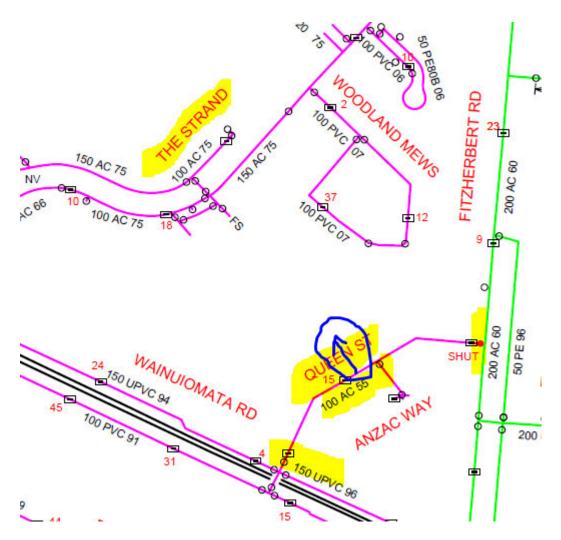
Hi

I am pleased to advise that the application to Hutt City Council for water connections at the above address have been approved with following conditions;

- A 100mm new water connection from 100mm AC main at Queens Street, Wainuiomata for stage 3 development at 18 Strand development.
- Any redundant water connection to this property must be disconnected from the main.

Please make arrangement to provide Water connection as built, HCC soon, after the completion of water connection. Please note to send me the information & copy to data.team@wellingtonwater.co.nz





Regards

Engineer- Land Development



Mob Tel 04 912 4400

Private Bag 39804, Wellington Mail Centre 5045 Level 4, IBM House, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz

Wellington Water is owned by the Hutt, Porirua, Upper Hutt and Wellington city councils and Greater Wellington Regional Council. We manage their drinking water, wastewater and stormwater services.

From:

Sent: Thursday, August 25, 2022 12:01 PM

To:

Cc:

Subject: FW: Queen Street Chamber Mock Up

Attachments: IMG_2022_08_24_14_22_33_213.jpg; IMG_2022_08_24_14_07_24_294.jpg



With attachments now.

I think this is a good workable result, enough space for the equipment (which at the time of the chamber being selected was not finalised) while also allowing flexibility to do some connections within the chamber.



Regards

CMEngNZ, Pr Eng, MEng, BSc Principal Water & Coastal Engineer



The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the intended recipient, please delete all copies and notify us immediately.

From @ccl.co.nz>
Sent: Thursday, 25 August 2022 9:56 AM

To: @ccl.co.nz>; @stantec.com>; @wellingtonwater.co.nz>

Cc: @wellingtonwater.co.nz>

Subject: FW: Queen Street Chamber

Hi Guys,

Please see attached photos taken yesterday of the inside of the new chamber with the new manifold. All pipe work is to be completed in 25mm copper.

The RPZ in this picture is 20mm so that will increase in size. (Sorry 25mm ones have not arrived yet) The other brackets are for the aerial and control unit for the water meters.

If there is any problems with this design please let me know as I'll be ordering all the materials needed tomorrow morning.

Regards,





From: @ccl.co.nz>
Sent: Thursday, 25 August 2022 9:34 am
To: @ccl.co.nz>
Subject: Queen Street Chamber

Hi

See attached.

Regards











From: @huttcity.govt.nz>

Sent: Tuesday, July 26, 2022 10:28 AM **To:** @ccl.co.nz);

Subject: FW: [EXTERNAL] Fw: 22HNC 083, 16 Queen Street, Wainuiomata, Lower Hutt- metered water

Connections approval

Attachments: WWL-32-40 with bf.pdf; 16 Queen St.docx; Approved Contractors-2021-22.docx

Placemaking Advisor

Hutt City Council, 30 Laings Road, Lower Hutt 5040

W: www.huttcity.govt.nz



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From: @ubclub.co.nz>
Sent: Wednesday, June 29, 2022 12:31 PM

To: @huttcity.govt.nz>

Subject: [EXTERNAL] Fw: 22HNC 083, 16 Queen Street, Wainuiomata, Lower Hutt- metered water Connections

approval

Hi

Hopefully your feeling a bit better now and back at work.

We have Water Meter permission now for Wellington Water.

Terry Ives will be our approved installer if you need to make any contact.

Best regards

Phone

From: <u>@wellingtonwater.co.nz</u>>

Sent: Wednesday, June 29, 2022 11:53 AM
To: @ubclub.co.nz>

Subject: FW: 22HNC 083, 16 Queen Street, Wainuiomata, Lower Hutt- metered water Connections approval



The water connection approval letter & other information are attached.

Regards





Tel 04 912 4400 Mob

Private Bag 39804, Wellington Mail Centre 5045

www.wellingtonwater.co.nz



Subject: RE: 22HNC 083, 16 Queen Street, Wainuiomata, Lower Hutt- metered water Connections approval

Hi

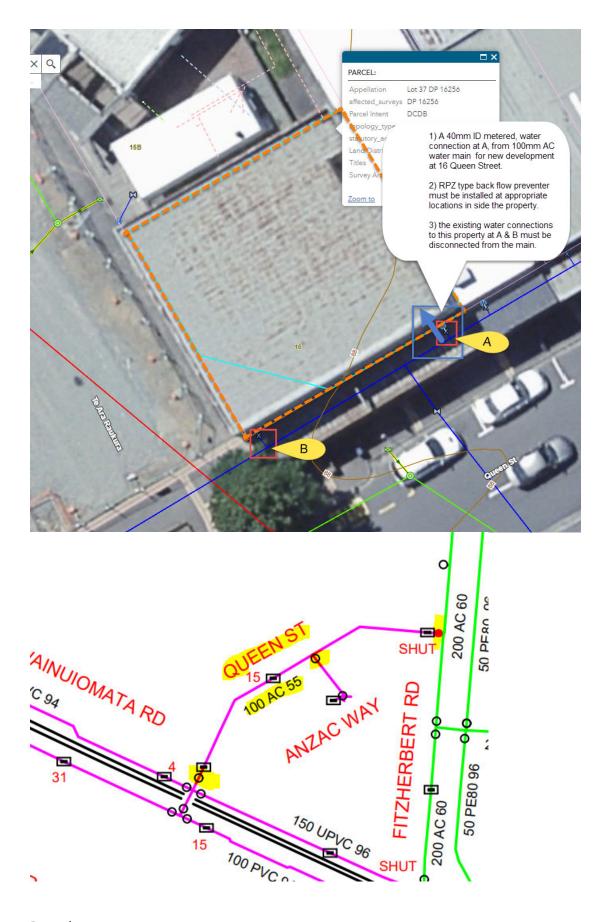
I am pleased to advise that the application to Hutt City Council for water connection for the above address has been approved as below.

- A 40mm ID metered, water connection at A, from 100mm AC water main for new development at 16 Queen Street.
- RPZ type back flow preventer must be installed at appropriate locations in side the property.
- the existing water connections to this property at A & B must be disconnected from the main.

This approval is valid for six months from 29 June 2022. Any connection after this date is to be re-applied with the Hutt City Council.

Please make arrangement to provide the water As built, meter information & back flow certificates to HCC soon, after the completion of water connection.

Please note to send me the As-built & other information & copy to data.team@wellingtonwater.co.nz



Regards

Engineer - Land Development- Connections



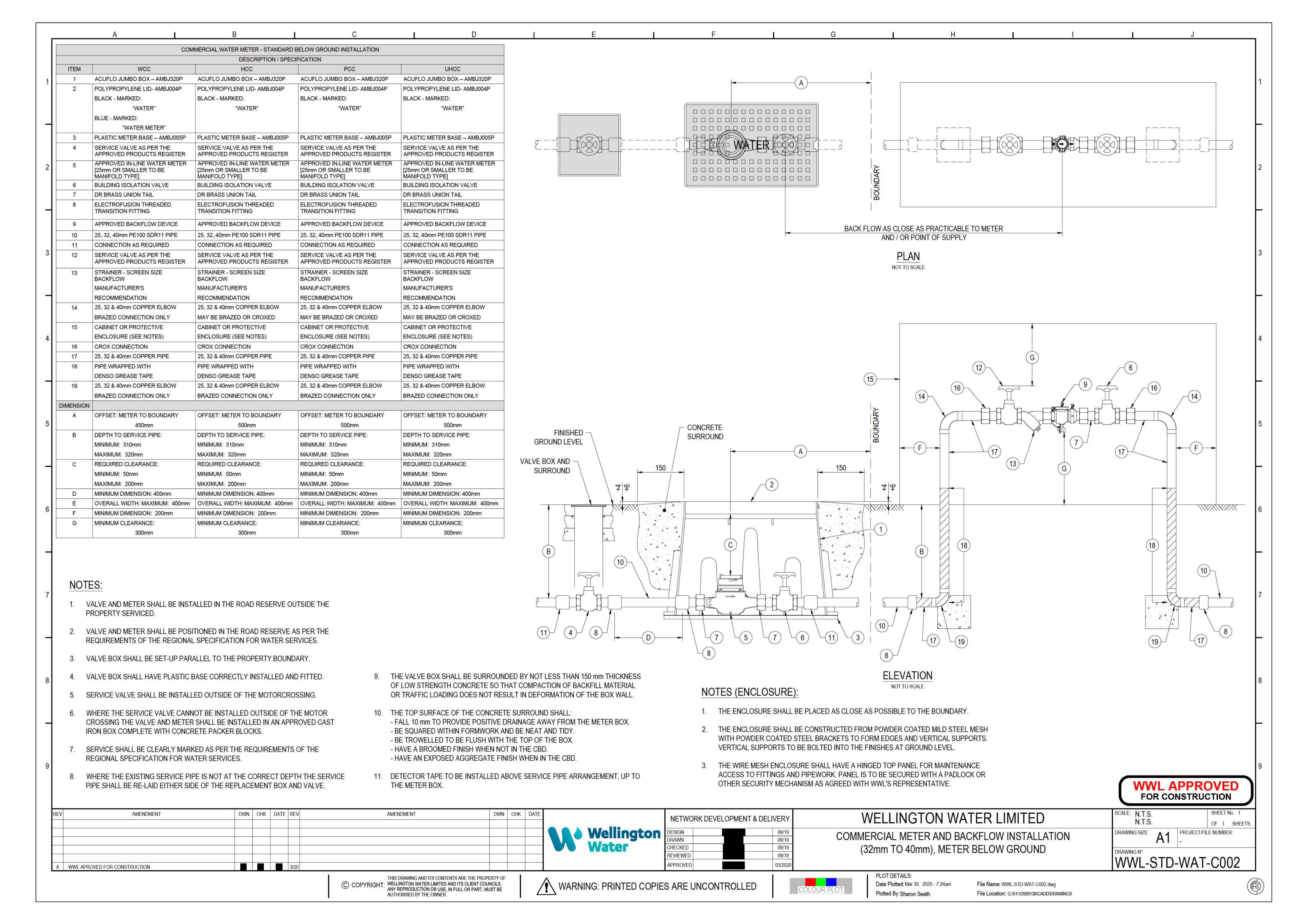
Tel 04 912 4400 Mob



Private Bag 39804, Wellington Mail Centre 5045

www.wellingtonwater.co.nz









Ref: 22HNC 083

29 June 2022

Dear

Approval – water connection to 16 Queen Street, Wainuiomata, Lower Hutt.

I am pleased to advise that your application to Hutt City Council for a water connection at this address has been approved as below.

- A 40mm ID metered, water connection at A, from 100mm AC water main for new development at 16 Queen Street.
- RPZ type back flow preventer must be installed at appropriate locations inside the property.
- the existing water connections to this property at A & B must be disconnected from the main.

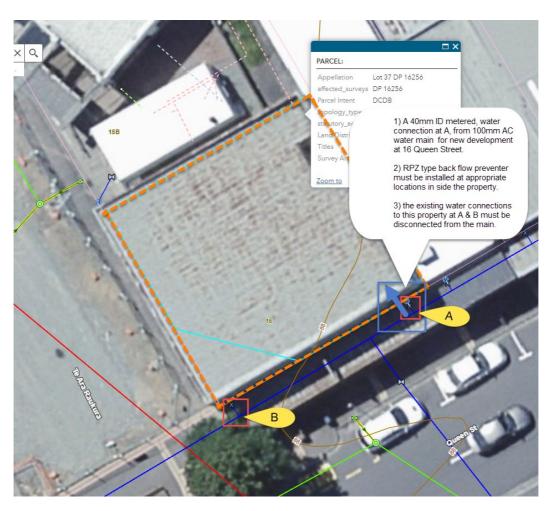
Please find attached a list of approved contractors for you to contact to obtain quotes for the required work. You will need to provide the contractor of your choice with a copy of this letter of approval.

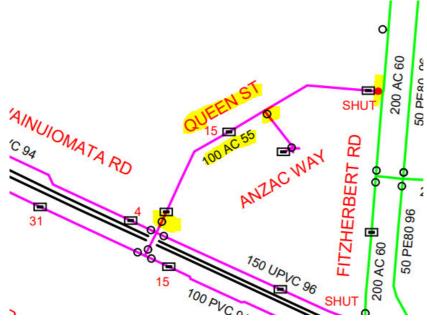
This approval is valid for six months from 29 June 2022. Any connection after this date is to be re-applied with the Hutt City Council.

Please make arrangement to provide Water as built, meter information & back flow certificate to HCC soon, after the completion of water connection.

Please note to send me the information & copy to data.team@wellingtonwater.co.nz

If you have any further questions relating to water matters please contact me on telephone:





Yours sincerely



Information sheet

Approved contractors- 2021/2022

The following contractors are currently approved to install new water service connections to Wellington, Lower Hutt, South Wairarapa, Upper Hutt & Porirua City's Council water supply system:

Contractor	Address	Contact details
Construction Contracts Limited	PO Box 46 002 Park Avenue Lower Hutt	Contact: Ph: Mob: Email: @ccl.co.nz
City Care Ltd	PO Box 13046 Johnsonville Wellington 6440	Contact: Mob – Ph. Emails: @citycare.co.nz
Groundworks Ltd	PO Box 45120 Epuni Lower Hutt	Contact: Ph. Mob. Email: admin@groundworks.net.nz
G P Friel Ltd	14 Seine Street Island Bay Wellington 6023	Contact: Ph. Mob Email: @gpfl.co.nz
Ives Plumbing Ltd	PO Box 38 266 Wellington Mail centre Lower Hutt 5045	Contact: Ph. Mob. Email: ivesplumbing@gmail.com
McLatchie & Sharp Ltd	PO Box 33 354 Petone 5046	Contact: Ph. Mob: Email: @mclatchieandsharp.co.nz contracts@mclatchieandsharp.co.nz
SAP Contractors Ltd	PO Box 50295 Porirua 5420	Contact: Mob: Email: @sapcontractorsltd.co.nz
Wellington Pipelines	PO Box 43 212 Wainuiomata	Contact: Ph. Mob: Email: wgtn.pipelines@xtra.co.nz
Action Civil	224 Staithes Drive South Whitby, Porirua	Contact: Ph. Mob: Email: action@actioncivil.co.nz. @actioncivil.co.nz.
Higgins Contractors	PO Box 14343 Johnsonville 6440	Contact: Ph. Mob: Email; @higgins.co.nz Email: contractors.wn@higgins.co.nz
Pope and Gray	PO Box 20 Greytown 5742	Contact: Ph. Mob: Email: admin@popeandgray.co.nz

It is the responsibility of the applicant to commission one of the above contractors (at agreed terms) to carry out the necessary works authorised by Wellington Water Ltd.

Wellington Water Ltd will carry out an inspection of the installation to ensure Council's requirements are
Wellington Water Ltd will carry out an inspection of the installation to ensure Council's requirements are being met prior to final acceptance.

From:

@huttcity.govt.nz>

Sent:

Tuesday, July 26, 2022 9:35 AM

To:

Subject:

FW: Queen St question

has approved covering the cost of the recessed lids with the water budget.

Thanks



Placemaking Advisor

Hutt City Council, 30 Laings Road, Lower Hutt 5040

W: www.huttcity.govt.nz



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From: @huttcity.govt.nz>

Sent: Tuesday, July 26, 2022 7:11 AM

@huttcity.govt.nz>;

@huttcity.govt.nz>

Subject: RE: Queen St question

Thanks



Not an issue.

This is something that the 3 waters budget will pick up as it clearly relates to the water renewal works.

Strategic Advisor

Hutt City Council, 30 Laings Road, Lower Hutt 5040

W: www.huttcity.govt.nz



Example 2 Prom: @huttcity.govt.nz

Sent: Monday, 25 July 2022 9:00 PM

@huttcity.govt.nz>;

@huttcity.govt.nz>

Subject: Queen St question



This is rather a detailed question and kind of thought it could come later but Stantec where asking me about this today.

With the water main renewal Stantec are putting in commercial tobys with backflow where currently there are residential tobys. So this means larger tobys for each shop and there are 32 off the top of my head. These commercial tobys are 600 x 700 compared to much smaller ones that we have.

With the project we had planned to put in ductaline covers with the smaller ones but now as the tobys are so much larger we would like the recessed covers that you can put pavers into like what is outside Laings Road building. As there are so many of them and they are large it will look so much better for the street.

Stantec are asking if the Town Centre project can pay for the more expensive covers but my position is this should be part of the water main project or at worst case cost shared. We can't put 32 large plastic covers down the street with very nice granite paving.

Can you let me know your thoughts on this? The covers cost each plus installation. I imagine there will be a number of these conversations about where the cost sits.

