IN THE MATTER of the Resource Management Act 1991(RMA)

AND

IN THE MATTER of Private Plan Change 109 – Whenuapai Green to the Auckland Unitary Plan

JOINT WITNESS STATEMENT (JWS) IN RELATION TO:

Topic: WATER & WASTEWATER (1)

Date 2 September 2025

Expert Conferencing Held on: 2 September 2025

Venue: Auckland Town Hall Boardroom (317 Queen Street, Auckland) and Online

Independent Facilitator: Marlene Oliver

Admin Support: Isobel Lee

1 Attendance:

1.1 The list of participants is included in the schedule at the end of this Statement.

1.2 Declarations – the participants expertise and roles are set out in the schedule. This JWS should be read having regard to those relationships.

1.3 Note from the facilitator -apologies:

Jenny Vince (Planner for Watercare) and Tim Heath (Economist for s42a team) were not available to attend because of prior commitments.

On the day – Tim Scheirlinck (Head of Water Planning, Watercare) advised he was not available, being on sick leave.

2 Basis of Attendance and Environment Court Practice Note 2023

2.1 **All participants agree to the following:**

(a) The Environment Court Practice Note 2023 provides relevant guidance and protocols for the expert conferencing session;

(b) They will comply with the relevant provisions of the Environment Court Practice Note 2023;

(c) They will make themselves available to appear before the Panel;

(d) This statement is to be filed with the Panel and posted on the Council's website.

3 Matters considered at Conferencing – Agenda and Outcomes

Water – note from the facilitator as TS (Watercare) was not available on 2 September, the following questions relating to water have been deferred to a separate expert conferencing session scheduled for Friday 5 September 2025. FC's responses have been included as he cannot attend on 5 September.

3.1 **Question (a)**

Following conferencing on PC100, does Watercare maintain its opposition to PC109, or is there now sufficient headroom to accommodate the build out of PC109 beginning 2031? If Watercare accepts there is now sufficient headroom to accommodate PC109, then go to question P.

3.2 **Question (b)**

What is the water infrastructure capacity (DUEs) that is currently available within the NH1 catchment?

3.3 **Question (c)**

Are the Housing and Business Development Capacity Assessment (HBA) plan enabled DUE numbers / Auckland Council Growth Scenario 2023 version 1.1 for the NH1 catchment correct to date? If not, what is the difference between projected and actual growth?

3.4 **Question (d)**

Are the HBA projections for future growth realistic, or are these numbers likely to be conservative?

Question (e)

As at 2031, what is the likely difference between HBA projected growth and likely projected growth in the NH1 catchment?

3.4.1 FC considers the AGS growth projections used for the area serviced by NH1, or at least the Redhills part, to be unrealistically high. Refer to FC's position statement (Attachment A, para 5-13).

3.4.2 Refer to the discussion in response to questions r and s.

3.5 **Question (f)**

If the mandatory Medium Density Residential Standards (MDRS) are removed, what impact will that have on projected growth in the NH1 catchment (taking into account Council's replacement plan change in anticipation of PC78 being withdrawn)?

3.5.1 All agree that this be included in the agenda for the planning expert conferencing session.

3.6 **Question (g)**

What is the projected demand as at 2031 for water network capacity in the NH1 catchment?

3.6.1 FC does not have the necessary information to calculate this demand. However, based on my response to question (e), it seems highly likely that actual water demand in 2031 will be far less than the AGS' projections imply.

3.7 **Question (h)**

Should water demand modelling be based on the 2020 peak day? What are the changes in projected demand in the NH1 catchment if the 2020 peak day is not used? What are the likely adverse effects from not using the 2020 peak day?

3.8 **Question (i)**

What figure should be used for per person per day water demand?

3.9 **Question (j)**

What is the likelihood of there being capacity to service PC109 if NH2 is commissioned in a staged manner?

3.10 **Question (k)**

What bulk and local water infrastructure upgrades are required to service PC109 other than NH2 (if any)?

3.11 **Question (l)**

What is required to get the required infrastructure built and in / on the ground?

3.12 **Question (m)**

By when do these upgrades need to occur in order for PC109 to begin build out?

3.13 **Question (n)**

What interim solutions are available and appropriate to service PC109?

3.14 **Question (o)**

Can PC109 advance relying on the interim solutions or on a staged basis? If so, what would this involve?

Wastewater

3.15 **Question (p)**

What is the current infrastructure capacity projection (DUEs) for the future Slaughterhouse WWPS catchment?

3.16 RW and AD agree that:

- Slaughterhouse WWPS is designed to service a catchment of 10,240 DUE utilising the DN500 rising main.
- Utilising the DN280 in addition to the DN500 could potentially allow a further 1,350 DUE to be serviced (at a velocity of 2 m/s).

