BEFORE THE HUTT CITY COUNCIL

Proposed District Plan Hearings Panel –

Stream 6 – Infrastructure Three Waters chapter (THW)

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of the Proposed Lower Hutt District Plan

JOINT WITNESS STATEMENT

Planning

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12 October 2026

1.0 INTRODUCTION

1.1 This joint witness statement relates to the potential replacement of some specific references to the Regional Standard for Water Services 2024, Version 3.1 in the Three Waters (THW) chapter in Rule THW-R1 of the Proposed Lower Hutt District Plan ('Proposed Plan' or 'PDP'), in favour of Appendix THW-APP1, as raised within submission (PDP/466) by Survey & Spatial New Zealand – Wellington Branch. This statement responds to directions from the Hearing Panel contained in items 4 to 5 of Minute #19 dated 2 October 2026.

1.2 The expert conferencing was held online on 8 October 2026. The sessions were self-facilitated.

1.3 The expert attendees at the conference were:

1.3.1 Dave Gibson (466) for Survey and Spatial NZ (S+SNZ)

1.3.2 Bradley Blucher for Tiaki Wai (Successor to submitter #422 and FS36 and Minute #19.

1.3.3 Cristal Bennett (Reporting officer for THW Chapter)

2.0 CODE OF CONDUCT

2.1 This joint witness statement is prepared in accordance with sections 9.4 to 9.6 of the Environment Court Practice Note 2023.

2.2 We confirm that we have read the Environment Court Practice Note 2023 and agree to abide by it. The experts confirm that the issues addressed in this joint witness statement are within our area of expertise, unless stated otherwise.

3.0 PURPOSE AND SCOPE OF CONFERENCING

3.1 Minute #18 issued by the Hearing Panel directs the conferencing parties to:

> *"…conference on the potential replacement of references to the Regional Standard for Water Services 2021 in favour of a specific Appendix or other method, as raised within submission 466 - Survey & Spatial New Zealand – Wellington Branch.*
>
> *The parties are to prepare and sign a joint witness statement setting out the areas of agreement, areas that remain in disagreement with reasons, and any agreed recommended amendments to the PDP. This is to be provided by 4:00pm 12 October 2026 to the Hearings Administrator, which will then be uploaded to the Hearing Stream 6 webpage."*

3.2 On 5 October 2026 Tiaki Wai submitted a memorandum in response to Minute #19 seeking leave for Bradley Blucher Manager Land Development and Consenting to participate in the conferencing as an interested party. It is noted Tiaki Wai made submissions on references to the Regional Standard.

4.0 PRIMARY DATA RELIED ON

4.1 The primary data on which the opinions are based is:

- The Proposed Lower Hutt District Plan (PDP) THW Chapter
- The Section 42A report for Three Waters (THW) (dated 24 August 2026) and Rebuttal Evidence (updated 17 September 2026) of Cristal Bennett.
- Survey and Spatial NZ (S+SNZ) submission speaking notes (PDP/466).
- Tiaki Wai Regional Standard for Water Services 2024 (the Regional Standard).

- Draft Appendix THW-APP1.

5.0 FACTS AND ASSUMPTIONS

5.1 The notified PDP THW Chapter rule THW-R1 did include reference to the *Wellington Water Regional Standard for Water Services, December 2021, Version 3.0* and was later recommended by Officers to be amended to reflect the replaced Wellington Water entity '*Tiaki Wai'* and to use Version 3.1 (as referenced in Tiaki Wai's Planning Evidence dated 7 September 2026 - Section 73).

5.2 Survey and Spatial NZ (PDP/466) submitted evidence dated 8 September 2026, in paragraphs 8 to 11 opposing the use of the RSWS 2021 in Rule THW-R1 as Wellington City Council (WCC) had a similar standard in their new 2024 District Plan. However, a WCC plan change 1 removed the references to the RSWS 2021 as a compliance document and replaced it with a more refined 'Appendix 17' which sets out the Three Waters Standards for the WCC District Plan (referenced ***Appendix 2*** in the rebuttal evidence of Cristal Bennett). Appendix 17 is made up of the relevant sections of the RSWS 2021. S+SNZ made reference to the final version of WCC's Appendix 17. Appendix 17 was agreed to between WCC, Tiaki Wai and S+SNZ. The relief sought by S+SNZ is a similar appendix for Rule THW-R1 of the PDP.