Thanks

Placemaking Advisor

Hutt City Council, 30 Laings Road, Lower Hutt 5040

P: M: W: www.huttcity.govt.nz



Sorry CMEngNZ, Pr Eng, MEng, BSc Team Lead - Principal Water & Coastal Engineer into this area is the concident all plope by o San ec and should not be copied modil ed. et ansmit ed. o used o any pur pose except with Stan ecs will en autho lization I you a enot he intended ecipient please edelete all copies and notily us immediately From:
Sent: Wednesday July 20 2022 8:27 AM

To:
Solication Stantes.com
Stantes.com
Stantes.com
Subject: Ri: Wainui WM-Queen Street Drawings @wellingtonwater.co.nz> @localcollective.nz>; @jfcltd.co.nz> @huttcity.govt.nz>; Hi all Some indicative supply only pricing for the Xpave: Thanks Logo @localcollective.nz esday 20 July 2022 8:17 am @xtra co nz> @ifcltd co nz> Either option with the infill paving is fine with us - the Xpave one looks like it would be slightly easier to pave inside! we will need to confirm how the paving is fixed / laid into the covers On Wed 20 Jul 2022 at 07:46 @xtra.co.nz> wrote: Good morning all, The XPave inf II id attached is a good option which we have used in We lington. The depth of the recess allows for the full depth of paving whereas the Sika options require the paving to be cut to thin slices due to the reduced depth of the recess (65mm as opposed to 90mm). Regards. @huttcity govt nz>; @ccl o

Subject: RE: Wainui WM-Queen Street Drawings As requested in the meeting yesterday please find two potential lid options. These are Class B so should be more than adequate to be used underneath the canopy in front of the shops as no vehicles should be driving underneath. The approximate cost is around ea and logos can be embossed for a bit extra) Thanks Logo 2

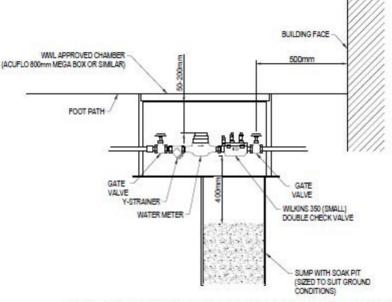
Stra con: Stra con:				
Sent: Friday 15 July 2022 1:20 pm To: @stantec.com> @huttity.govt.nz>				
Cc: @ifclid co nz>; @localcollective nz>; @localcollective nz>; @localcollective nz>;				
I don't think so but would need guidance from the landscape architect on this as there would be over 30 of these lids in the street f one is installed at each property.				
Regards,				
Market Control of the				
©stantec.com>				
Sent: 15 July 2022 12:47				
Ostra.co.nz				
Subject: RE: Wainui WM-Queen Street Drawings				
Would a black id be considered?				
The lid would be 780mm x 450mm.				
Regards				
OMEngNZ, PF Eng, MEng, 8Sc Snr Water & Coastal Engineer				
of vivine disconsistant programs				
To consist to this consist in the consist of this consist of the c				
From: Stagon Butta cont				
Sent: Friday 15 July 2022 10:51 AM				
To: Stantec.com> Shuttcity.govt.nz> Swellingtonwater.co.nz> Swellingtonwater.co.nz> Swellingtonwater.co.nz> Swellingtonwater.co.nz>				
Subject: RE: Wainui WM-Queen Street Drawings				
Thanks				
Because we are using high qual ty granitle paving we need to make sure that the visual aspects of your chamber lids fit in with the streetscape. The large blue covers (1.2m x0.8m?) on the Acuflo website would not be appropriate.				
The preferred would be a recessed lid that can be infilled with paving. We need to discuss the options for this at our meeting on Tuesday.				
Regards,				
22				
From: Sent: 15 July 2022 10:23				
Sent: 15 July 2022 10:23				
©hutteity govt.nz>				
To: Shuttelty.covt.nz> Siglicitd.co.nz. sid.wade@stra.co.nz Swellingtonwater.co.nz> Swellingtonwater.co.nz> Swellingtonwater.co.nz>				
To: @huttcity.govt.nz> Cc: @ifcitd.co.nz; sid.wade@xtra.co.nz; @wellingtonwater.co.nz>				
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To: Buttotty eor to: Bu				
To: Shuffeld conzy sid wade@stra.co.nz: Swellingtonwater.co.nz> Subject: RE: Walnut WM-Queen Street Drawings Apologies EVI MMErggKz-PF Eng, MEng, BSc Mrwater & Coastal Engineer In women's the small is the con dental page by to Bibetic and should not be capied medial of a sman field a used a stry pu pose except on his strate with man his as in 1 you a not the number expiret passe derive all copies and no y as immediately From:				
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Thank you for the information.

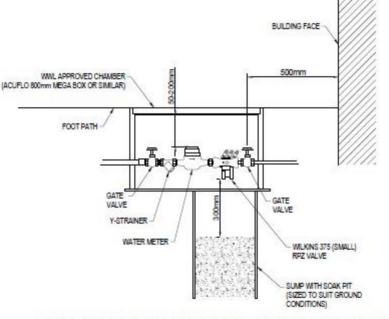
Evening

Stantec New Zealand Level 15, 10 Brandon Street Wellington Central, We lington 6011 New Zealand

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DETAIL FOR COMMERCIAL INGROUND CONNECTION (MEDIUM HAZARD DOUBLE CHECK VALVE)



DETAIL FOR COMMERCIAL INGROUND CONNECTION (HIGH HAZARD RPZ VALVE) NTS





XPAVE Infill Access Covers

A low profile alternative for traditional solid access covers, ideal for high profile streetscapes and architectural designed areas where the in fill can blend with the surrounding surface.



TECHNICAL GUIDE: CG9.1

Applications

Suitable for discreet installations in a variety of hard surface finishes

Product Attributes

Load rating Class A 15kN to C 250kN

Galvanised mild steel finish

3mm gauge steel

Approval/Standards

European Standard EN 124

Hot-dipped galvanised steel in accordance with EN 1461

Quality

EN 1090-1:2009/A1:2011

Applications

- The XPAVE recessed access cover system has been designed to provide quick and safe access to underground chambers and ducts where aesthetics are required to be maintained in a variety of hard surface finishes including concrete, pavers, tiles, resin flooring and other surfaces.
- XPAVE covers are generally selected for external applications.

Features

- XPAVE is manufactured from 3mm gauge high quality steel
- Load rated up to Class C 250kN
- Access cover components are laser-cut and/or coldformed to precise tolerances. Covers and associated frames are then jig-welded to ensure a precise fit
- The covers are tapered in design to achieve quick, simple and practical removal from the frame
- Fabricated steel units are hot-dipped galvanised in accordance with EN ISO 1461
- XPAVE frames and covers have a plain edge detail for improved aesthetics. The frame and cover assembly are unobtrusive when installed in a block paved surface. The use of 3mm gauge steel provides added strength and rigidity to the edge
- XPAVE covers are supplied with a neoprene seal



FIG. 1 XPAVE Installation

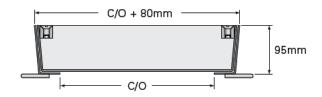


FIG. 2 XPAVE 95 Galvanised Steel Dimensions

TABLE 1 Product Range

Hygrade code	Load Rating	Clear Opening (mm)	Outside Dimensions (mm)	Weight - Unfilled (kg)
INFILXPAV400400	C250kN	400×400	480 x 480 x 95	15
INFILXPAV600600	C250kN	600×600	680 x 680 x 95	24
INFILXPAV700700	C250kN	700 x 700	780 x 780 x 95	30
INFILXPAV900900	C 250kN	900×900	980 x 980 x 95	42



Scan for more information

Disclaimer: While every effort has been made to ensure that the information in this document is correct and accurate, users of Hygrade Water product or information within this document must make their own assessment of suitability for their particular application. Product dimensions are nominal only, and should be verified if critical to a particular installation. No warranty is either expressed, implied, or statutory made by Hygrade Water unless expressly stated in any sale and purchase agreement entered into between Hygrade Water and the user.

December 2019



From:

Sent: Friday, June 16, 2023 10:24 AM

To:

Cc:

Subject:

FW: Wainuiomata Town Centre Upgrade PS3 NEEDED

Its probably who is leading the rpz discussion for WWL.

My thinking is they may need to go back and replace them.

CMEngNZ, Pr Eng, MEng, BSc Principal Water & Coastal Engineer



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From: @wellingtonwater.co.nz>
Sent: Wednesday, May 10, 2023 11:27 AM

To: @ccl.co.nz>
Cc: @wellingtonwater.co.nz>; @wellingtonwater.co.nz>; @ccl.co.nz>; @wellingtonwater.co.nz>; @wellingtonwater.co.nz>;

Subject: Wainuiomata Town Centre Upgrade PS3 NEEDED

Hi

The short answer is NO. Wellington Water cannot provide documentation in support for the property No.16 (Price Busters apartments) on Queen Street to achieve Code of Compliance for back flow prevention.

In hindsight we should have only provided a testable double-check valve on all commercial water connections and not the below ground RPZ that was installed on a couple of the connections that we had deemed high risk. Least a testable double-check valve installed by the water supply authority is better than no backflow device at all.

The key aspect of the work undertaken in Queen St was that the water supply authority (council) installed the back flow devices not the property owner. We would expect the property owner / occupier will take ownership of the testable double-check if their business activity required an annual WOF.

The backflow device installed by Stantec/WWL/CCL has the fundamental purpose of preventing contamination of the potable water supply network. It was installed on the understanding that these commercial properties have a level of risk. It was also the intention that the testable double-check valve device installed would be maintained by Wellington Water / Council, unless the business activity was deemed to be a risk and under the Health Act required an annual WOF.

Any existing building that has a requirement under a current building consent (BC) needs to provide backflow protection independent of the upgrade works done in the street to meet the requirements of the BC.

Properties that have activities that are considered a risk to public health need a higher degree of protection. The Council has a duty to enforce backflow prevention, whether the hazard is new or historic (and recover all reasonable costs incurred for testing, survey, and retrofitting devices).

Properties are classified into three degrees of risk that determines the type of backflow device required. Typically hairdressing is classified as high risk and require a Reduced Pressure Zone (RPZ) whereas other commercial premises such as laundries are classified as medium and a Testable Double-check valve is permitted as a back flow device. Typically the responsibility for the installation and maintenance is the responsibility of the property owner.

It is correct to assume, that as part of a building consent a new backflow prevention device and new water meter should or would be required. Agree a producer statement for the BPD installation and a test certificate issued by an IQP is required for BC compliance. Agree, these are usually installed on the applicants property by the applicant and that needs to remain a requirement under any existing building consent issued.

I can confirm that

- A BFD has been installed on every water connection that was part of the water supply upgrade in Queen St.
 It was deemed better to install a backflow device than have nothing at all, as was the existing situation.
- If the property business activity requires a backflow device to manage their level of risk then that responsibility will be passed onto the property / business owner.
- If a business activity is within a low to medium risk then the IQP can assess the suitability of the testable
 double-check valve installed under this upgrade and issue a test certificate on the understanding of what is
 there or upgrade the existing as necessary. If the business activity is HIGH risk, then a RPZ will need to be
 installed within the property and independent of any existing system in the street. The IQP can then issue a
 test certificate for compliance based on the newly installed RPZ.

I have copied in , our Wellington Water Chief Advisor (Drinking Water). Network Operations and Engineering (East) Wellington Water Tel 04 912 4400 Mob @ccl.co.nz> From: Sent: Monday, 8 May 2023 10:48 am @wellingtonwater.co.nz> To: @wellingtonwater.co.nz>; @wellingtonwater.co.nz>; Cc: @ccl.co.nz>; @stantec.com> Subject: FW: [EXTERNAL] FW: Wainuiomata Town Centre Upgrade PS3 NEEDED

Importance: High

Caution: This is an external email. Please take care when clicking links or opening attachments.



The owners of Property No.16 (Price Busters apartments) on Queen Street are reaching out for a PS3 for the backflow prevention to get Council Code of Compliance. We cannot sign this as the pipework does not meet the requirements (as we know) due to the RPZ's being installed underground. This was designed/discussed/determined between Stantec/WWL/CCL, and it was the way it had to be due to the conditions of the area as was discussed during the works. Is there something that you can put in writing for them to achieve Code of Compliance with certain conditions?

Thanks,





From:	@ubclub.co.nz>	
Sent: Frida	ay, May 5, 2023 3:17 PM	
To:	@jfcltd.co.nz>; wainuiproject	s@huttcity.govt.nz;
	@jfcltd.co.nz>;	@ubclub.co.nz>
Cc:	@huttcity.govt.nz>;	39 Dalton Grove Stokes Valley
0	@gmail.com>	
	E 14/ :	

Subject: RE: Wainuiomata Town Centre Upgrade PS3 NEEDED

Caution External Email: Do not click links or open attachments unless you know the content is safe

Hi Team Hutt Council & Wainuiomata Upgrade team,

We have now finished our apartments at 16 Queen Street Wainuiomata and are applying for Council Code of Compliance.

We need a PS3 for new "Back flow prevention" and new water connections to our building which the council and their contractors put in along Queen street as part of the last 12 month major works project and disruptions through Queen street Wainuiomata which are almost finished and have come up great in my 40 years have never seen Wainuiomata looks so good with the Mall demolished and the new supermarket and new housing well done to you all.

Can someone please send paper work ASAP.

Best regards,

Phone

From: @huttcity.govt.nz>

Sent: Wednesday, October 5, 2022 9:46 PM

Subject: Wainuiomata Town Centre Upgrade information 5 October

Kia ora

Please find attached this weeks updates on the Town Centre Upgrade.

A note as the water main renewal work is nearing completion JFC will be stepping back in to keep you all informed on the next steps in the construction work.

We would like to encourage you to put , Stakeholder Manager JFC, details in your contact list . It is quicker for you to receive answers to your questions if you contact her in the first instance.

If you need further support please contact <u>wainuiprojects@huttcity.govt.nz</u> or on

The Project team were very pleased to be able to complete the asphalting work on Tuesday night and very much appreciate this affected some retailers evening trading.

Ngā mihi, Wainuiomata Project Team



Hutt City Council, 30 Laings Road, Lower Hutt 5040

P: M: W: [www.huttcity.govt.nz]www.huttcity.govt.nz



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Atención: Este correo electrónico proviene de fuera de Stantec. Por favor, tome precauciones adicionales.

From: @ccl.co.nz>
Sent: Thursday, August 25, 2022 8:47 AM
To:
Cc:
Subject: List of Businesses on Queens St for RPZ

Hi Guys,

The list of Businesses is as follows on Queens St and the ratings for the new RPZ valves:

Please read through the list and let me know if you would like me to change any ratings. There is 24 connections in total and of that 2 of them are 40mm and the rest our 25mm.(ID)

From my understanding the lowest rating backflow device we are installing is medium even though some of these current properties are low risk.

Please come back to me asap if there is any problems as I need to confirm the numbers with the supplier.

Lawyers/Harcourts – Medium
Hairdresser – High
Fish and Chips/Dairy – High (Both properties off one connection)
Noddle Canteen – High
Mr Bun – High
Barrel Bottle store – Medium
Coin Save – Medium

Laundry/Barber – High (Both of same connection)

Chemist – Medium Dawn Bakery – High Dairy – Medium Butcher – High

Price Busters/ 3 apartments – Medium (40mm connection)

Tuatahi Centre – Medium Eddy's Bar – Medium Dominos Pizza – Medium

Fish and Chips/Hairdresser - High (Both on same connection)

Dairy/Vape shop/Roast shop/2xapartments - High (40m connection)

Laundry - High

Joes Cook Takeaways – High Dog Grommer - Medium

Salvation Army/kebab house/Vape shop - Medium

Curry Time takeaways – Medium Lawn Mower Shop – Medium

Regards,





From: Thursday, June 15, 2023 12:16 PM Sent: To: Cc: Subject: RE: Non-compliant backflow installations - Queen St, Wainuiomata **Thanks** FYI also I have asked to raise as a quality incident in the PMO system so that we can get some actions out of it communicated across the panels as appropriate Cheers From: @wellingtonwater.co.nz> Sent: Thursday, June 15, 2023 12:11 PM @wellingtonwater.co.nz>; To: @wellingtonwater.co.nz> Subject: RE: Non-compliant backflow installations - Queen St, Wainuiomata Noted. I've discussed with that we should be prescriptive in future briefs that backflow prevention is installed above ground and according to our standards. @wellingtonwater.co.nz> From: Sent: Thursday, 15 June 2023 10:47 am @wellingtonwater.co.nz>; @wellingtonwater.co.nz> To: Subject: FW: Non-compliant backflow installations - Queen St, Wainuiomata **FYI cheers** @wellingtonwater.co.nz> From: Sent: Wednesday, June 14, 2023 3:17 PM @wellingtonwater.co.nz>; To: @wellingtonwater.co.nz>; @wellingtonwater.co.nz> Subject: RE: Non-compliant backflow installations - Queen St, Wainuiomata Hi Thank you for those suggested tweaks. I can incorporate those into any future reports that broach those topics. Cheers, **Drinking Water Protection Officer** Wellington Tel 04 912 4400 Mob

@wellingtonwater.co.nz> From: Sent: Wednesday, 14 June 2023 3:05 pm @wellingtonwater.co.nz>; To: @wellingtonwater.co.nz>; @wellingtonwater.co.nz> Subject: RE: Non-compliant backflow installations - Queen St, Wainuiomata Can I suggest an amendment as shown below Network Operations and Engineering (East) Wellington Water Tel 04 912 4400 Mob @wellingtonwater.co.nz> From: Sent: Tuesday, 13 June 2023 4:56 pm @wellingtonwater.co.nz>; To: @wellingtonwater.co.nz>; @wellingtonwater.co.nz>

Subject: Non-compliant backflow installations - Queen St, Wainuiomata

@wellingtonwater.co.nz>;

Hi Team,

Cc:

Thank you for the conversation this morning about the Queens St backflow installations in Wainuiomata, and the wider issues around boundary backflow prevention, especially with respect to watermain renewals. It was a very useful discussion.

This email is to summarise what I have learnt/observed about Queen Street from site visits, phone conversations and meetings, and to set a workable action plan to ensure we are working towards compliance.

@wellingtonwater.co.nz>

Queen St situation summary

@wellingtonwater.co.nz>;

- A recent CBD revamp had a last-minute water main renewal added to the schedule of works.
- 24 connections were replaced/upgraded/installed, and it was decided boundary backflow prevention should be installed at the same time.
- For a variety of reasons, the backflow risk assessment was a field judgement based on the type of business
 as could be seen from the street, made by individuals that are not backflow surveyors.
- Some properties were identified as presenting a high risk to the water supply, meaning RPZs were required
 to provide the appropriate level of protection. An RPZ device must be installed aboveground to comply with
 manufacturer's specifications, AS/NZS standards, and industry best practice.
- Councils directive was that there were to be no aboveground installations, so as to not disrupt the visual amenity of the CBD revitalisation. I doubt if this statement can be supported
- The result is nineteen RPZs installed in underground. This means the risk to the network has been increased
 rather than minimised, especially in the chambers with leaking installations and insufficient drainage, and in
 the chambers that will become inundated when the ground water level rises through the drainage holes.
- It also appears that some installations have insufficient valving for water supplier backflow prevention device testing.
- It appears this job involved directives from people at several levels who did not understand the operational and legal implications of their directives.
- Numerous systemic issues identified when I looked into the situation after it was brought my attention through a customer seeking a producer statement from Wellington Water because the non-compliant

backflow installation on their connection meant their Building Consent Code Compliance Certificate would not be signed off by Council.

Action Plan for resolution

1.	Repair leaking installations. This is to be done immediately as part of the watermain renewal project works.
	to progress and manage.