  AD advised that this has not yet been verified, specifically how the pipe (DN280)

connects to the pump station. From a hydraulic perspective, whether the currently designed pumps are suitable and whether they would need to be upsized and whether they would fit into the pump station. If additional capacity were added to the pump station (10-15%), that would possibly create a requirement for more storage on site to meet Watercare's standards for the storage in terms of hours. This may also have reconsenting requirements.

- Retaining the interim Redhills WWPS (designed to service a catchment of 4,800 DUE) would allow additional DUE (possibly 2,400 DUE) within the expanded Slaughterhouse WWPS catchment (which includes Redhills) ahead of construction of the proposed Brigham Creek WWPS (programmed for 2035).

  AD advised that Watercare is currently carrying out this analysis in relation to storage requirements. At this stage, AD considers this is likely to be achieved and is not technically challenging with the main consideration being what the additional DUE would be.

3.17 **Question (q)**

Is the Auckland Council Growth Scenario 2023 version 1.1 for the future Slaughterhouse WWPS catchment correct to date? If not, what is the difference between projected and actual growth?

3.17.1 FC does not have the necessary information to answer this question, because the catchment served is too fine-grained to reconcile with publicly available information, which is available only at much coarser spatial levels.

3.17.2 FC considers that this information should be readily accessible by Watercare simply by translating observed flows back to DUE and/or connections, and that this information is an important missing piece.

3.17.3 CA notes that some information can be provided and will report back on Friday 5 September.

3.18 **Question (r)**

Are the AGS projections for future growth realistic, or are these numbers likely to be conservative?

Question (s)

As at 2031, what is the likely difference between AGS projected growth and likely projected growth in the future Slaughterhouse WWPS catchment?

3.18.1 FC considers the AGS numbers are conservative (i.e. unrealistically high) – refer to FC's Position Statement (Attachment A para 14-16). Note there is a typo/error in para 16 and the number should read 3,855 (not 3,655).

3.18.2 CA notes that Watercare have been directed by Auckland Council to use the AGS and we are legislatively required to act consistently with the AGS numbers for our design purposes. As FC has stated, the AGS is a numerical representation of how the Council would like the growth in Auckland to occur based on their planning provisions and policies.

3.18.3 FC reiterates that the AGS summary document (Oct 2024) clearly states that the AGS growth scenario only provides high-level guidance and that "it does not resolve all planning, funding and investments challenges… (refer to FC's response to question u below).

3.19 **Question (t)**

If the MDRS are removed, what impact will that have on projected growth in the future Slaughterhouse WWPS catchment (taking into account Council's replacement plan change in anticipation of PC78 being withdrawn)?

3.19.1 All agree that this be included in the agenda for the planning expert conferencing session.

3.20 **Question (u)**

What is the projected demand as at 2031 for wastewater network capacity in the future Slaughterhouse WWPS catchment?

3.20.1 For context, RW and AD agree that there will **ultimately** be between 4,780 and 5,420 DUE in the Slaughterhouse pump station catchment, excluding Redhills. It comprises:

(a) Whenuapai Village (~1,200 DUE)

(b) Spedding Block (1,335 DUE)

(c) Whenuapai Business FUA (2,080 DUE) (part that gravitates to Slaughterhouse WWPS ~73ha)

(d) PC88 – 41 -43 Brigham Creek Road (260 DUE)

3.20.2 RW and AD agree that the Redhills catchment currently includes between 1,200-1,300 DUE.

3.20.3 AD considers that **by 2031**, 7,257 DUE will be serviced in the Redhills catchment. This is 6,000 additional DUE from the current number of connections in the catchment, which would be 1,000 DUE per year. This projection through to 2031 is based on the AGS23 (V1.1).

3.20.4 RW advised that his modelling has been based on the annual growth figures of 250 DUE a year (from FC evidence). This is considerably lower than an annual rate of 1,000 DUE recorded above in para 3.22.3.

3.20.5 RW utilising AD's numbers, calculates a total catchment (wider Slaughterhouse catchment, including Redhills) of 12,677 DUE by 2031. The Slaughterhouse WWPS designed capacity (10,240 DUE) plus 50% of the Redhills WWPS (2,400 DUE) equates to 12,640 DUE (excluding any capacity from utilising the DN280 pipe). (NB: note that this is based on the 1,000 DUE per year). Adopting a more realistic 330 DUE a year pushes the capacity out to 2041. RW considers that there would be capacity to service PC109 within the Slaughterhouse WWPS/before the Brigham Creek WWPS.

3.20.6 FC considers that Watercare's adoption and reliance on the AGS to micromanage growth within the future urban areas is wholly inappropriate. The AGS summary document (Oct 2024) makes it clear that:

"the AGS is a strategic high-level tool and does not and should not pre-empt local detailed and context specific decision making…"

"The AGS is a numerical representation of the FDS…"

"It is not intended to replace project based or operational decision making, forecasting or scheduling, which should consider potential risk and consequence of faster or slower growth than indicated..."