5.3 As the WCC Three Waters rule structure differs from the HCC PDP Three Waters rule structure, the standards in WCC - Appendix 17 have been amended to reflect the PDP as opposed to adopting the entire Appendix 17 verbatim. This would also require consequential amendments to rule THW-R1 to refer to the new Appendix THW-APP1 in Rule THW-R1.1. However, for Rule THW-R1.2 the *Tiaki Wai Regional Standard for Water Services, Version 3.1* will remain as the wider compliance standards.

6.0 MATTERS DISCUSSED

6.1 All parties agree that the inclusion of the amended standards using WCC's Appendix 17 should be incorporated into the Appendix THW-APP1 of the PDP relating to Rule THW-R1. THW-APP1 will assist in the consistency and targeted approach for THW provisions in the Wellington region.

6.2 All parties agree that the amended THW-APP1 standards are an appropriate replacement for certain references to the RSWS 2021.

6.3 Consequential amendments are appropriate where the PDP determines whether a new building and its connections are a permitted activity in Rule THW-R1 - *New buildings (excluding accessory buildings) and conversions of existing buildings in an Urban Zone – Connections to the Reticulated Network.*

6.4 Recommended consequential amendments are detailed in Attachment 1 of this joint witness statement, and are agreed to by all parties.

- That Rule THW-R1.1 reference the new THW-APP1
- Rule THW-R1.2 maintain reference to Tiaki Wai's RSWS 2024, Version 3.1.

6.5 All parties agreed that it is appropriate to modify the recommended reference to WCC's Appendix 17 (formerly referred to as Appendix 2).

6.6 All parties agree and accept the amendments contained above in paragraph 6.4 and Attachment 1.

Other matters –

6.7 The conferencing parties considered that the Subdivision Chapter rules and standards of the PDP may also be applicable to THW-APP1. However, THW-APP1 will potentially require further consequential amendments to tailor it to the context of the subdivision provisions of the PDP. It was noted that the Subdivision

Chapter is within another hearing stream and written by another HCC reporting officer.

6.8 The conferencing parties agreed that there was no scope to amend rules within the Subdivision Chapter (SUB) of the PDP for this conferencing.

7.0 AGREED POSITION

7.1 That THW-APP1 – Three Waters Connections is amended and included in Rule THW-R1.1 of the PDP.

7.2 That consequential amendments are made to Rule THW-R1.2 of the PDP to retain the RSWS 2024, Version 3.1 where appropriate. Attachment 1 records the agreed amendments to the PDP using the following format:

7.2.1 Section 42A Report recommendations: in red underlined or ~~strike through~~

7.2.2 Further amendments agreed in this conferencing are shown in blue underline or ~~strike through~~.

8.0 SECTION 32AA EVALUATION

8.1 The further recommend amendment to the Compliance Standards in WCC - Appendix 17 (APP17) will ensure that for new building connections, there are appropriate and regionally consistent standards contained within Rules THW-R1.1 and THW-R1.2 in the PDP.

8.2 The consequential amendments to THW-R1.2 will also support a consistent regional approach and provide more certainty to plan users.

Date: 12 October 2026



Dave Gibson



Bradley Blucher



Cristal Bennett

Attachment 1 – Recommended amendments to the Three Waters chapter

For Rule THW-R1, amendments to the rule from previous recommendations from reporting officers to the Panel (through *Hearing #6: Infrastructure* and earlier hearings) are shown in red underline and ~~strikethrough~~. Amendments to the rule that are recommended through this statement are shown in blue underline and ~~strikethrough~~.

For Appendix THW-APP1, the recommended appendix is shown in full, without any tracked changes.