- Replace all under-ground RPZs with Testable Double Check Valves (TDVC). This is to be done immediately
 as part of the watermain renewal project works, to remove the hazard of submerged RPZs. These devices
 should also have installation test reports completed and submitted as part of the as-builts, along with the
 test kit calibration certificates for the test kits used.
- 3. Conduct a full backflow survey in July, by an experienced backflow surveyor under the Regional Boundary Backflow Prevention Programme. to organise and manage, and to liaise with Council and possibly customers. The full backflow survey would include:
 - a. review of the installed backflow assemblies
 - b. in-property assessments of the hazards presented to each point of supply
 - c. identification of any other relevant/related backflow hazards
 - d. identification of any other points of supply that may require backflow protection be installed
- Complete a risk assessment (backflow survey findings combined with any relevant network conditions),
 write report and, if necessary, identify key actions to resolve any issues arising.
 to do immediately after
 surveying is completed.
- 5. Develop a resolution plan should it be required as an outcome of the risk assessment. to do in conjunction with appropriate WWL staff, as it may involve politics and media.
- 6. Write up a system review report and discuss with appropriate WWL management, in conjunction with the outcomes of the Queens Street backflow risk assessment. to do.

Additional issue - McDonalds Backflow installation

As part of a conversation in the field at Queen Street on Friday, it came to my attention that McDonalds requires an RPZ, and CCL advised that they are under pressure from the developer to install this below ground. I was shown the site (see attached pdf) ... there is no technical reason why there can't be an aboveground installation with an aesthetically pleasing cover on it (it could even be designed at a height that could be sat on, though I am not sure if McDonalds have a policy regarding seating at their entrances).

A related issue is that the isolation valve for this water line has been buried somewhere under the new concrete out in from of McDonalds – this is likely to be an issue for installation. The backflow assembly (inlet valve, strainer, RPZ, outlet valve) will need an inlet valve for isolation that does not require the currently buried valve.

What channel needs to be engaged to ensure the aboveground instruction makes it to the developer? can you please follow up with this as I do not yet know how this kind of issue gets conveyed to the coalface.

I trust this provides enough structure for the moment. If you identify anything that I have omitted or mis-recorded please let me know.

and and have been copied in because I answer to them, they are already aware of the situation, and they need to be across what is happening.

Cheers,



Private Bag 39804, Wellington Mail Centre 5045 Level 4, 25 Victoria Street, Petone, Lower Hutt www.wellingtonwater.co.nz

Wellington Water is owned by the Hutt, Porirua, Upper Hutt and Wellington city councils and Greater Wellington Regional Council. We manage their drinking water, wastewater and stormwater services.

From:

Sent: Thursday, July 21, 2022 10:11 AM

To: Cc:

Subject: RE: Queen St - Proposed Manifold Installation - Backflow Prevention

Hi

The only definitions I could find are in the MBIE document shown below (effective from 27 June 2019) which defines what low, medium and high risks are and has indicative lists of properties for each risk. Refer to section 3.

I believe the current Regional Standard and Specification accounts for connection size, rather than the risk the property poses with regard to backflow.

In Queens Street we are trying to retro fit an existing situation that does not comply with Drawing WS09 of the Regional Specification.



https://www.building.govt.nz/assets/Uploads/building-code-compliance/g-services-and-facilities/g12-water-supplies/asvm/g12-water-supplies-3rd-edition-amendment-12.pdf

Below is some background information regarding backflow (from

To understand back flow devices, there are various means to require a property owner/occupier to install a backflow device. The Health Act 1956, and the health (Drinking Water) Amendment Act 2007, authorizes water supply authorities to enforce backflow prevention, whether the hazard is new or historic, and recover all reasonable costs to install. The Building Act 2004 requires all buildings to have a safe and adequate water supply. If there is any likelihood of contamination from a cross connection, an approved backflow prevention device is required under a BC to eliminate it, ensuring that all end users are protected against contaminated water.

I believe the Water Services Act 2021 ('Act') that commenced on 15 November 2021, part of the Three Waters Reforms, establishes drinking water standards.

The boundary backflow prevention device needs to contain the degree of risk. There are three degrees of risk used to classify properties in order to determine the type of backflow device required.

- High Risk sites are properties that use or produce products of a toxic or bacterial nature that may cause
 death or serious illness if leaked into the main water supply. Examples include hairdressing salons, food
 processing that are typical within a CBD commercial environment.
- Medium Risk sites can endanger health if backflow occurs. Examples commercial laundries
- Low Risk sites are properties that could cause a nuisance by colour, odour, or taste but do not endanger health.

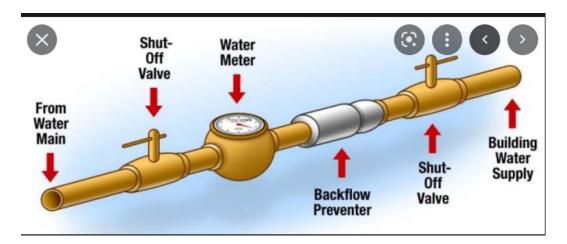
Typically, all non-domestic connections should be fitted with an approved backflow prevention device appropriate to the level of risk associated with the activity within the property. On that understanding all water connections in Queen Street should have an (appropriate) approved backflow prevention device installed.

Where non-domestic connections that are not designated as a medium or high risk, a non-testable double check valve installed on the connection can be achieved with a manifold toby valve with internal double check valve or an inline (non-testable) double check valve.

Where the property is considered a High or Medium risk a testable backflow device is required.

A reduced pressure zone assembly (RPZ) is the most expensive and complicated type of backflow preventer but also the most reliable. The issue we have in Queen Street is the limited room to install a backflow device within the shop frontage. Our next best option to an RPZ is a testable double check valve (tested annually, by an Independently Qualified Person).

Typically this will be a valve (isolation valve), inline meter, double check valve (testable), valve configuration, preferably housed within the one box.



Thanks. Regards

Investigations and Planning Engineer - Drinking Water Network Engineering Team



Mob Tel 04 912 4400

Private Bag 39804, Wellington Mail Centre 5045 Level 6, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz

Wellington Water is owned by the Hutt, Porirua, Upper Hutt, and Wellington city councils, South Wairarapa District Council and Greater Wellington Regional Council.

We manage their drinking water, wastewater and stormwater services.

From: @stantec.com>
Sent: Wednesday, 20 July 2022 11:41 am

To: @wellingtonwater.co.nz>

Cc: @wellingtonwater.co.nz>;

@wellingtonwater.co.nz>

Subject: RE: Queen St - Proposed Manifold Installation and Water Network and GIS plans

Hi

Is there some guidance as to what counts as medium or high hazard, I have also not found any guidance in the 2021 spec and the standard detail only refers to one layout (WWL Drawing WS09). What was used to determine the requirements for the two details below.

Also, Is there a register of connections which would allow for quick determining of Medium or High Commercial connection requirements.

Apposed to heading out there and doing an onsite assessment.

Regards

CMEngNZ, Pr Eng, MEng, BSc Snr Water & Coastal Engineer



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@wellingtonwater.co.nz>

Sent: Friday, 15 July 2022 9:15 AM

To: @stantec.com>

@stantec.com>; @wellingtonwater.co.nz>;

@wellingtonwater.co.nz>

Subject: RE: Queen St - Proposed Manifold Installation and Water Network and GIS plans

Hi

Yes, Wellington Water would like these installed outside all properties. This will cover a possible change in risk, if a property changes from low risk to medium/high risk in the future.

Thanks.

Regards

Investigations and Planning Engineer - Drinking Water Network Engineering Team



DI Mob

Tel 04 912 4400

Private Bag 39804, Wellington Mail Centre 5045 Level 6, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz

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We manage their drinking water, wastewater and stormwater services.

From: @stantec.com>

Sent: Thursday, 14 July 2022 9:09 am

To: @wellingtonwater.co.nz>

@stantec.com>;

Subject: RE: Queen St - Proposed Manifold Installation and Water Network and GIS plans

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CMEngNZ, Pr Eng, MEng, BSc Snr Water & Coastal Engineer



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@wellingtonwater.co.nz>

Sent: Thursday, 14 July 2022 8:57 AM

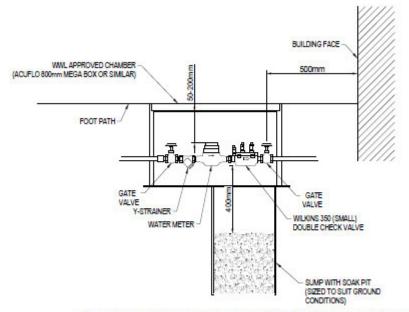
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@stantec.com>;
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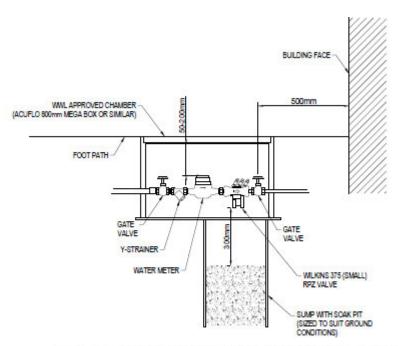
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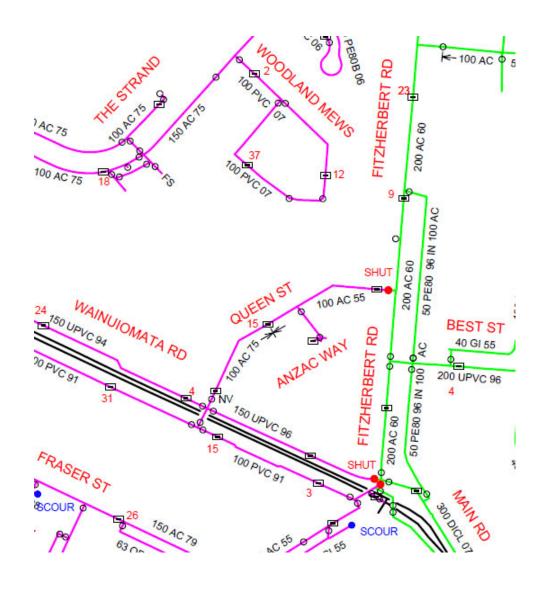


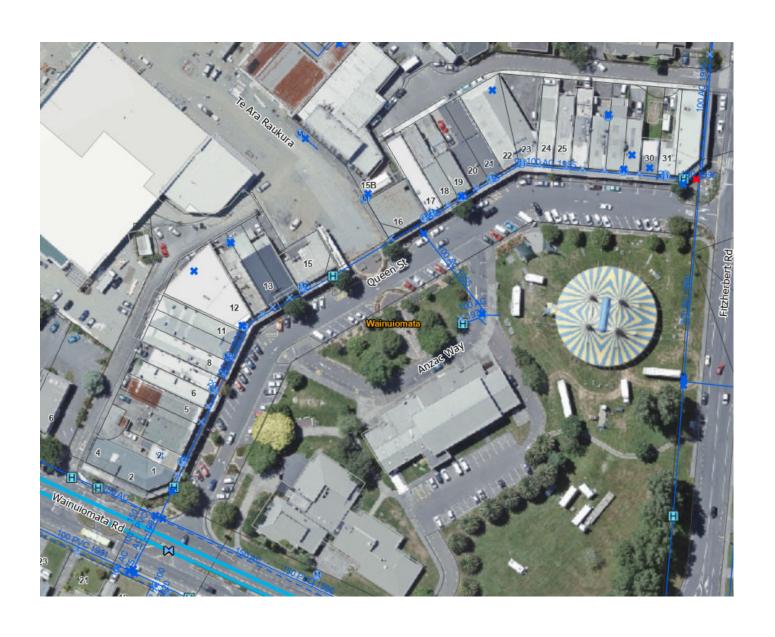
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N.T.S.

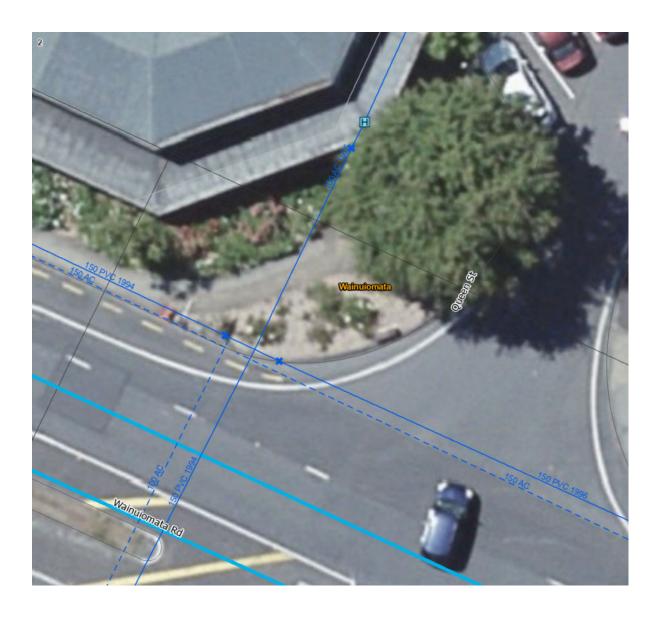


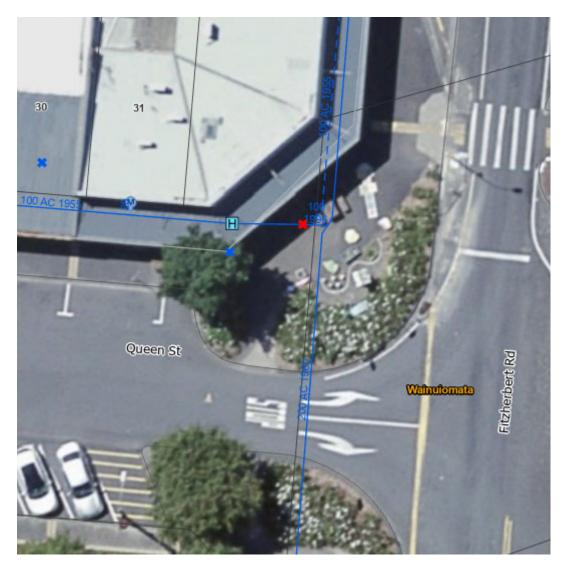
DETAIL FOR COMMERCIAL INGROUND CONNECTION (HIGH HAZARD RPZ VALVE)
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Part of the water newtork plan and GIS plans below









Thanks. Regards

Investigations and Planning Engineer - Drinking Water Network Engineering Team



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We manage their drinking water, was tewater and stormwater services. $\label{eq:water}$ From:

Sent: Wednesday, June 7, 2023 2:34 PM

To:

Subject: FW: Queen St - Proposed Manifold Installation - Backflow Prevention

Hi — the backflow details at the bottom of the email trail below, do you know where they came from?

The RSWS standard details for RPZs are all above ground.

Regards



Subject: RE: Queen St - Proposed Manifold Installation - Backflow Prevention

For what it's worth, the HCC water Supply Bylaw was recently updated and is scheduled to be adopted by Council on 5 August.

The revised bylaw is clear that the costs for maintenance and testing are with the "owner". The bylaw however does not specify who the owner is because it was future-proofed to allow council to take over ownership of backflow preventers if we could get this opportunity in the future.

Cheers

Senior Project Manager, Standards

Subject: RE: Queen St - Proposed Manifold Installation - Backflow Prevention

Hi

This will need to be discussed further with Council.

I will update once the discussion has been had.

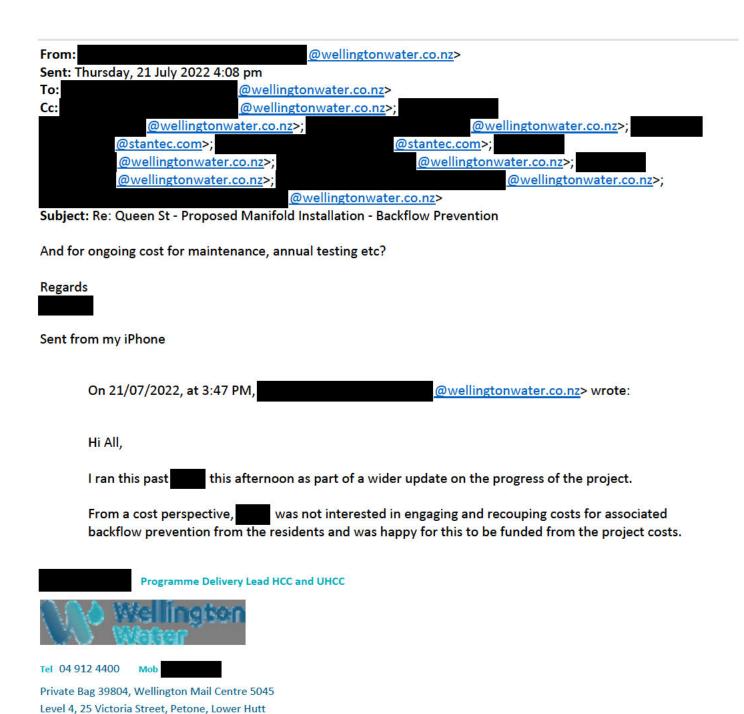
Programme Delivery Lead HCC and UHCC

Tel 04 912 4400 Mob

Private Bag 39804, Wellington Mail Centre 5045 Level 4, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz

www.wellingtonwater.co.nz





A bit of context on this one.

- There are landscaping/beautification physical works that have begun on Queen Street, Wainuiomata.
- We have the opportunity to renew the aging watermain under the work (to avoid coming back in a few years and digging it up again), but only if we get the renewal underway with urgency.

- We have identified that while renewing this pipeline, backflow prevention should be installed as per the discussion below.
- Technical advice is that due to the changeability of commercial use, backflow prevention should be installed on all connections that meets the requirements of a medium or high hazard class.
- Because of the urgency, agreements with owners will not be reached on recovering costs for backflow prevention ahead of confirming that the works will progress.
- The conversation on recovering costs is an important one that we need to have between ourselves and and then customers, but it needs not to hold up the current work plan or we may lose the opportunity for the renewal.

Regards



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www.wellingtonwater.co.nz



Subject: RE: Queen St - Proposed Manifold Installation - Backflow Prevention

Hi all

Also please note that:

- All applications for a Change of Use are to be assessed by Wellington
 Water's Land Development Team (I have copied them in) on behalf of HCC
 and water connections must be accompanied by the appropriate application
 form and fee.
- 2. The revised RSWS V3.0 requirement for backflow prevention, s6.4.14 requires all commercial properties to have a testable backflow preventer, regardless of pipe size. My understanding is this essentially trumps the result of a hazard classification. This is consistent with other councils and recognises that commercial activities within a property can change quickly and frequently from low to high hazard.
- 3. The requirement is for the backflow preventer to be as close as practicable to the point of supply. My understanding is in the CBD these are often in the

building itself. In that case s6.4.14(f) also requires access and easement to be considered (so that it can be tested)

Cheers

Senior Project Manager, Standards



Subject: Re: Queen St - Proposed Manifold Installation - Backflow Prevention

Hi team

Have we spoken with the property owners about this? And do we know the hazard ratings for these properties.