3.20.7 FC considers that the growth rate of 1,000 DUE per year (AGS23 V1.1) is extremely unlikely (i.e. virtually impossible) for Redhills to achieve (refer to FC position statement dated 27 August 2025 – Attachment A). FC's evidence in chief at para 49-57 addresses the historic and projected future growth rates of Redhills, which have historically been 200-250 DUE per year but he considers could reach 350 DUE per year as the long term average. FC considers that the projected higher figure of 350 DUE takes into account the recent spike in resource consent applications lodged prior to the development contribution changes coming into effect and the likely conversion into building consents.

3.21 **Question (v)**

What bulk and local wastewater infrastructure upgrades are required to service PC109 (based on the first connection being applied for in 2031)?

3.21.1 For bulk wastewater infrastructure – RW and AD agree that the Whenuapai and Redhills Wastewater Scheme Packages 1 & 2 (due for completion 2028-29) are required to service PC109.

3.21.2 AD considers that Brigham Creek WWPS is also required based on the AGS data. RW disagrees – refer to the discussion above relating to growth rates under question u.

3.21.3 RW and AD agree that the local Network Infrastructure (at the developers cost) including local gravity reticulation; WWPS; rising main(s); and gravity sewer are required to service PC109.

3.22 **Question (w)**

What is required to get the required infrastructure built and in / on the ground?

3.22.1 RW and AD agree that the detailed design has been completed for the bulk wastewater upgrades: Whenuapai and Redhills Wastewater Scheme Packages 1 & 2, with a programmed completion date of 2028/29. These two projects are currently being tendered with the construction and commissioning phases remaining.

3.22.2 AD considers that also from a bulk wastewater perspective the Brigham Creek WWPS will need to undergo feasibility, concept design, detailed design, construction, and commissioning. This will have multiple funding approval gates and will include activities such as optioneering to select the site and rising main alignment, ground investigations and service location, land acquisition, consenting and/or designation before detailed design and commence. RW disagrees – refer to the discussion above relating to growth rates under question u.

3.22.3 RW and AD agree that local wastewater network "upgrades" will be designed by the applicant / developer and subject to Engineering Plan Approval, prior to construction by the developer, at its cost. Offsite network upgrades (i.e., rising main(s) in Totara Road and gravity sewer in Brigham Creek Road) are within public roads, minimising consenting requirements.

3.23 **Question (x)**

When do these upgrades need to occur by in order for PC109 to get underway?

3.23.1 RW considers that from a technical perspective Whenuapai and Redhills Wastewater Scheme Packages 1 & 2 are required to service PC109.

3.23.2 AD considers that the Brigham Creek WWPS is required in addition to Whenuapai and Redhills Wastewater Scheme Package 2. Noting that package 1 is not required for the Brigham Creek WWPS.

3.24 **Question (y)**

What interim solutions are available and appropriate to service PC109?

3.24.1 RW and AD agree that no interim solutions are being considered.

3.25 **Question (z)**

Can PC109 advance relying on the interim solutions or on a staged basis? If so, what would this involve?

3.25.1 RW considers that PC109 can advance without the need for interim solutions or staging. RW considers the capacity from Slaughterhouse pump station from both rising mains and Redhills pump station is greater than the catchment growth ahead of the planned Brigham Creek WWPS. The requirement to apply for resource consent for subdivision and engineering plan approval allows Watercare to object should unforeseen events occur that significant change the demand projections / scenarios, such that there is no longer capacity to service the plan change area.

3.25.2 AD considers that PC109 cannot advance ahead of the Whenuapai and Redhills Wastewater Scheme Package 2 and the Brigham Creek WWPS being commissioned.

4 PARTICIPANTS TO JOINT WITNESS STATEMENT

4.1 **The participants to this Joint Witness Statement, as listed below, confirm that:**

(a) They agree that the basis of their participation and the outcome(s) of the expert conferencing are as recorded in this Joint Witness Statement; and

(b) They agree to the introduction of the attached information – Refer to para 3.4.1 above; and

(c) They have read the Environment Court's Practice Note 2023 and agree to comply with it; and

(d) The matters addressed in this statement are within their area of expertise; and

(e) As this session was held both in-person and online, in the interests of efficiency, it was agreed that each expert would verbally confirm their position in relation to this para 4.1 to the Independent Facilitator and the other experts and this is recorded in the schedule below.