THW-R1	**Construction of ~~N~~new buildings (excluding accessory buildings) and conversions of existing buildings in an Urban Zone — Connections to the Reticulated Network**
Residential Zones **Commercial and Mixed Use Zones** **Industrial Zones** **Sport and Recreation Zone** **Open Space Zone** **Hospital Zone** **Tertiary Education Zone** **Marae Zone** **Seaview Marina Zone**	**1. Activity status:** Permitted Where: a. Connection to the existing three water infrastructure achieves compliance with the requirements of THW-APP1: Three Waters Connections.~~:~~ ~~i. For wastewater: The level of service in Chapter 5, section 5.2.3 of the Wellington Water Regional Standard for Water Services, December 2021, Version 3.0,~~ ~~ii. For water supply: The level of service in Chapter 6, Tables 6.1 and 6.2 of the Wellington Water Regional Standard for Water Services, December 2021, Version 3.0, and~~ ~~iii. For stormwater: The performance standard in Chapter 4 of the Wellington Water Regional Standard for Water Services, December 2021, Version 3.0.~~ **Note:** Chapter 4: Stormwater, Chapter 5: Wastewater and Chapter 6: Water Supply of the ~~Wellington Water~~ Tiaki Wai Regional Standard for Water Services, December ~~2021~~ 2024, Version ~~3.0~~ 3.1, provide additional context for determining compliance with the references specified above.
Residential Zones **Commercial and Mixed Use Zones** **Industrial Zones**	**2. Activity status:** Restricted discretionary Where: a. Compliance ~~with any of the requirements of~~ is not achieved with THW-R1.1 ~~cannot be achieved~~. **Matters of discretion are restricted to:** 1. The relevant sections of the ~~Wellington Water~~ Tiaki Wai Regional Standard for Water Services, December ~~2021~~

	Sport and Recreation Zone **Open Space Zone** **Hospital Zone** **Tertiary Education Zone** **Marae Zone** **Seaview Marina Zone**	2024, Version ~~3.0~~ 3.1, that the proposal does not comply with. 2. The relevant matters in THW-P2: Three waters infrastructure capacity. 3. The ownership, maintenance and operation arrangements of any alternative solutions to meet the performance standards of the ~~Wellington~~ Tiaki Wai Regional Standard for Water Services, December ~~2021~~ 2024, Version ~~3.0~~ 3.1. 4. Any site constraints that may impact the alternative solution that is adopted for the site. 5. The extent to which the proposed water supply, including for firefighting purposes, is sufficient for the development or activity it services. **Notification:** Public notification and limited notification are precluded for applications under this rule.

THW-APP1: Three Waters Connections[1]

1. Stormwater

1.1 Private Connections

1.1.1 Lateral connections to the existing public stormwater network

The following applies to lateral connections to public mains:

a) Private connections must be a minimum size of 100 mm nominal diameter.

b) A vacant lot must be serviced by a separate connection to the public network.

c) Each proposed residential unit on a lot must be serviced by a separate connection to the public system, except that:

   i. Unit-titled developments are exempt from this criterion and may be serviced by a single, suitably-sized connection.

d) Each connection must be capable, as a minimum, of conveying the design level of service.

[1] This appendix is a 'clean' version of the appendix that was attached to Mr Gibson's statement of evidence. The only alterations have been to change the title of the appendix, remove any tracked changes, correct number of provisions and tables, and to replace references to Wellington Water Ltd with references to Tiaki Wai Ltd.

e) Industrial and commercial lots must have a minimum nominal diameter of 150 mm and must connect to a public stormwater pipe.

f) Connections provided to lots must be at sufficient depth so that they can be extended to the building platform in a manner compliant with the New Zealand Building Code.

~~g) Where the connection is to an empty lot, the terminal connection must be:~~

~~i. Laid at least 1 m inside and within the boundary of the property.~~

~~ii. End in a method that can accept an approved spigot.~~

~~iii. Pipe colour-coded green, ensuring that if paint is used any rubber ring gap is taped over to protect it from the paint.~~

~~iv. Be blanked off or sealed with a removable cap colour-coded green.~~

~~v. Be marked with a securely embedded H4 treated timber post, with at least 600 mm protruding above ground, and the top 100 mm painted green.~~

g) Connections larger than 150 mm must be connected to the public system via a manhole only. Connections must be made at angles 90 degrees or less to the direction of the flow.

h) Connections 150 mm or less can be made directly to a stormwater main.

i) Connections must not be made to a public pipe deeper than 3.5 m to the crown.

j) Connections must not be connected to the wastewater network.

k) A private connection cannot cross an adjacent property without the permission of the adjacent property owner. Where permission is obtained, in writing, an easement must be obtained in favour of the connection's lot.