My understanding is that if a device is required at the boundary the property owner should have the opportunity to install one within a reasonable timeframe, and if they do not council may install one on their behalf and charge them for its installation, ongoing testing and maintenance. It's important we have these discussions with them. The key is that the property owners should pay either way, and that we have spoken to them/documented things clearly.

Internal devices may be sufficient to protect the public supply following risk assessment, meaning a boundary device may not be needed.

I suggest we raise this with the way forward that is proposed.

Installation details will likely need to be adjusted for site specific conditions.



Sent from my iPhone

On 21/07/2022, at 10:11 AM, own21/07/2022, wrote:

Hi

The only definitions I could find are in the MBIE document shown below (effective from 27 June 2019) which defines what low, medium and high risks are and has indicative lists of properties for each risk. Refer to section 3.

I believe the current Regional Standard and Specification accounts for connection size, rather than the risk the property poses with regard to backflow.

In Queens Street we are trying to retro fit an existing situation that does not comply with Drawing WS09 of the Regional Specification.



https://www.building.govt.nz/assets/Uploads/building-code-compliance/g-services-and-facilities/g12-water-supplies/asvm/g12-water-supplies-3rd-edition-amendment-12.pdf

Below is some background information regarding backflow (from

To understand back flow devices, there are various means to require a property owner/occupier to install a backflow device. The Health Act 1956, and the health (Drinking Water) Amendment Act 2007, authorizes water supply authorities to enforce backflow prevention, whether the hazard is new or historic, and recover all reasonable costs to install. The Building Act 2004 requires all buildings to have a safe and adequate water supply. If there is any likelihood of contamination from a cross connection, an approved backflow prevention device is required under a BC to eliminate it, ensuring that all end users are protected against contaminated water.

I believe the Water Services Act 2021 ('Act') that commenced on 15 November 2021, part of the Three Waters Reforms, establishes drinking water standards.

The boundary backflow prevention device needs to contain the degree of risk. There are three degrees of risk used to classify properties in order to determine the type of backflow device required.

- High Risk sites are properties that use or produce products of a toxic or bacterial nature that may cause death or serious illness if leaked into the main water supply.
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Typically, all non-domestic connections should be fitted with an approved backflow prevention device appropriate to the level of risk associated with the activity within the property. On that

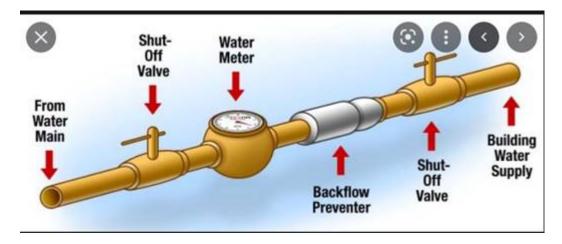
understanding all water connections in Queen Street should have an (appropriate) approved backflow prevention device installed.

Where non-domestic connections that are not designated as a medium or high risk, a non-testable double check valve installed on the connection can be achieved with a manifold toby valve with internal double check valve or an inline (non-testable) double check valve.

Where the property is considered a High or Medium risk a testable backflow device is required.

A reduced pressure zone assembly (RPZ) is the most expensive and complicated type of backflow preventer but also the most reliable. The issue we have in Queen Street is the limited room to install a backflow device within the shop frontage. Our next best option to an RPZ is a testable double check valve (tested annually, by an Independently Qualified Person).

Typically this will be a **valve** (isolation valve), inline meter, double check valve (testable), valve configuration, preferably housed within the one box.





Investigations and Planning Engineer - Drinking Water Network Engineering Team



DDI Mob Tel 04 912 4400

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From: @stantec.com>
Sent: Wednesday, 20 July 2022 11:41 am

The second s

To: @wellingtonwater.co.nz cc:@stantec.com;

@wellingtonwater.co.nz>;
@wellingtonwater.co.nz>

Subject: RE: Queen St - Proposed Manifold Installation and Water Network and GIS plans



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Regards

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To: <u>@stantec.com</u>>
Cc: @stantec.com>

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@wellingtonwater.co.nz>;
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Cc: @stantec.com>;
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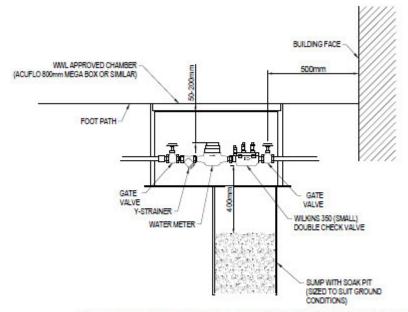
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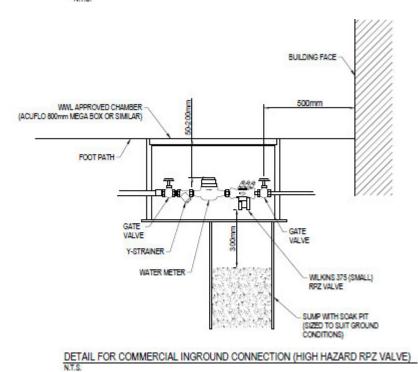
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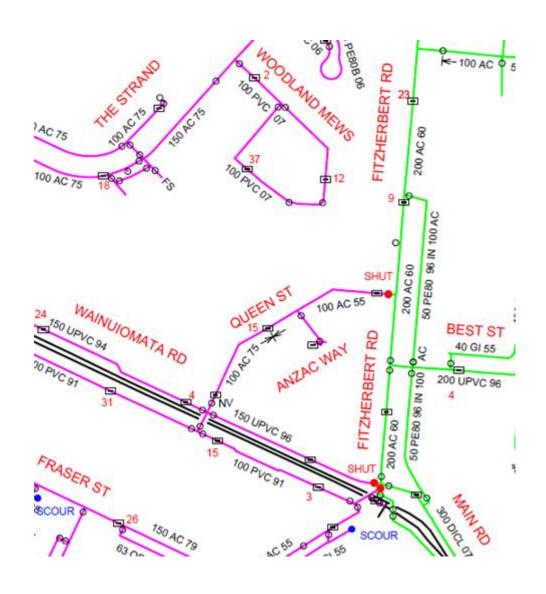
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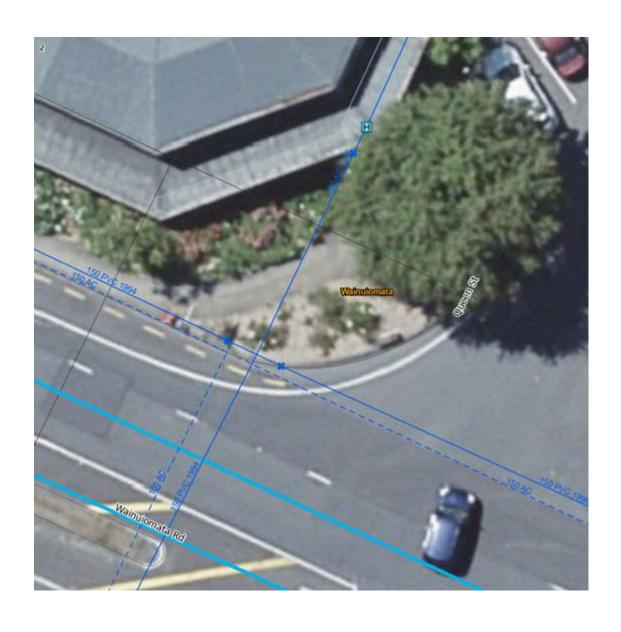
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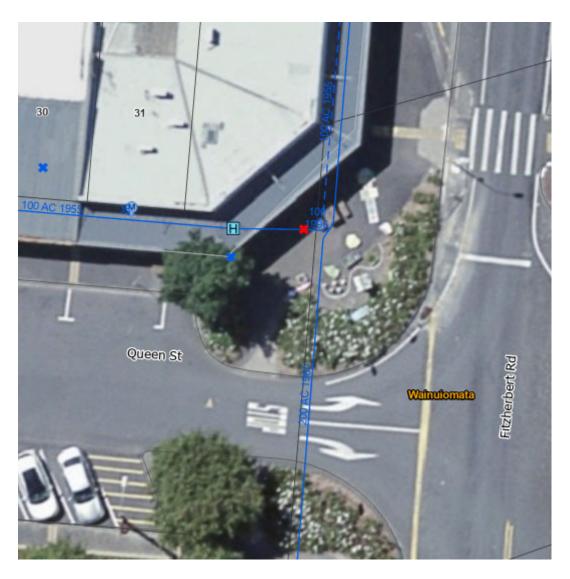


Part of the water newtork plan and GIS plans below









Thanks.
Regards

Investigations and Planning Engineer - Drinking Water Network Engineering Team



Mob Tel 04 912 4400

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We manage their drinking water, was tewater and stormwater services. From:

Sent: Tuesday, July 25, 2023 10:56 AM

To:

Cc:

Subject:

Queen St - Proposed Manifold Installation - Backflow Prevention

Attachments: List of Businesses on Queens St for RPZ; FW: Queen Street Chamber Mock Up

Hi Team

Below and attached is an email trail.



Agree that if the property has a testable boundary backflow device that a double check valve at the point of supply (chamber) is not required if such will cause additional head loss (flow restriction) that would compromise the business activity.

Network Operations and Engineering (East)

Wellington Water

Tel 04 912 4400 Mob

From: @stantec.com>

Sent: Tuesday, 25 October 2022 2:26 pm

To: @wellingtonwater.co.nz>;

Cc: @stantec.com>;

Subject: RE: Queen St - Proposed Manifold Installation - Backflow Prevention

Thanks

I guess the risk is getting it certified. Which CCL will do at the end of the project.

But we can address it at that point.

Kind Regards

CMEngNZ, Pr Eng, MEng, BSc Principal Water & Coastal Engineer



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@wellingtonwater.co.nz>

Sent: Tuesday, 25 October 2022 2:21 PM

To: @stantec.com>;

@stantec.com>;

Subject: Queen St - Proposed Manifold Installation - Backflow Prevention



If we lived in an ideal world.

Agree with your supplier for the RPZ to be installed above ground, however we do not always have that luxury.

The other risk to us as a WSA is that businesses change use and we have little or no control over that. High risk can change to low but predominantly low risk changes to medium /high.

Agree a testable double check valve for low risk,

Agree a RPZ on the medium to high risk (even though its buried.)

You can only assess what you see at the time as to Low / Medium or High. It is up to the WSA to regulate - inspect and manage the risk.

Customer Planning Engineer - Wellington Water

Mob

From: @stantec.com>

Sent: Tuesday, 25 October 2022 2:02 pm

To: @wellingtonwater.co.nz>; @wellingtonwater.co.nz>

Cc: @stantec.com>; @stantec.com>

Subject: RE: Queen St - Proposed Manifold Installation - Backflow Prevention

Hi /

I must admit only last week in a discussion with a supplier at the Water NZ conference did I pick up that a RPZ is not typically installed below ground due to the risk of the automatic release port getting contaminated through backsplash or being submerged.

The details we have been following allows for the testable double check valve for low risk, and RPZ on the Medium to high risk (even though its buried.)

Just asking if the risk of contamination has been assessed somewhere that I missed possibly? Or were all of the connections meant to be testable double check valves?

Regards

CMEngNZ, Pr Eng, MEng, BSc Principal Water & Coastal Engineer



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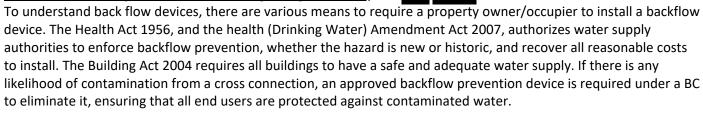
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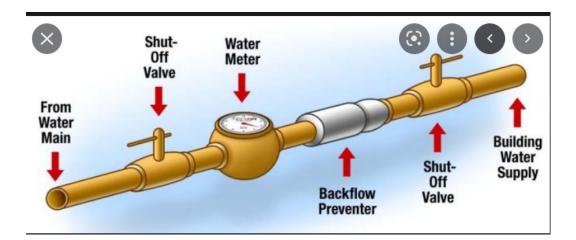
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Thanks. Regards

Investigations and Planning Engineer - Drinking Water Network Engineering Team



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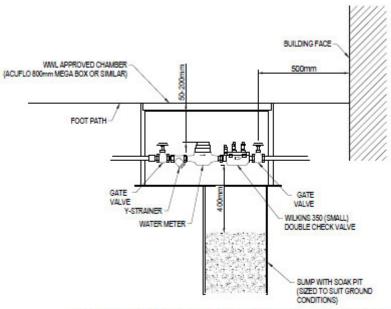
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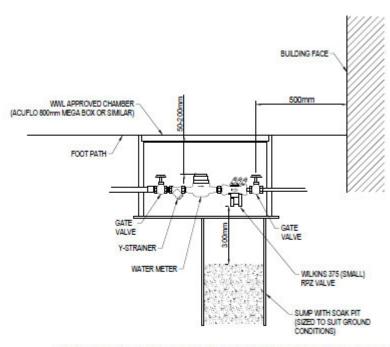
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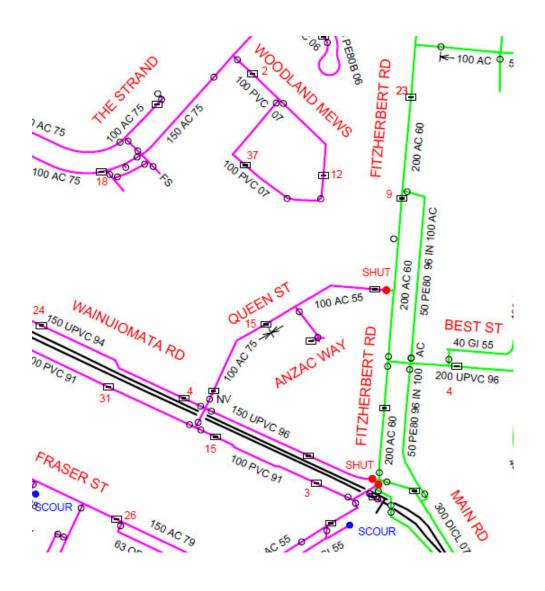
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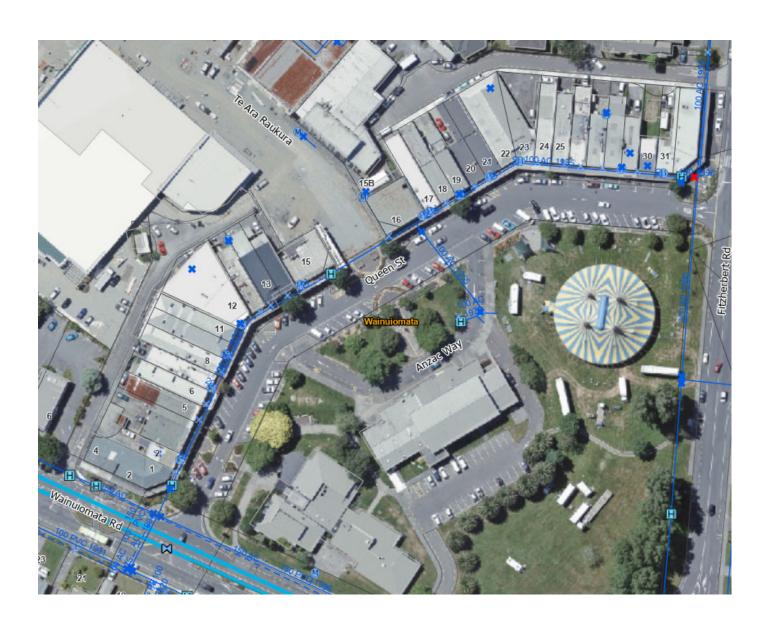


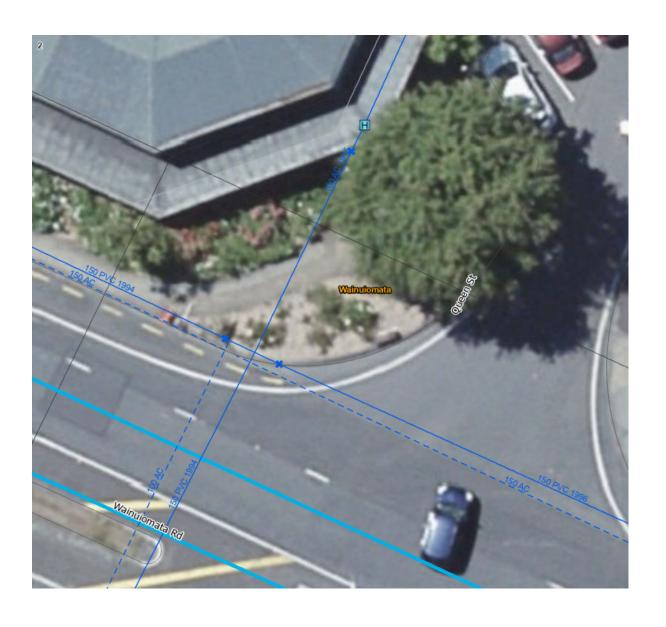
DETAIL FOR COMMERCIAL INGROUND CONNECTION (HIGH HAZARD RPZ VALVE)

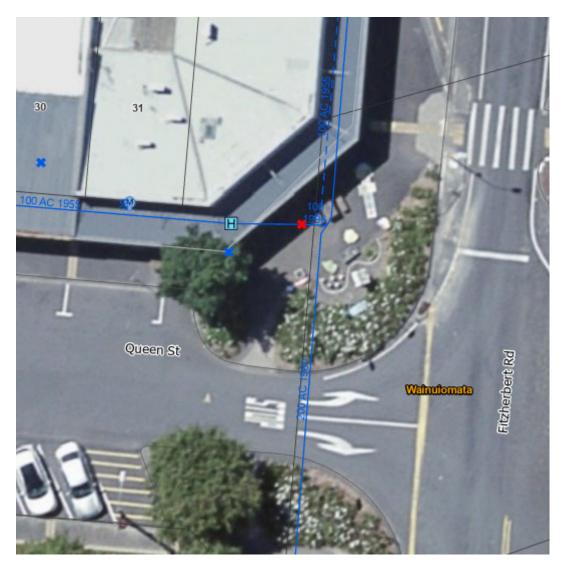
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Part of the water newtork plan and GIS plans below









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Investigations and Planning Engineer - Drinking Water Network Engineering Team



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Agree a testable double check valve for low risk,

Agree a RPZ on the medium to high risk (even though its buried.)

You can only assess what you see at the time as to Low / Medium or High. It is up to the WSA to regulate - inspect and manage the risk.

Customer Planning Engineer - Wellington Water

Mob

From: @stantec.com>
Sent: Tuesday, 25 October 2022 2:02 pm

To: @wellingtonwater.co.nz>;

Cc: @stantec.com>; @stantec.com>

Subject: RE: Queen St - Proposed Manifold Installation - Backflow Prevention



I must admit only last week in a discussion with a supplier at the Water NZ conference did I pick up that a RPZ is not typically installed below ground due to the risk of the automatic release port getting contaminated through backsplash or being submerged.

@wellingtonwater.co.nz>

The details we have been following allows for the testable double check valve for low risk, and RPZ on the Medium to high risk (even though its buried.)

Just asking if the risk of contamination has been assessed somewhere that I missed possibly? Or were all of the connections meant to be testable double check valves?

Regards

CMEngNZ, Pr Eng, MEng, BSc Principal Water & Coastal Engineer



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From:

@wellingtonwater.co.nz>
Sent: Thursday, 21 July 2022 10:11 AM

To:
@stantec.com>
Cc:
@stantec.com>;
@wellingtonwater.co.nz>;
@wellingtonwater.co.nz>;
@wellingtonwater.co.nz>;
@wellingtonwater.co.nz>;
@wellingtonwater.co.nz>;

Subject: RE: Queen St - Proposed Manifold Installation - Backflow Prevention



The only definitions I could find are in the MBIE document shown below (effective from 27 June 2019) which defines what low, medium and high risks are and has indicative lists of properties for each risk. Refer to section 3.

I believe the current Regional Standard and Specification accounts for connection size, rather than the risk the property poses with regard to backflow.

In Queens Street we are trying to retro fit an existing situation that does not comply with Drawing WS09 of the Regional Specification.



https://www.building.govt.nz/assets/Uploads/building-code-compliance/g-services-and-facilities/g12-water-supplies/asvm/g12-water-supplies-3rd-edition-amendment-12.pdf

Below is some background information regarding backflow (from

To understand back flow devices, there are various means to require a property owner/occupier to install a backflow device. The Health Act 1956, and the health (Drinking Water) Amendment Act 2007, authorizes water supply authorities to enforce backflow prevention, whether the hazard is new or historic, and recover all reasonable costs to install. The Building Act 2004 requires all buildings to have a safe and adequate water supply. If there is any likelihood of contamination from a cross connection, an approved backflow prevention device is required under a BC to eliminate it, ensuring that all end users are protected against contaminated water.

I believe the Water Services Act 2021 ('Act') that commenced on 15 November 2021, part of the Three Waters Reforms, establishes drinking water standards.

The boundary backflow prevention device needs to contain the degree of risk. There are three degrees of risk used to classify properties in order to determine the type of backflow device required.

- High Risk sites are properties that use or produce products of a toxic or bacterial nature that may cause
 death or serious illness if leaked into the main water supply. Examples include hairdressing salons, food
 processing that are typical within a CBD commercial environment.
- Medium Risk sites can endanger health if backflow occurs. Examples commercial laundries
- Low Risk sites are properties that could cause a nuisance by colour, odour, or taste but do not endanger health.

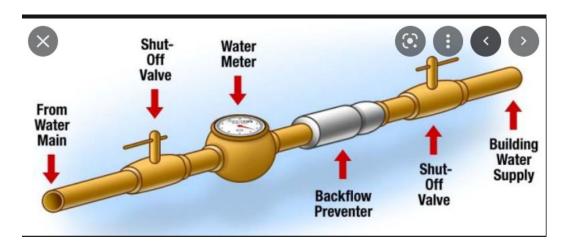
Typically, all non-domestic connections should be fitted with an approved backflow prevention device appropriate to the level of risk associated with the activity within the property. On that understanding all water connections in Queen Street should have an (appropriate) approved backflow prevention device installed.

Where non-domestic connections that are not designated as a medium or high risk, a non-testable double check valve installed on the connection can be achieved with a manifold toby valve with internal double check valve or an inline (non-testable) double check valve.

Where the property is considered a High or Medium risk a testable backflow device is required.

A reduced pressure zone assembly (RPZ) is the most expensive and complicated type of backflow preventer but also the most reliable. The issue we have in Queen Street is the limited room to install a backflow device within the shop frontage. Our next best option to an RPZ is a testable double check valve (tested annually, by an Independently Qualified Person).

Typically this will be a valve (isolation valve), inline meter, double check valve (testable), valve configuration, preferably housed within the one box.



Thanks. Regards

Investigations and Planning Engineer - Drinking Water Network Engineering Team



Mob Tel 04 912 4400

Private Bag 39804, Wellington Mail Centre 5045 Level 6, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz

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We manage their drinking water, was tewater and stormwater services. $\label{eq:wastewater}$

From: <u>@stantec.com</u>>
Sent: Wednesday, 20 July 2022 11:41 am

To: @wellingtonwater.co.nz>

Cc: @stantec.com>; @wellingtonwater.co.nz>;

@wellingtonwater.co.nz>

Subject: RE: Queen St - Proposed Manifold Installation and Water Network and GIS plans

Hi

Is there some guidance as to what counts as medium or high hazard, I have also not found any guidance in the 2021 spec and the standard detail only refers to one layout (WWL Drawing WS09). What was used to determine the requirements for the two details below.

Also, Is there a register of connections which would allow for quick determining of Medium or High Commercial connection requirements.

Apposed to heading out there and doing an onsite assessment.

Regards

CMEngNZ, Pr Eng, MEng, BSc Snr Water & Coastal Engineer



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From: @wellingtonwater.co.nz>

Sent: Friday, 15 July 2022 9:15 AM

To: @stantec.com>

@stantec.com>;

@wellingtonwater.co.nz>

Subject: RE: Queen St - Proposed Manifold Installation and Water Network and GIS plans

Hi

Yes, Wellington Water would like these installed outside all properties. This will cover a possible change in risk, if a property changes from low risk to medium/high risk in the future.

Thanks.

Regards

Investigations and Planning Engineer - Drinking Water Network Engineering Team



Mob Tel 04 912 4400

Private Bag 39804, Wellington Mail Centre 5045 Level 6, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz

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We manage their drinking water, wastewater and stormwater services.

From: @stantec.com>

Sent: Thursday, 14 July 2022 9:09 am

To: @wellingtonwater.co.nz>

Cc: @wellingtonwater.co.nz>

Subject: RE: Queen St - Proposed Manifold Installation and Water Network and GIS plans

Hi

With each property being commercial I assume this would need to be installed outside if each property? Or is there a concession available to install a domestic type connection to small commercial operations with this being installed outside of the hairdressers and laundromats (the ones currently metered an GIS)?

I'm asking as that is quite an installation which would sit back nearly 1.5m into the path, which would mean that a much larger paving area would need to be left open to fit the manifold and the excavation for the sump.

Regards

CMEngNZ, Pr Eng, MEng, BSc Snr Water & Coastal Engineer

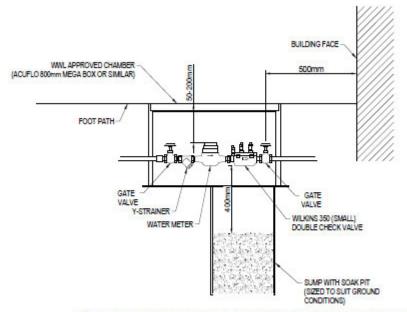


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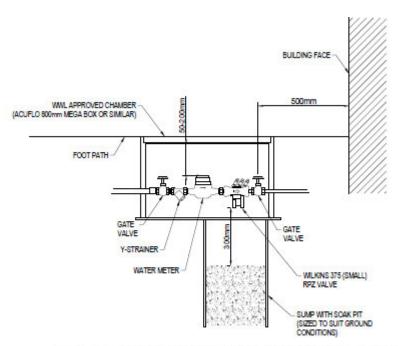
From:	@wellingtonwater.co.nz>			
Sent: Thursday, 14 July 2022 8:57 AM				
То:	@stantec.com>			
Cc:	@stantec.com>;	@wellingtonwater.co.nz>		
Subject: Queen St - Proposed Manifold Installation and Water Network and GIS plans				

Hi

Below are the manifold installations that Wellington Water would like installed in Queen St.

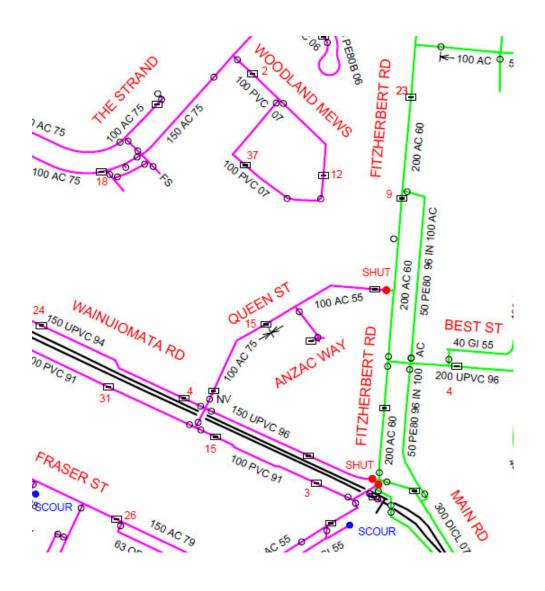


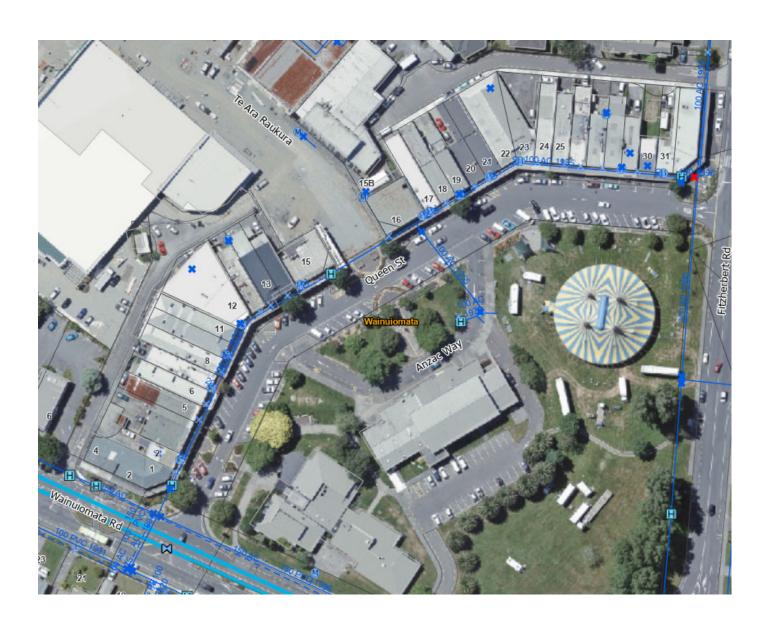
DETAIL FOR COMMERCIAL INGROUND CONNECTION (MEDIUM HAZARD DOUBLE CHECK VALVE)
N.T.S.

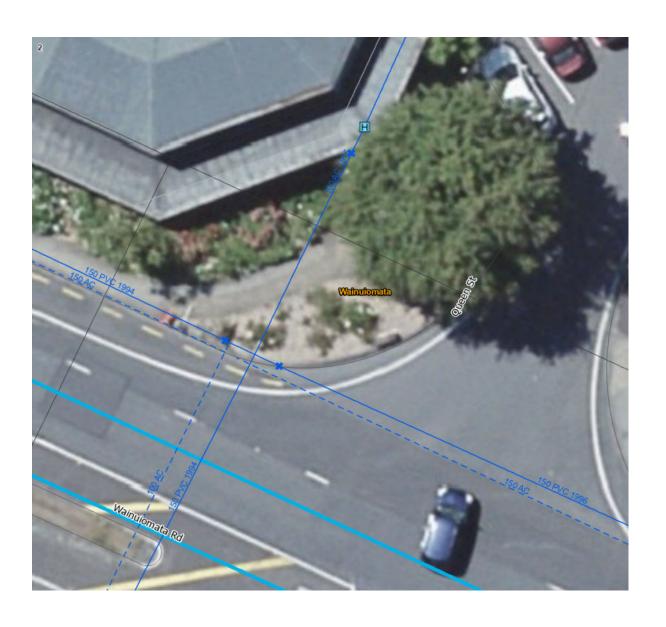


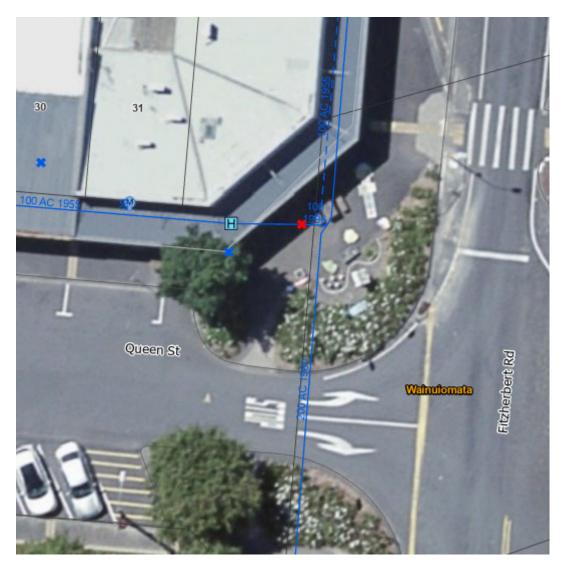
DETAIL FOR COMMERCIAL INGROUND CONNECTION (HIGH HAZARD RPZ VALVE)
NT.S.

Part of the water newtork plan and GIS plans below









Thanks. Regards

Investigations and Planning Engineer - Drinking Water Network Engineering Team



DI Mob

Tel 04 912 4400

Private Bag 39804, Wellington Mail Centre 5045 Level 6, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz

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We manage their drinking water, wastewater and stormwater services.

 From:
 @ccl.co.nz>

 Sent:
 Monday, July 25, 2022 8:58 AM

To:

Cc: Subject: Toby Boxes for Queen Street

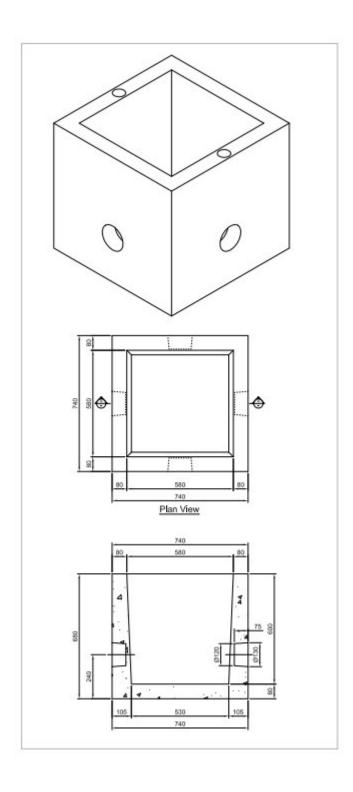
Hi All,

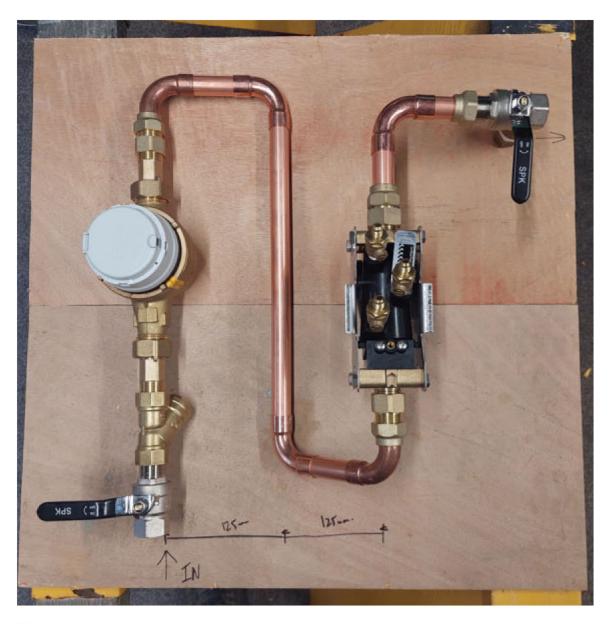
I can get small concrete chambers as below to install the valves, strainer, meter and backflow within them, if I have my measurements correct the square infill lids should fit straight on top of them. We will have to have holes drilled for the inlets, outlets and drain. We may also need to make up some brackets to take the weight of all the fittings.

One of my guys has mocked up the arrangement to ensure it all fits within the chamber size (plywood cut to size).

what's your thoughts as to using a smart meter so the lids don't have to be lifted by the meter reader?

I can get enough chambers but they are ex Auckland so need a decision quickly, as we want to get them in at the same time as the service lateral pipes.





Cheers







From: @wellingtonwater.co.nz>

Sent: Thursday, August 11, 2022 1:24 PM

To:

Cc:

Subject: Queen Street water main renewal.

Attachments: Queen Street toby box lid 2.jpg; Queen Street toby box.jpg; Queen Street toby box lid 1.jpg



You raise valid points regarding size and bulkiness of the chamber, the access lids and the ability for the property owner to access the chamber if they want to isolate the water supply to undertake private maintenance.

Unfortunately with Queen St we had no lead time so decisions had to be made quickly and based on supply. However, the concept of metered water connections with backflow will be a standard requirement where Wellington Water replaces water assets on commercial / industrial properties.

 points to discuss on project completion (lessons learnt) and whether there are other options for consideration with the chamber size and perhaps standardising the covers (wonder covers or similar). A discussion with CCL perhaps.

- you will need to know how best to remove these covers if you get called over to access the toby, meter or backflow device.

is our COG water team leader – Pomare

Customer Planning Engineer - Wellington Water

Mob

From: @wellingtonwater.co.nz>

Sent: Thursday, 11 August 2022 10:57 am

To: @wellingtonwater.co.nz>

Cc: @wellingtonwater.co.nz>;

Subject: Queen Street water main renewal.

Hi

I went over to Wainuiomata with ADR to have a look at the new "toby boxes" been installed in Queen St. We are testing the smart meter, to ensure that the signal will get out of the chamber with the steel lid.

The chamber is huge, so will be easy to swap toby/meter without any excavation.

But they will be very difficult to open in a hurry, once in place with the paving stones. There are no lifting eyes in the frame. They have set screws, which you remove, then screw in a lifting eye. So cant see how a property owner, even with 2 people, will get it up to turn of toby if they have a leak. I suspect most plumbers will struggle to get them up?

For the 2 40mm connections we are going to use 40mm Elster Kent meters with a separate CAPTIS pulse unit. We have confirmed that they will work in the chambers.

For the 25mm connections we are trialling a Axioma smart meter in a chamber over the weekend. If they won't work with the chamber, we will go with 25mm Elster Kents meters and CAPTIS pulse units. Preference is the Axioma meters as network development are keen to trial them Thanks





Mob Tel +64 4 912 4400

Private Bag 39804, Wellington Mail Centre 5045 Level 4, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz

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From: @ccl.co.nz>

Sent: Wednesday, November 23, 2022 5:08 PM

To: @wellingtonwater.co.nz;

@wellingtonwater.co.nz

Cc:

Subject: RE: Queen St Watermain Renewal - Defects Walkover

Follow Up Flag: Follow up Flag Status: Completed

Hi all,

Thanks for your time today. I believe is going to send through a copy of the minutes/actions from the walkover.