~~1.1.2 Lateral connections that require extensions/upgrades to the public stormwater network~~

~~In addition to the lateral requirements under 1.1.1, where a private connection to the public stormwater network requires an extension to, or upgrade of, the public stormwater network, the design requirements of 1.2 are also to be complied with.~~

~~1.1.3 On-site soakage stormwater disposal~~

~~Where an on site soakage system is proposed (i.e. no connection to the public network) the design requirements under section 1.2 are to be complied with.~~

1.2 Requirements for 1.1.2 and 1.1.3

1.2.1 Climate change

All systems must be designed to accommodate the predicted impacts of climate change in terms of hydrology (refer to the Tiaki Wai Ltd Reference Guide for Design Storm Hydrology, which is available on the Tiaki Wai Ltd website) and design sea levels allowing for climate change and predicted land subsidence to 2130 as in Table 1 below.

Table 1 – Design sea levels allowing for climate change

Mean high water springs (NZVD2016) (m)	0.537 m
+ Projected sea level rise (m)	1.23 m
+ Land subsidence (m)	0.47 m (York Bay)
+ Barometric allowance (m)	0.25 m
= Design sea level (NZVD2016) (m)	**2.49**

1.2.2 Primary system level of service

The primary system typically comprises piped drainage systems, formed drainage channels and soakage systems. Each system is to be designed:

a) To accommodate the design storm to a set level of service as defined by the annual exceedance probabilities (AEPs) listed in Table 2.

b) To the General Catchment Level of Service, and then demonstrate that the roads, sections and other considerations internal to the catchment are not inundated when the general catchment is subjected to the assigned internal event for each consideration.

c) The catchment is the entire drainage area above the design point of concentration.

Table 2 – Primary level of service (AEP)

General catchment level of service	
Residential	10%
Commercial/industrial	10%
Rural/rural residential	10%
Internal level of service for roads	

Primary arterial	1%
Secondary arterial	5%
Local/minor	20%
Bridges	2%
Internal level of service for sections	
Open space/reserve	50%
Private yards	50%
Car parks	20%
Internal level of service for others	
Where no secondary path is available	1%
Key public facilities, hospitals, substations etc.	1%
Wastewater disposal fields	**5%**

1.2.3 Secondary system level of service

The secondary system comprises secondary flow paths typically overland and along carriageway surfaces. The secondary systems must:

a) Follow the required level of service for secondary systems as outlined in Table 3.

b) Follow the maximum stormwater flow depths and velocities for access roads as outlined in Table 4.

Table 3 – Secondary system level of service

Building floors	**Design Storm Event (AEP)**
Housing and communal residential and communal non-residential	1%
Commercial	1%
Industrial	1%
Rural residential	1%
Roads	**Design Storm Event (AEP)**

Primary arterial*	1%
Secondary arterial*	5%
Local/minor*	20%
Bridges and major culverts	1%

* Flooding is allowed at these levels of service, but the road must be passable by light vehicles. The table below indicates acceptable depths and flow velocities as measured at the road centreline.

Table 4 – Maximum stormwater flow depths and velocities for access roads

	Max depth	Max velocity
Primary/secondary arterial road	0.1 m	2 m/s
Local/minor road	0.2 m	2 m/s
Steep local/minor roads	0.1 m	3 m/s
Walkways only	0.4 m	1 m/s

1.2.4 Secondary flow path

A secondary flow path is the path the stormwater would take if the primary drain was rendered inoperable or is overwhelmed by a flow exceeding the drain's design capacity. The secondary flow path must:

a) Be shown on the submitted design and subsequent as-built plans, including demonstrating that existing and proposed residential units are not affected by the secondary flow during the design secondary storm event.

b) Include a secondary inlet (if required by Tiaki Wai Ltd) where the primary drain's capacity is large and the consequence of overflow is great (primary flow is greater than secondary flow path capacity).

c) Convey the secondary system level of service event, less the design capacity of the primary system, regardless of secondary intakes.