Just a few comments from my side regarding the chambers:

The RPZ installation in the chambers (below ground) is not ideal, however this was discussed between Stantec and WWL in early design. WWL recognised there was no alternative in the environment to install them above ground and approve the design. The RPZ, double check valves and pipework are to be certified in March next year by when he completes the training (this should not influence the practical completion cert). He is happy to certify/test the RPZ's for the future.

The chambers containing RPZ's, and double check valves will be identified, and the information will be passed on to WWL and HCC for maintenance/testing.

Please feel free to add any further comments to this and/or let me know of any misinterpretation.

Kind Regards,







From: @stantec.com>
Sent: Wednesday, 23 November 2022 11:13 am

To: @ccl.co.nz>; @jfcltd.co.nz>; @xtra.co.nz; @xtra.co.nz; @wellingtonwater.co.nz;

Cc: @stantec.com>

Subject: RE: Queen St Watermain Renewal - Defects Walkover

Hi all.

Ahead of today's walkover, please find attached the Queen St Watermain Renewal IFC drawings for your information.

I look forward to seeing you all on site this afternoon.

Kind Regards,



Stantec New Zealand Stantec Building Level 15, 10 Brandon Street Wellington 6011 New Zealand



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----Original Appointment----

From:

Sent: Wednesday, 16 November 2022 1:13 pm

To:

@wellingtonwater.co.nz;

@xtra.co.nz;

Cc:

Subject: Queen St Watermain Renewal - Defects Walkover

When: Wednesday, 23 November 2022 2:30 pm-3:30 pm (UTC+12:00) Auckland, Wellington.

Where: Queen St (Queen St, Wainuiomata Wellington Region 5014)

Hi all,

This is an invite for the defects walkover of the soon to be completed Queen Street Watermain Renewal, carried out by CCL.

Hopefully this time suits everyone. Please let me know if it doesn't work and we can reschedule.

Kind Regards,

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Atención: Este correo electrónico proviene de fuera de Stantec. Por favor, tome precauciones adicionales.

Subject: RE: Wainui WM: Road marking at Queen Street

Hi all,

is looking to install the additional valve at the hairdressers tomorrow. Can I please receive confirmation that this is to go ahead and who the cost will fall under. From the below email chain, it is unclear.

Kind Regards,







Subject: RE: Wainui WM: Road marking at Queen Street

Hi

did have a look at this on Monday and it is very similar to the one that has already been installed, I'm not sure of what this involved but it is achievable. He did mention that not all businesses would have the same configuration so costs could fluctuate if this is to become a common factor for each property.

Regards

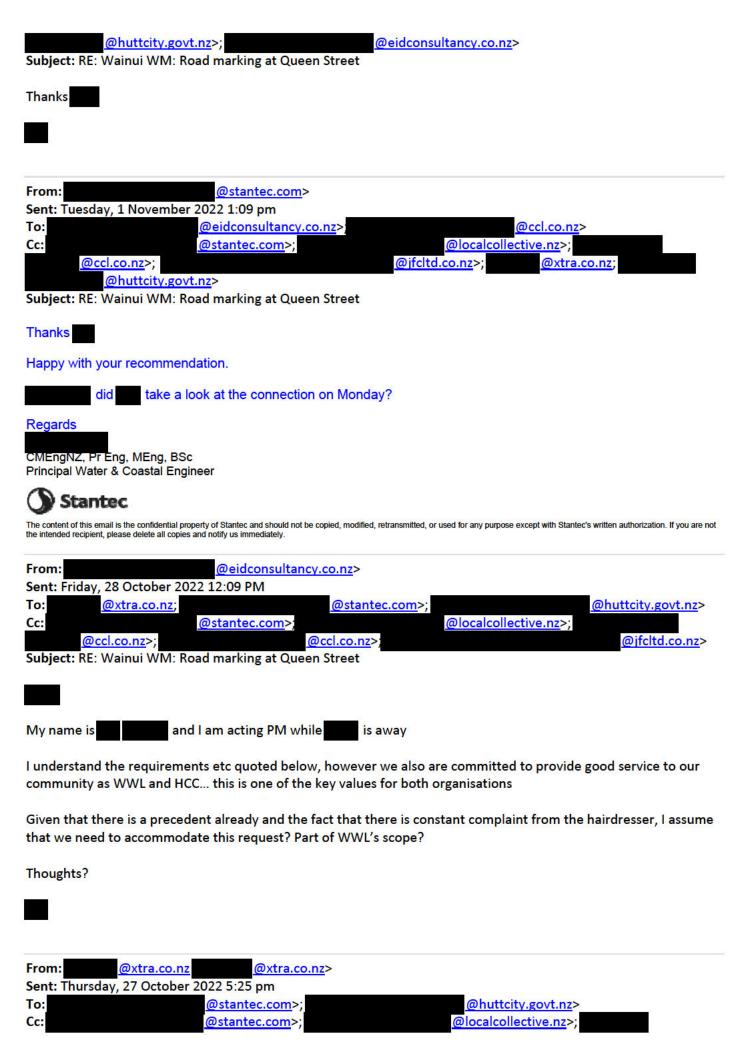




From:

@eidconsultancy.co.nz>
Sent: Tuesday, 1 November 2022 1:10 pm

To:
@stantec.com>;
@ccl.co.nz>
Cc:
@stantec.com>;
@ifcltd.co.nz>;
@axtra.co.nz;



@eidconsultancy.co.nz>;
@ifcltd.co.nz>;
@eidconsultancy.co.nz>;
@ifcltd.co.nz>

Subject: RE: Wainui WM: Road marking at Queen Street

Hi everyone,

I think the other point to consider now is that the isolation points are now under heavy chamber lids that cannot be accessed by one person and quickly as the chamber lids are screwed down.

Regards,



From: @stantec.com>

Sent: 27 October 2022 17:02

To: @huttcity.govt.nz>

@stantec.com>;

@eidconsultancy.co.nz;
@ccl.co.nz;

@ccl.co.nz>;

Subject: RE: Wainui WM: Road marking at Queen Street

Hi

I'd like to get your thoughts, I know that we have already done this for another shop owner who had an issue but my understanding was that it was a Once off.

I have reviewed the WWL std and the requirements are more to allow for safe access to meter reading not so much isolation:

(f) Service valves (or meters) should not be located in driveways or areas where vehicle traffic is likely. Where a meter cannot be accessed safely, a remote display shall be installed in a location that is safe and has ready access for meter readers and is either on the boundary or public land.

Although the service valve is defined as follows:

An isolation (water shut off) valve where a potable water connection is made between the public water supply (in the street) and the private dwelling or commercial building. Sometimes referred to as a "toby".

Which aligns with the HCC bylaw:

"Service Valve (Toby/Manifold)" means the valve at the customer end of service pipe used to control and/or isolate the supply.

The bylaw goes on to say that:

5. Responsibility for maintenance

5.1 The Council shall own and maintain the service pipe and fittings up to the point of supply, including any water meter where fitted. The customer shall own and maintain the supply pipe beyond the point of supply. Without limiting that obligation on the customer, the customer shall undertake any specific maintenance or repairs on the customer's side of the point of supply, as directed by Council.

5.2 The Council gives no guarantee as to the serviceability of the service valve (Toby/Manifold) located on the service pipe.

It doesn't appear that council is responsible for providing access to isolation in a hurry. But, there is precedent at another property now.

Regards





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From: @ccl.co.nz>

Sent: Thursday, 27 October 2022 9:49 AM

@xtra.co.nz;
@ccl.co.nz>;

@jfcltd.co.nz>

Cc: @stantec.com>;

@eidconsultancy.co.nz; @huttcity.govt.nz>

Subject: RE: Wainui WM: Road marking at Queen Street

Hi /

To:

This is something we can definitely look into, will be onsite for a brief period of time on Monday so he will visit the hairdresser to see what is required and we can get back to you with a price to complete the additional works.

Regards







<u>@xtra.co.nz</u> <u>@xtra.co.nz</u>>

Sent: Thursday, 27 October 2022 9:17 am

To: @stantec.com>;

@jfcltd.co.nz>

Cc: @stantec.com>; @ccl.co.nz>;

@localcollective.nz>; @eidconsultancy.co.nz; @huttcity.govt.nz>

Subject: RE: Wainui WM: Road marking at Queen Street

Hi

We spoke yesterday about cutting of V's into the tops of the granite kerb and agreed that this has to be done so the lines/edges are neat and square. Using an angle grinder would not be acceptable.

is going to investigate how this can be done. Possibly by sand or vapour blasting.

On a separate note, the hairdresser at No 30 spoke to us yesterday and vented her dissatisfaction of where her toby is and that she would not be able to lift the lid of the new chamber if she needed to in a hurry. She asked if she could have a tap on the supply pipe inside her premises. Is this something the water team can arrange?

Regards,





From: @stantec.com>
Sent: 26 October 2022 08:28 To: @xtra.co.nz; @ccl.co.nz>;
@ifcltd.co.nz>
Cc: @stantec.com>; @ccl.co.nz>;
@localcollective.nz>
Subject: RE: Wainui WM: Road marking at Queen Street
Apologies yes, yellow not red.
CMEngNZ, Pr Eng, MEng, BSc Principal Water & Coastal Engineer
Stantec
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From: @xtra.co.nz @xtra.co.nz>
Sent: Wednesday, 26 October 2022 8:21 AM To: @ccl.co.nz>; @stantec.com>;
@ifcltd.co.nz>
Cc: @stantec.com>; @ccl.co.nz>;
@localcollective.nz>
Subject: RE: Wainui WM: Road marking at Queen Street
Thanks
Where painting of the FH lid occurs in the granite paved areas please can you arrange for the road markers to mask
off the granite to prevent paint going on to the granite.
Regards,

Wade Consulting
Francis Control of the Control of th
From: @ccl.co.nz> Sent: 25 October 2022 19:35
To: @stantec.com>; @xtra.co.nz>;
@jfcltd.co.nz>
<pre>@ccl.co.nz>;</pre>
@localcollective.nz>
Subject: RE: Wainui WM: Road marking at Queen Street
Hi all,
I think meant yellow in the below email. Please find attached the marked-up plan I am providing to Capital
Road Marking for tomorrow night. I have left the middle section for hydrant marking as it is still under construction.
I am on a course for the next couple of days in Auckland and then away next week. Can I leave it to be coordinated
after your meeting tomorrow? is it possible you could give the guy a call from Capital Road Marking if you know him?

Kind Regards,





From:	@stantec.com>	
Sent: T	uesday, 25 October 2022 7:12 pm	
To:	@xtra.co.nz>;	@jfcltd.co.nz>;
***	@ccl.co.nz>	
Cc:	@stantec.com>;	@ccl.co.nz>;
	@localcollective.nz>	
Subject	: RE: Wainui WM: Road marking at Queen Street	

MOBILE:

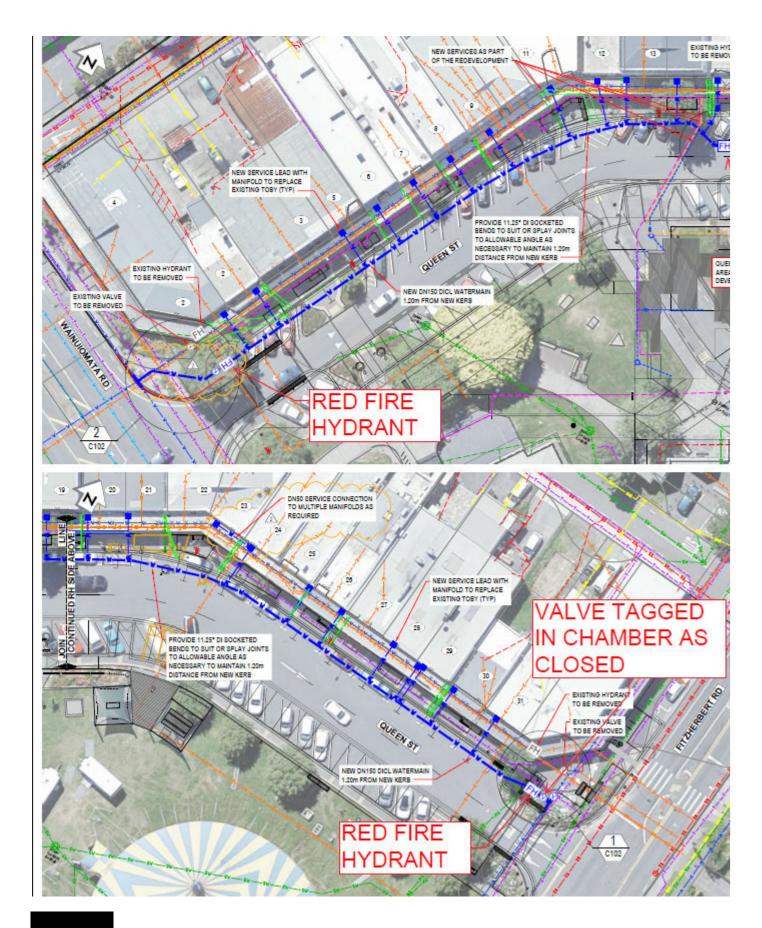
@ccl.co.nz | www.ccl.co.nz

Hey

I'm hoping that a vehicle will come available tomorrow.

But essentially we need to mark the hydrants red. The valves can be tagged in the chambers.

It would be good to know if the V cut can be accommodated into the Kerb to indicate service valves. Ill try and get a recent example.



CMEngNZ, Pr Eng, MEng, BSc Principal Water & Coastal Engineer



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Could the streetscaping team possibly comment on what would be an acceptable proposals for the road marking at Queen St. The requirements set out tin the Spec are extracted below.

4.11.2.1 Hydrants

Marking of hydrants shall (see also Section 6.2.11.4 Hydrant valves):

- (a) Comply with SNZ PAS 4509.
- (b) Be carried out within 24 hours of the pipeline being commissioned.
- (c) Include the hydrant box lid and any concrete surround, the triangle near the carriageway centreline pointing at the hydrant and a circle if required.
- (d) Include reflective blue pavement markers to be installed on the centreline as per the standard.

4.11.2.2 Gate (sluice) valves

The following applies to marking of gate valves:

- (a) Normally shut valves and fire service valves shall be marked with a non-slip reflective paint that complies with NZTA M/07 excepting colour.
- (b) "Normally Shut" valves shall be painted red.
- (c) "Fire Service" valves shall be painted green.
- (d) Scour valves shall be painted blue.
- (e) Gate valves shall be painted within 24 hours of commissioning of the pipeline.

4.11.2.3 Service valves

The following applies to the marking of service valves (see also Section 6.2.11.5 Service valves):

- (a) Marking of the location of services valves shall be carried out within 2 weeks of commissioning of the pipeline or prior to vesting of the asset.
- (b) Service valve locations shall be marked on the point of the adjacent kerb closest to the valve.
- (c) They shall be identified by a "V" cut into the top of the kerb with the point of the "V" pointing towards the valve location.
- (d) The "V" shall be a minimum of 100 mm long and be cut a minimum of 5 mm deep into the kerb.

Regards

CMEngNZ, Pr Eng, MEng, BSc

Principal Water & Coastal Engineer



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From: @ccl.co.nz>
Sent: Tuesday, 25 October 2022 8:06 AM

To: @wellingtonwater.co.nz) < @wellingtonwater.co.nz>
Cc: @wellingtonwater.co.nz>; @stantec.com>;

@ccl.co.nz>

Subject: Road marking at Queen Street



We are having trouble getting the road marking done for the valves and hydrants on Queen Street. Majority are still in the construction site and the painters do not enter due to it being a H & S risk. I thought I would make you aware of this as the spec states they shall be painted 24h after commissioning. We have put a temporary stripe of paint on them for the time being (which can be painted over by the proper road marking crew).

We also need to have a discussion on how these will be marked on the road and kerb. Do we want to paint over the nice paving or is there an alternative for this type of situation?

I look forward to hearing from you.

Kind Regards,







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From:

@wellingtonwater.co.nz>

Sent:

Wednesday, July 27, 2022 9:25 AM

To: Cc:

Subject:

RE: Wainui WM_Queen St - Proposed Manifold Installation - Backflow Prevention Chamber Detail



Thanks for that; proposal accepted.

Regards,





Mob

Private Bag 39804, Wellington Mail Centre 5045 Level 4, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz

From: @stantec.com>

Sent: Tuesday, 26 July 2022 7:06 pm

To: @wellingtonwater.co.nz>

Cc: @wellingtonwater.co.nz>; @stantec.com>;

@wellingtonwater.co.nz>;

Subject: Wainui WM_Queen St - Proposed Manifold Installation - Backflow Prevention Chamber Detail

Hi

Confirming our discussion this morning.

We are proposing the X-Pave lids over the 580x580 chambers proposed below. The internals are still to be finalised (if we install smart meters) but should fit as per CCL's mock-up, also below.

CCL have organised for these to be delivered such that the existing contractor can continue with their Streetscaping works.

I have still included the discussion re the backflow for reference down below.



XPAVE INFILLED COVERS

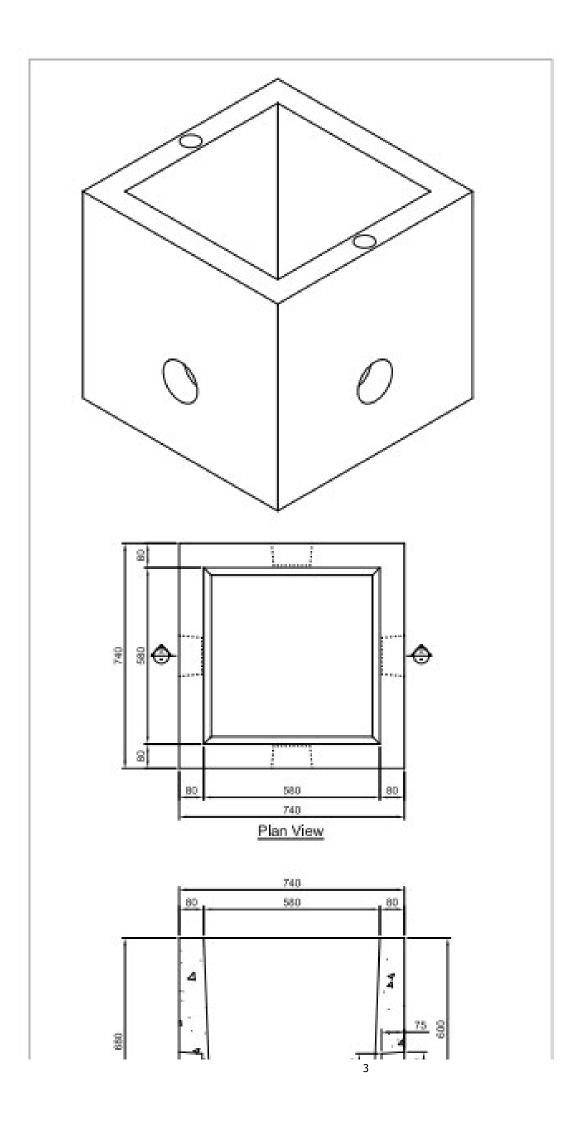
Paver infilled cover to camouflage access points in pedestrian and trafficable areas.