2. Wastewater

2.1 Private Connections

2.1.1 Lateral connections to the existing wastewater network

The following applies to lateral connections to the wastewater network:

a) A minimum nominal diameter for a lateral connection must be 100 mm.

b) A vacant lot must be serviced by a separate connection to the public network.

c) Each proposed residential unit on a lot must be serviced by a separate connection to the public main, except that:

   i. Unit titled developments are exempt from this criterion and may be serviced by a single, suitably sized connection.

d) Connections provided to the lot boundary must be at sufficient depth that they can be extended to the building platform in a manner compliant with the New Zealand Building Code.

e) Minimum grades for private connections up to the property boundary must be as outlined in Clause G13 of the New Zealand Building Code, but with a minimum grade of 1:60.

f) Laterals must be no deeper than 600 mm below ground level at the boundary.

g) An inspection eye must be installed at the property boundary (on the public side of the boundary with the lot), comprised of either:

   i. Proprietary inspection chamber with minimum 150 mm riser and screwcap fitting within:

      1. Manifold box with red lid marked ‘SS’ in non-trafficable areas, or

      2. Ductile iron lamp-hole frame and cover on a concrete footing

   Or:

   ii. On steep property frontages with an exposed lateral pipe, the inspection eye may be replaced with a sealed inspection junction point.

h) Connections must be made at a manhole in the following situations:

   i. Where the lateral connection is 225 mm or greater.

   ii. Where the public main is identified as a trunk main, either on existing GIS network plans or as required by Council.

i) Connections must not be made to a public sewer pipe deeper than 3.5 m to the crown.

~~j) Where the connection is to a vacant lot, the terminal connection must be:~~

   ~~i. Laid at least 1 m inside and within the boundary of the property.~~

~~ii. End in a method that can accept an approved spigot.~~

~~iii. Pipe colour-coded red, ensuring that if paint is used any rubber ring gap is taped over to protect it from the paint.~~

~~iv. Be blanked off or sealed with a proprietary removable cap colour-coded red.~~

~~v. Be marked with a securely embedded treated timber post, with at least 600 mm protruding above ground, and the top 100 mm painted red.~~

j) Must not be connected to the stormwater network. Wastewater systems must be designed and constructed to minimise the risk and extent of stormwater inflow and infiltration.

k) Be designed to prevent floodwaters entering the network where the wastewater network is within a flood plain, or secondary flow path.

l) Allow for Gully traps to be installed at a level that:

i. prevents unwanted wastewater discharge by being a minimum of 150 mm above the nearest opening (e.g. manhole) in the wastewater network; and

ii. prevents stormwater inflow by being above the 1% AEP flood event level, or at the minimum clearance allowable by the New Zealand Building Code based on the overflow level of the lowest plumbing fixture.

m) A private connection cannot cross an adjacent property without the permission of the adjacent property owner. Where permission is obtained, in writing, an easement must be obtained in favour of the connection's lot.

n) The wastewater network must:

i. be of capacity suitable for carrying peak flows anticipated during the lifetime, without surcharge and with due allowance for ground and surface water infiltration and inflow; and

ii. adequately convey wastewater to an approved discharge point.