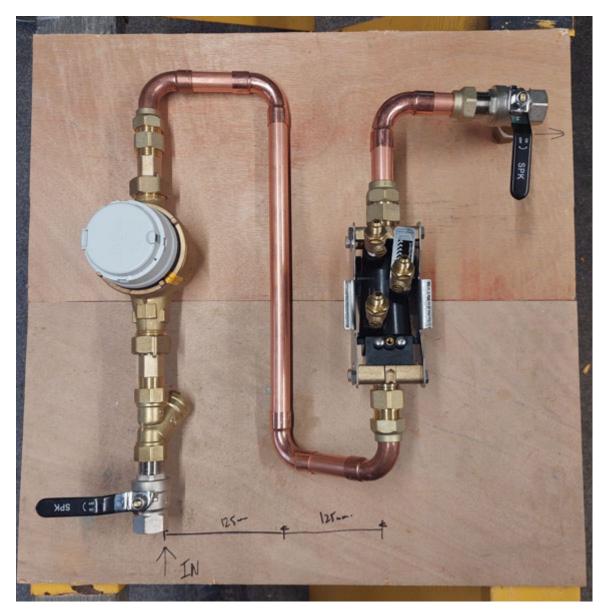
- Xpave has a deep recess to accommodate thicker pavers
- ► Complies with EN124 loading up to C250kN
- Laser cut to ensure precise tolerances
- ▶ Discreet and unobtrusive

PAVER INFILL COVER AND FRAME SETS

Product Code	Description
INFILXPAV600600	600 × 600 mm Xpave Paver Infilled Class C250







Regards

CMEngNZ, Pr Eng, MEng, BSc Snr Water & Coastal Engineer



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Subject: RE: Queen St - Proposed Manifold Installation - Backflow Prevention

For what it's worth, the HCC water Supply Bylaw was recently updated and is scheduled to be adopted by Council on 5 August.

The revised bylaw is clear that the costs for maintenance and testing are with the "owner". The bylaw however does not specify who the owner is because it was future-proofed to allow council to take over ownership of backflow preventers if we could get this opportunity in the future.

Cheers





Subject: RE: Queen St - Proposed Manifold Installation - Backflow Prevention

Hi

This will need to be discussed further with Council.

I will update once the discussion has been had.



Private Bag 39804, Wellington Mail Centre 5045 Level 4, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz



Subject: Re: Queen St - Proposed Manifold Installation - Backflow Prevention

And for ongoing cost for maintenance, annual testing etc?

Regards

On 21/07/2022, at 3:47 PM, @wellingtonwater.co.nz> wrote: Hi All, this afternoon as part of a wider update on the progress of the project. I ran this past From a cost perspective, was not interested in engaging and recouping costs for associated backflow prevention from the residents and was happy for this to be funded from the project costs. Programme Delivery Lead HCC and UHCC Tel 04 912 4400 Mob Private Bag 39804, Wellington Mail Centre 5045 Level 4, 25 Victoria Street, Petone, Lower Hutt www.wellingtonwater.co.nz From: @wellingtonwater.co.nz> Sent: Thursday, 21 July 2022 12:06 pm @wellingtonwater.co.nz> To: Cc: @wellingtonwater.co.nz>; @wellingtonwater.co.nz>; @stantec.com>; @wellingtonwater.co.nz>; @stantec.com>; @wellingtonwater.co.nz>; @wellingtonwater.co.nz>; @wellingtonwater.co.nz>; @wellingtonwater.co.nz>; @wellingtonwater.co.nz> Subject: RE: Queen St - Proposed Manifold Installation - Backflow Prevention is that something you'd be able to set up? Yes agreed, Regards From: @wellingtonwater.co.nz> Sent: Thursday, 21 July 2022 11:46 am @wellingtonwater.co.nz> To: @wellingtonwater.co.nz>; Cc: @wellingtonwater.co.nz>; @stantec.com>; @wellingtonwater.co.nz>; @stantec.com>; @wellingtonwater.co.nz>; @wellingtonwater.co.nz>; @wellingtonwater.co.nz>; @wellingtonwater.co.nz>; @wellingtonwater.co.nz> Subject: Re: Queen St - Proposed Manifold Installation - Backflow Prevention **Thanks**



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A bit of context on this one.

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Team Lead Conveyance, Network Engineering
Wellington

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www.wellingtonwater.co.nz

From:

Sent: Thursday, 21 July 2022 11:09 am

To:

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Senior Project Manager, Standards



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Hi team

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My understanding is that if a device is required at the boundary the property owner should have the opportunity to install one within a reasonable timeframe, and if they do not council may install one on their behalf and charge them for its installation, ongoing testing and maintenance. It's important we have these discussions with them. The key is that the property owners should pay either way, and that we have spoken to them/documented things clearly.

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The only definitions I could find are in the MBIE document shown below (effective from 27 June 2019) which defines what low, medium and high risks are and has indicative lists of properties for each risk. Refer to section 3.

I believe the current Regional Standard and Specification accounts for connection size, rather than the risk the property poses with regard to backflow.

In Queens Street we are trying to retro fit an existing situation that does not comply with Drawing WS09 of the Regional Specification.



https://www.building.govt.nz/assets/Uploads/building-code-compliance/g-services-and-facilities/g12-water-supplies/asvm/g12-water-supplies-3rd-edition-amendment-12.pdf

Below is some background information regarding backflow (from

To understand back flow devices, there are various means to require a property owner/occupier to install a backflow device. The Health Act 1956, and the health (Drinking Water) Amendment Act 2007, authorizes water supply authorities to enforce backflow prevention, whether the hazard is new or historic, and recover all reasonable costs to install. The Building Act 2004 requires all buildings to have a safe and adequate water supply. If there is any likelihood of contamination from a cross connection, an approved backflow prevention device is required under a BC to eliminate it, ensuring that all end users are protected against contaminated water.

I believe the Water Services Act 2021 ('Act') that commenced on 15 November 2021, part of the Three Waters Reforms, establishes drinking water standards.

The boundary backflow prevention device needs to contain the degree of risk. There are three degrees of risk used to classify properties in order to determine the type of backflow device required.

- High Risk sites are properties that use or produce products of a toxic or bacterial nature that may cause death or serious illness if leaked into the main water supply.
 Examples include hairdressing salons, food processing that are typical within a CBD commercial environment.
- Medium Risk sites can endanger health if backflow occurs.
 Examples commercial laundries
- Low Risk sites are properties that could cause a nuisance by colour, odour, or taste but do not endanger health.

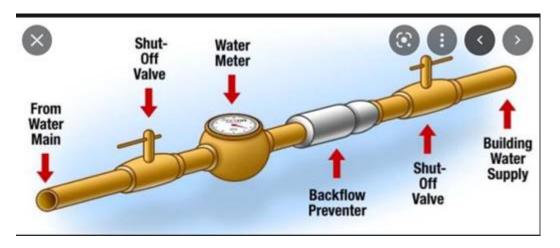
Typically, all non-domestic connections should be fitted with an approved backflow prevention device appropriate to the level of risk associated with the activity within the property. On that understanding all water connections in Queen Street should have an (appropriate) approved backflow prevention device installed.

Where non-domestic connections that are not designated as a medium or high risk, a non-testable double check valve installed on the connection can be achieved with a manifold toby valve with internal double check valve or an inline (non-testable) double check valve.

Where the property is considered a High or Medium risk a testable backflow device is required.

A reduced pressure zone assembly (RPZ) is the most expensive and complicated type of backflow preventer but also the most reliable. The issue we have in Queen Street is the limited room to install a backflow device within the shop frontage. Our next best option to an RPZ is a testable double check valve (tested annually, by an Independently Qualified Person).

Typically this will be a valve (isolation valve), inline meter, double check valve (testable), valve configuration, preferably housed within the one box.



Thanks.
Regards

Investigations and Planning Engineer - Drinking Water Network Engineering Team



DDI Mob Tel 04 912 4400

Private Bag 39804, Wellington Mail Centre 5045 Level 6, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz

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We manage their drinking water, wastewater and stormwater services.

From: @stantec.com>

Sent: Wednesday, 20 July 2022 11:41 am

To: @wellingtonwater.co.nz>

Cc: @stantec.com>;

@wellingtonwater.co.nz>;
@wellingtonwater.co.nz>;

Subject: RE: Queen St - Proposed Manifold Installation and Water

Network and GIS plans

Hi

Is there some guidance as to what counts as medium or high hazard, I have also not found any guidance in the 2021 spec and the standard detail only refers to one layout (WWL Drawing WS09). What was used to determine the requirements for the two details below.

Also, Is there a register of connections which would allow for quick determining of Medium or High Commercial connection requirements.

Apposed to heading out there and doing an onsite assessment.

Regards

CMEngNZ, Pr Eng, MEng, BSc Snr Water & Coastal Engineer



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@wellingtonwater.co.nz>

Sent: Friday, 15 July 2022 9:15 AM

To: @stantec.com>

Cc: @stantec.com>;

@wellingtonwater.co.nz>;

@wellingtonwater.co.nz>

Subject: RE: Queen St - Proposed Manifold Installation and Water

Network and GIS plans



Yes, Wellington Water would like these installed outside all properties. This will cover a possible change in risk, if a property changes from low risk to medium/high risk in the future.

Thanks.

Regards

Investigations and Planning Engineer - Drinking Water Network Engineering Team



DI Mob

Tel 04 912 4400

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www.wellingtonwater.co.nz

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We manage their drinking water, wastewater and stormwater services.

From: @stantec.com>

Sent: Thursday, 14 July 2022 9:09 am

To: @wellingtonwater.co.nz

Cc: @stantec.com>;

@wellingtonwater.co.nz>

Subject: RE: Queen St - Proposed Manifold Installation and Water

Network and GIS plans

Hi

With each property being commercial I assume this would need to be installed outside if each property? Or is there a concession available to install a domestic type connection to small commercial operations with this being installed outside of the hairdressers and laundromats (the ones currently metered an GIS)?

I'm asking as that is quite an installation which would sit back nearly 1.5m into the path, which would mean that a much larger paving area would need to be left open to fit the manifold and the excavation for the sump.

Regards

CMEngNZ, Pr Eng, MEng, BSc Snr Water & Coastal Engineer



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From: @wellingtonwater.co.nz>

Sent: Thursday, 14 July 2022 8:57 AM

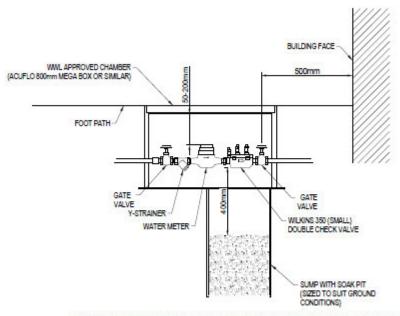
To: @stantec.com>

@stantec.com>;
@wellingtonwater.co.nz>

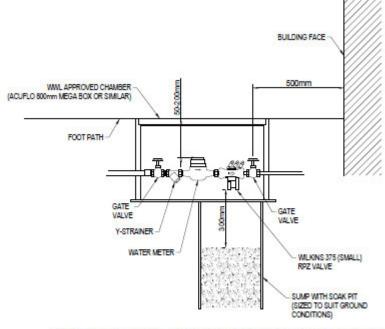
Subject: Queen St - Proposed Manifold Installation and Water Network and GIS plans



Below are the manifold installations that Wellington Water would like installed in Queen St.

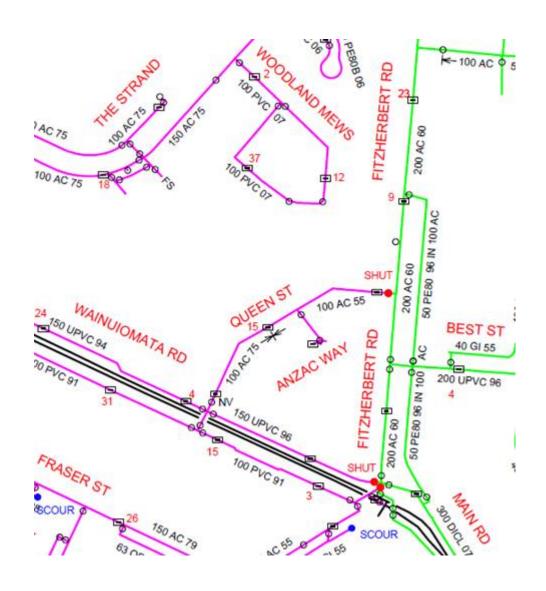


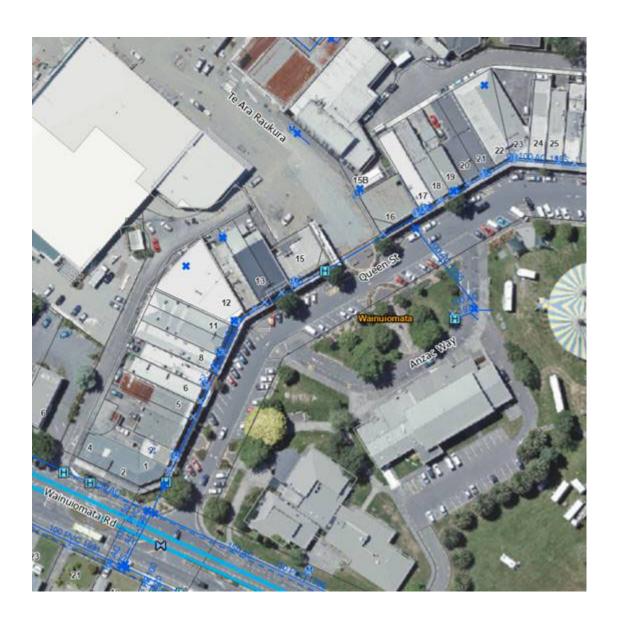
DETAIL FOR COMMERCIAL INGROUND CONNECTION (MEDIUM HAZARD DOUBLE CHECK VALVE)
N.T.S.

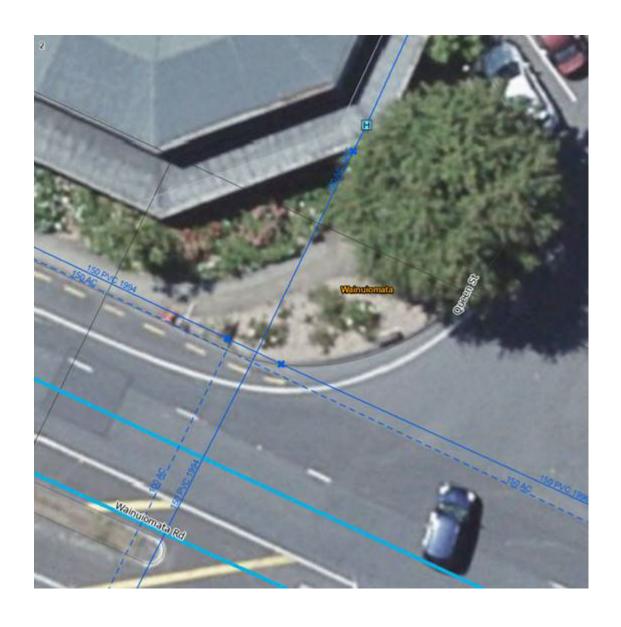


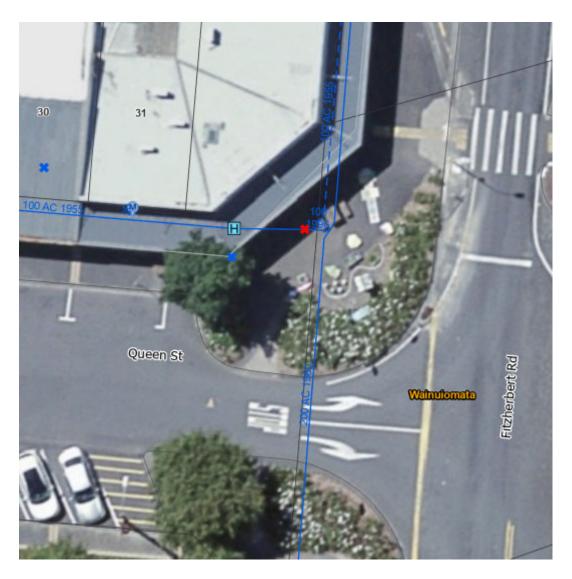
DETAIL FOR COMMERCIAL INGROUND CONNECTION (HIGH HAZARD RPZ VALVE)
NT.S.

Part of the water newtork plan and GIS plans below









Thanks. Regards

Investigations and Planning Engineer - Drinking Water Network Engineering Team



Mob Tel 04 912 4400

Private Bag 39804, Wellington Mail Centre 5045 Level 6, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz

Wellington Water is owned by the Hutt, Porirua, Upper Hutt, and Wellington city councils, South Wairarapa District Council and Greater W. Council.

We manage their drinking water, was tewater and stormwater services. From: Sent: Tuesday, August 9, 2022 3:24 PM To: Cc: Subject: Wainui WM_Queen St - Proposed Manifold Installation Placement **Thanks** Best fit makes sense. I have discussed this with HCC () and we share the view that the service pipe up to the business frontage will be maintained by council. This is contrary to the wording in the water supply bylaw but in practical terms, makes sense. You may want to add comment to this affect in your completion report - cheers Customer Planning Engineer - Wellington Water Mob @stantec.com> From: Sent: Tuesday, 9 August 2022 3:14 pm @wellingtonwater.co.nz>; @wellingtonwater.co.nz> To: Cc: @stantec.com>; @wellingtonwater.co.nz>;

Subject: RE: Wainui WM_Queen St - Proposed Manifold Installation Placement

@stantec.com>;

Hi /

Just to note that there are spatial constraints within the walkway and JFC/CCL are having to fit the chambers between the existing live watermain, the power cables & the lighting ducts. This is leading to some chambers being further from the building boundary closer to the curb and a longer supply between the manifold and the property. There shouldn't be any additional connections than there would have been with CCL swapping over the existing tobies to the newly installed chambers adjacent.

@ccl.co.nz>

They will be noted on the as-builts.



Regards
CMEngNZ, Pr Eng, MEng, BSc

Snr Water & Coastal Engineer



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From:	@wellingtonwater.co.nz>	
Sent: Tuesday, 2	August 2022 9:03 PM	
To:	@stantec.com>;	@wellingtonwater.co.nz>
Cc:	@stantec.com>;	@wellingtonwater.co.nz>;
@	ccl.co.nz>;	@jfcltd.co.nz>;
@sta	ntec.com>	

Subject: RE: Wainui WM_Queen St - Proposed Manifold Installation - #23 & #24 connection

Agree – keep it simple (all good provided detail is recorded on as-builts – then updated to GIS) - keep in mind the two 90 degree bends – don't want them walking.

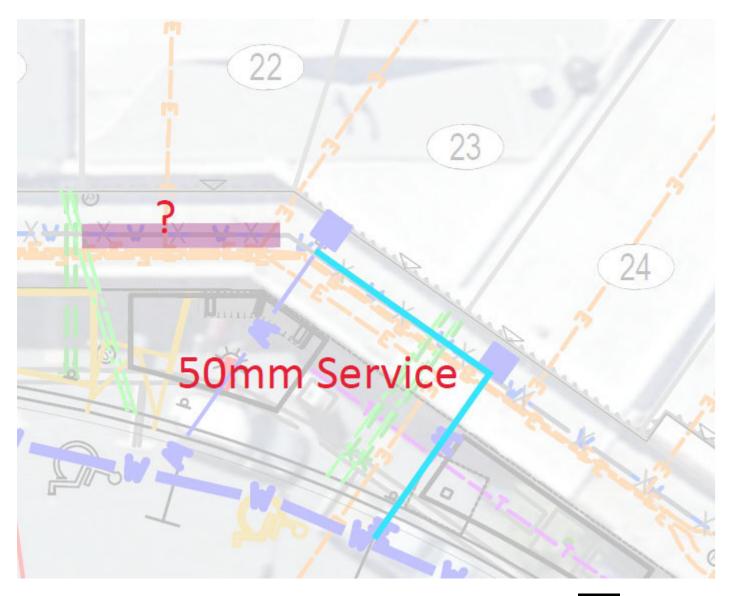


Subject: RE: Wainui WM_Queen St - Proposed Manifold Installation - #23 & #24 connection

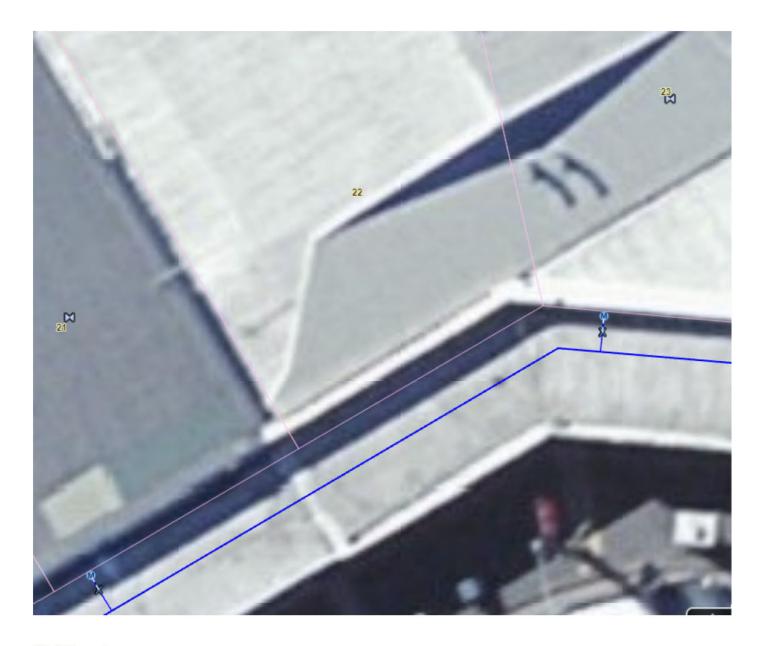
Hi /

JFC have asked if we could provide a single DN50 service connection to both #23 & #24 to steer clear of a planting area (similar to what we are proposing either side of the concrete surfacing section).

I figured a straight connection to #24 and then along the walkway to #23 would be a better alignment then a dedicated alignment to 23 which isn't in line and has a dog leg over the electrical services?



Also the Toby Infront of #22 is not shown on the GIS, on any service plans nor in the walkway? is going to ask to do some investigation if there is an internal supply either side but should we be placing a manifold box Infront anyway? There are a couple of other similar properties with no obvious connection, #30, harcourts, #22, ANZ (#15), #4.



Kind Regards

CMEngNZ, Pr Eng, MEng, BSc Snr Water & Coastal Engineer



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From: @wellingtonwater.co.nz>

Sent: Wednesday, 27 July 2022 9:25 AM

To: @stantec.com>

@wellingtonwater.co.nz>;

@wellingtonwater.co.nz>;
Subject: RE: Wainui WM_Queen St - Proposed Manifold Installation - Backflow Prevention Chamber Detail

Hi

Thanks for that; proposal accepted.

Regards,



Private Bag 39804, Wellington Mail Centre 5045 Level 4, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz

From:	@stantec.com>	
Sent: Tue	sday, 26 July 2022 7:06 pm	
То:	@wellingtonwater.co.nz>	
Cc:	@wellingtonwater.co.nz>;	<pre>@stantec.com>;</pre>
	@wellingtonwater.co.nz>;	@wellingtonwater.co.nz>

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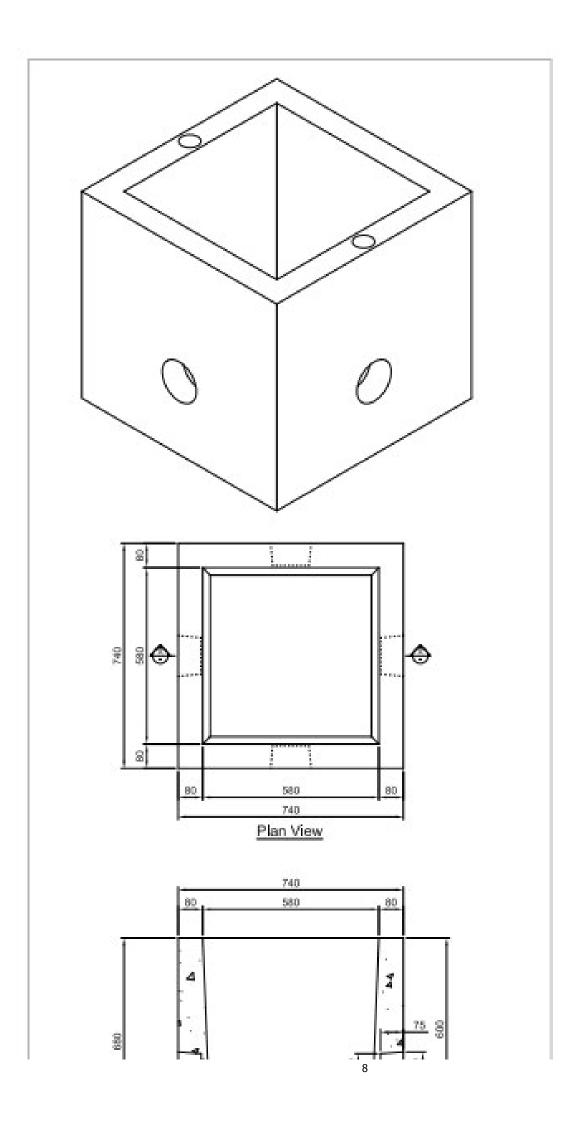
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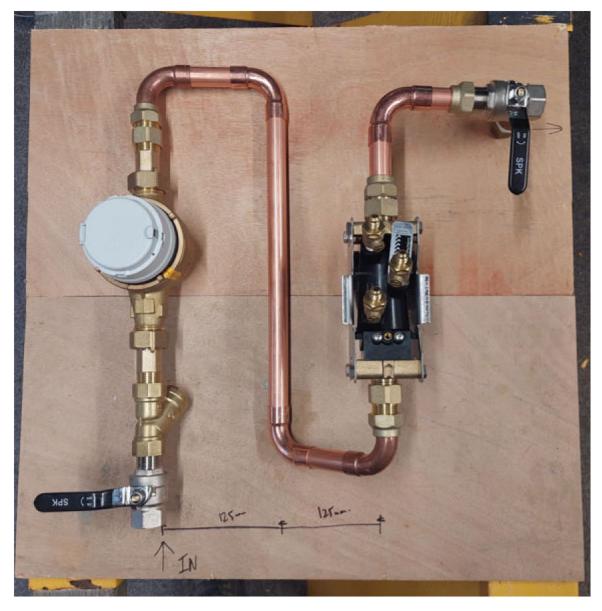
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And for ongoing cost for maintenance, annual testing etc?

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Senior Project Manager, Standards



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https://www.building.govt.nz/assets/Uploads/building-code-compliance/g-services-and-facilities/g12-water-supplies/asvm/g12-water-supplies-3rd-edition-amendment-12.pdf

Below is some background information regarding backflow (from

To understand back flow devices, there are various means to require a property owner/occupier to install a backflow device. The Health Act 1956, and the health (Drinking Water) Amendment Act 2007, authorizes water supply authorities to enforce backflow prevention, whether the hazard is new or historic, and recover all reasonable costs to install. The Building Act 2004 requires all buildings to have a safe and adequate water supply. If there is any likelihood of contamination from a cross connection, an approved backflow prevention device is required under a BC to eliminate it, ensuring that all end users are protected against contaminated water.

I believe the Water Services Act 2021 ('Act') that commenced on 15 November 2021, part of the Three Waters Reforms, establishes drinking water standards.

The boundary backflow prevention device needs to contain the degree of risk. There are three degrees of risk used to classify properties in order to determine the type of backflow device required.

- High Risk sites are properties that use or produce products of a toxic or bacterial nature that may cause death or serious illness if leaked into the main water supply.
 Examples include hairdressing salons, food processing that are typical within a CBD commercial environment.
- Medium Risk sites can endanger health if backflow occurs.
 Examples commercial laundries
- Low Risk sites are properties that could cause a nuisance by colour, odour, or taste but do not endanger health.

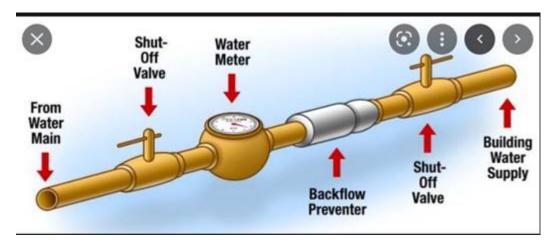
Typically, all non-domestic connections should be fitted with an approved backflow prevention device appropriate to the level of risk associated with the activity within the property. On that understanding all water connections in Queen Street should have an (appropriate) approved backflow prevention device installed.

Where non-domestic connections that are not designated as a medium or high risk, a non-testable double check valve installed on the connection can be achieved with a manifold toby valve with internal double check valve or an inline (non-testable) double check valve.

Where the property is considered a High or Medium risk a testable backflow device is required.

A reduced pressure zone assembly (RPZ) is the most expensive and complicated type of backflow preventer but also the most reliable. The issue we have in Queen Street is the limited room to install a backflow device within the shop frontage. Our next best option to an RPZ is a testable double check valve (tested annually, by an Independently Qualified Person).

Typically this will be a valve (isolation valve), inline meter, double check valve (testable), valve configuration, preferably housed within the one box.



Thanks.

Investigations and Planning Engineer - Drinking Water Network Engineering Team



DDI Mob Tel 04 912 4400

Private Bag 39804, Wellington Mail Centre 5045 Level 6, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz

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We manage their drinking water, wastewater and stormwater services.

From: @stantec.com

Sent: Wednesday, 20 July 2022 11:41 am

To: @wellingtonwater.co.nz>

@stantec.com>;

@wellingtonwater.co.nz>;
@wellingtonwater.co.nz>;

Subject: RE: Queen St - Proposed Manifold Installation and Water

Network and GIS plans

Hi

Is there some guidance as to what counts as medium or high hazard, I have also not found any guidance in the 2021 spec and the standard detail only refers to one layout (WWL Drawing WS09). What was used to determine the requirements for the two details below.

Also, Is there a register of connections which would allow for quick determining of Medium or High Commercial connection requirements.

Apposed to heading out there and doing an onsite assessment.

Regards

CMEngNZ, Pr Eng, MEng, BSc Snr Water & Coastal Engineer



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@wellingtonwater.co.nz>

Sent: Friday, 15 July 2022 9:15 AM

To: @stantec.com>

@stantec.com>;

@wellingtonwater.co.nz>;
@wellingtonwater.co.nz>

Subject: RE: Queen St - Proposed Manifold Installation and Water

Network and GIS plans



Yes, Wellington Water would like these installed outside all properties. This will cover a possible change in risk, if a property changes from low risk to medium/high risk in the future.

Thanks.

Regards

Investigations and Planning Engineer - Drinking Water Network Engineering Team



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From: @stantec.com>

Sent: Thursday, 14 July 2022 9:09 am

To: @wellingtonwater.co.nz>

Cc: @stantec.com>;

@wellingtonwater.co.nz>

Subject: RE: Queen St - Proposed Manifold Installation and Water

Network and GIS plans

Hi

With each property being commercial I assume this would need to be installed outside if each property? Or is there a concession available to install a domestic type connection to small commercial operations with this being installed outside of the hairdressers and laundromats (the ones currently metered an GIS)?

I'm asking as that is quite an installation which would sit back nearly 1.5m into the path, which would mean that a much larger paving area would need to be left open to fit the manifold and the excavation for the sump.

Regards

CMEngNZ, Pr Eng, MEng, BSc Snr Water & Coastal Engineer



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From: @wellingtonwater.co.nz>

Sent: Thursday, 14 July 2022 8:57 AM

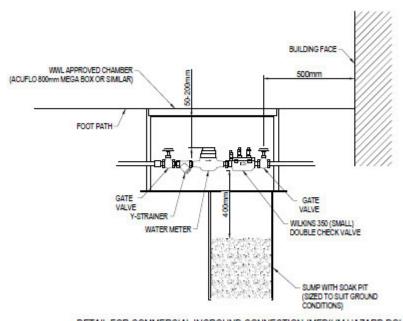
To: @stantec.com>

@stantec.com>;
@wellingtonwater.co.nz>

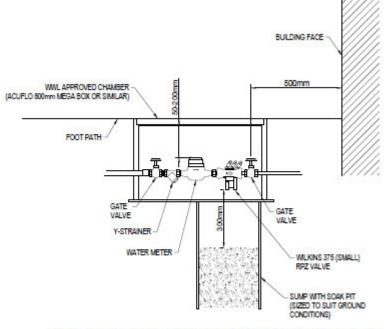
Subject: Queen St - Proposed Manifold Installation and Water Network and GIS plans



Below are the manifold installations that Wellington Water would like installed in Queen St.

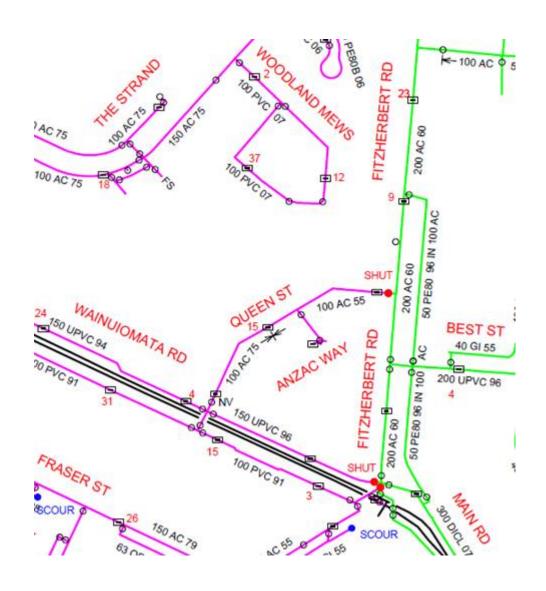


DETAIL FOR COMMERCIAL INGROUND CONNECTION (MEDIUM HAZARD DOUBLE CHECK VALVE)
N.T.S.

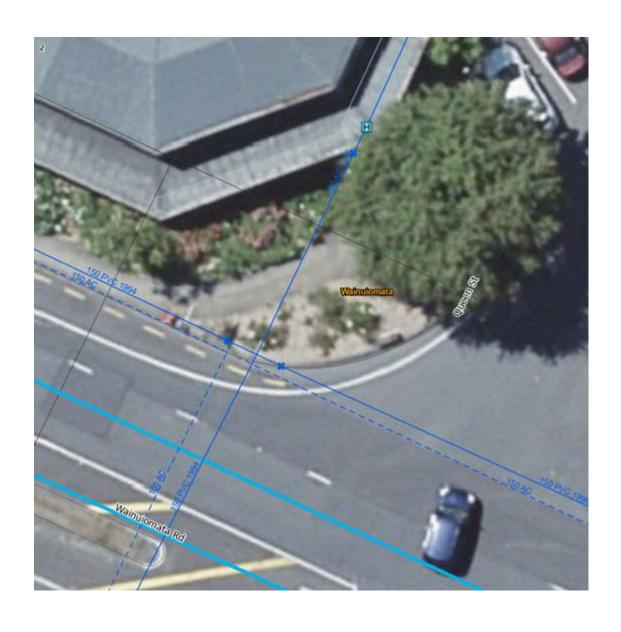


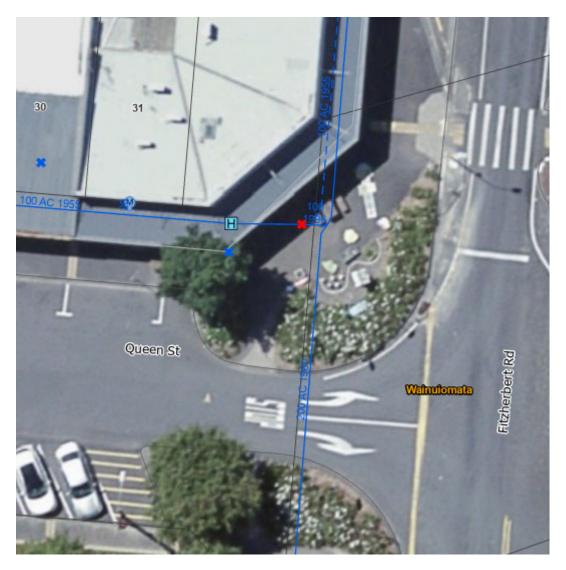
DETAIL FOR COMMERCIAL INGROUND CONNECTION (HIGH HAZARD RPZ VALVE)

Part of the water newtork plan and GIS plans below









Thanks. Regards

Investigations and Planning Engineer - Drinking Water Network Engineering Team



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