~~2.1.2 Lateral connections that require extensions/upgrades to the public wastewater network~~

~~In addition to the lateral requirements under 2.1.1, where a private connection to the public wastewater network requires an extension to, or upgrade of, the public wastewater network, the design requirements of 2.2. are also to be complied with.~~

~~2.2 Design Requirements for 2.1.2~~

~~2.2.1 Level of service~~

~~The wastewater network must:~~

a) Consist of an underground piped reticulation system where an adjacent public reticulation is available.

b) Be of capacity suitable for carrying peak flows anticipated during the lifetime, without surcharge and with due allowance for ground and surface water infiltration and inflow.

c) Be designed to minimise blockage and sediment deposition.

d) Adequately convey wastewater to an approved discharge point.

e) Not be connected to the stormwater network. Wastewater systems must be designed and constructed to minimise the risk and extent of stormwater inflow and infiltration.

f) Be designed to prevent floodwaters entering the network where the wastewater network is within a flood plain, or secondary flow path.

g) Allow for gully traps to be installed at a level that:

i. prevents unwanted wastewater discharge by being a minimum of 150 mm above the nearest opening (e.g. manhole) in the wastewater network; and

ii. prevents stormwater inflow by being above the 1% AEP flood event level, or at the minimum clearance allowable by the New Zealand Building Code based on the overflow level of the lowest plumbing fixture.

2.2.2 Population

The following applies to the population for wastewater design:

a) The population to be used for wastewater design in typical residential developments must be based on a people per residential unit basis.

b) Where the proposed number of residential units cannot be determined, the minimum density per hectare (ha), outlined in Table 5, must be adopted.

Table 5 – Residential development population density

	Population per residential unit	Minimum density people per ha*
Outside the City Centre Zone	3.1	General Residential Zone or Medium Density Residential Zone – 140 High Density Residential Zone – 400 Metropolitan Centre Zone, Local Centre Zone or Neighbourhood Centre Zone - 1200

City Centre Zone	3.1	400/ha of floor area**

* Gross area including streets but excluding reserves.

** Assuming 3 m between floor levels, the building heights at the height thresholds specified in CCZ-S1, and 80% site coverage. Ninth floors and above can assume 50% occupancy.

3. Water Supply

3.1 Private Connections

3.1.1 Residential Service Connections

The following applies to residential service connections:

a) Each residential unit, or vacant lot in a residential zone, must be provided with a separate, single potable service connection from the public main up to and including the agreed point of supply.

   i. Unit titled developments are exempt from this requirement in a) and may be serviced by a single suitably sized service connection.

b) Front sections (or residential units with individual street frontage) must have the point of supply located adjacent to the street boundary.

c) For properties supplied from a public main in a right-of-way or private land, the service valves must be located in a shared property.

d) Service valves (or meters) must not be located in driveways or on-site vehicle parking and manoeuvring areas.

3.2 Commercial Service Connections

Each commercial property or vacant lot must:

a) Be provided with a separate, single suitably sized potable service connection from the public main up to and including the agreed point of supply

b) Include backflow prevention.

3.2 General Requirements

The following applies to all new private connections.

3.2.1 Functionality

The functionality of the water supply system must achieve the following:

a) The network must provide firefighting flows and pressures in compliance with SNZ PAS 4509:2008, and during firefighting scenarios, the pipeline pressure in elevated areas of water distribution zone must remain positive.

b) Private connections must not be directly to a trunk main.

c) Pressure to the points of supply, in a reticulated network, must be provided by gravity from a public storage reservoir.

3.2.2 Levels of service

3.2.2.1 Network pressure

Network pressure at the connection point must comply with the following clauses:

a) The maximum pressure in any part of the water supply network must not exceed 90 m head of pressure.

b) The minimum pressure available at the downstream outlet of the point of supply must not be less than 25m head of pressure measured from the bottom water level of the reservoir.

c) The water pressure must not be less than 10 m head of water at the final level on the building platform.

3.2.2.2 Reservoir volume

The water supply reservoir must have sufficient storage capacity to achieve the storage volume outlined in Table 6.

Table 6 – Mandated levels of service for storage volumes

Method	Storage (L/person)	Scenario
1	700	Where actual consumption is not known such as new developments
2	2 x Average Day Demand	Used when demand statistics are available from Tiaki Wai Ltd. The designer to target the greater of the volume determined by each method. Consult with Tiaki Wai Ltd to determine critical users and their consumption.
3	Maximum Day Demand + 20% + SNZ PAS 4509:2008 firefighting requirements	
4	(20 L/person/day for 23 days + critical users allowance) x 1.43	