Confirmed: 2 September 2025

EXPERT'S NAME & EXPERTISE	PARTY	EXPERT'S CONFIRMATION REFER PARA 4.1
Vanessa Wilkinson (VW), Planning	Auckland Council (s42A team)	Yes
Michele Perwick (MP), Planning	Auckland Council (submitter) Consultant	Online, yes
Andrew Deutschle (AD), Engineer - Wastewater	Watercare Services Limited Employee – Head of Wastewater Planning	Yes for wastewater questions addressed on 2 September 2025.
Chris Allen (CA), Engineer – Strategic Planning	Watercare Services Limited Employee – Strategic Planning Manager	Yes
Robert White (RW), Engineer – Water and Wastewater	Neil Construction Limited (Applicant) Consultant	Yes
Fraser Colegrave (FC), Economics	Neil Construction Limited (Applicant) Consultant	Yes for questions addressed by FC on 2 September 2025.
Philip Brown (PB), Planning	Neil Construction Limited (Applicant) Consultant	Yes

Attachment A

BEFORE THE HEARING COMISSIONERS
FOR AUCKLAND COUNCIL

PLAN CHANGE 109 (PRIVATE)
WHENUAPAI GREEN

IN THE MATTER	of a request for a plan change under clause 21 of schedule 1 of the Resource Management Act 1991
APPLICANT	Neil Construction Limited
APPLICATION SITE	98-100 and 102 Totara Road, Whenuapai, Auckland

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POSITION STATEMENT FOR EXPERT CONFERENCING FOR FRASER JAMES COLEGRAVE (ECONOMICS)

DATED 27 AUGUST 2025

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POSITION STATEMENT FOR EXPERT CONFERENCING FOR FRASER JAMES COLEGRAVE (ECONOMICS)

Introduction

1 My name is Fraser James Colegrave. I prepared statements of evidence dated 8 July 2025 and 24 July 2025. I am an expert economist. My qualifications and experience are set out in my evidence.

2 As per my evidence, I confirm that I have read and understood the Environment Court's Code of Conduct for Expert Witnesses and agree to comply with it in conferencing.

3 My position on the pre-circulated questions is below.

Question (c)

Are the Housing and Business Development Capacity Assessment (HBA) plan enabled DUE numbers / Auckland Council Growth Scenario 2023 version 1.1 for the NH1 catchment correct to date? If not, what is the difference between projected and actual growth?

4 I do not have the necessary information – about the specific properties serviced by NH1 – to reliably answer this question.

Question (d)

Are the HBA projections for future growth realistic, or are these numbers likely to be conservative?

5 While I do not definitively know the exact suburbs and properties serviced by NH1, that is immaterial here, because the Northwest accounts for most of its growth over the next 10 years in any case.

6 For example, according to my calculations, Redhills alone accounts for approximately 45% of population and household growth within the indicative area served by NH1 between 2025 and 2035.

7 As explained in my evidence, I consider it extremely unlikely (i.e. virtually impossible) for Redhills to achieve the extremely ambitious growth targets assigned to it in the AGS.

8 They are several times higher than the actual growth rates observed anywhere in NZ over the past few decades, and they lack any factual or empirical basis.

9 In my view, Redhills will struggle to achieve even half of the growth rate assigned to it, which leaves ample headroom to enable at least a thousand additional homes nearby over the next 10 years to help meet rapid growth in the Northwest.

10 Similarly, my evidence showed that the ambitious employment projections for Whenuapai are yet to materialise. They signal an additional 5,000 workers there between 2022 and 2026, yet the actual number fell between 2022 and 2024. In addition, there is no growth in Whenuapai North and almost no growth in Whenuapai South forecast from 2026 to 2033 (see figure 8 from my evidence in chief).

11 The AGS growth projections also show a 16% drop in the average size of new households in the NH1 catchment versus those already there. However, it is unclear whether this has been factored into the DUE calculations for NH1.

12 I do not consider the increase in resource consent applications made in July 2025 (ahead of the Development Contributions Policy coming into force) to materially alter growth rates in Redhills. I have explained the reasons for this in my reply evidence.

13 Overall, I consider the NH1 growth projections, or at least the Redhills part of them, to be unrealistically high.

Question (e)

As at 2031, what is the likely difference between HBA projected growth and likely projected growth in the NH1 catchment?

14 I have answered this only for the study area identified in my EIC, which covered Redhills, Redhills North, Westgate, and Whenuapai North, but excluded Whenuapai South.

15 Specifically, I have compared the *cumulative* number of new dwellings consented in my study area to the AGS' projections to 2035. For 2026 to 2035, I assume that 350 new dwellings are consented annually in my study area, most of which will be at Redhills because that is where most live-zoned residential land is currently located.

Table 1: Actual Dwelling Consents to 2025 (& Projected thereafter) vs AGS New Dwelling Projections

YE March	Cumulative Building Consents	Cumulative AGS Projected Growth	Cumulative Headroom
2019	265	70	-195
2020	540	180	-360
2021	1,010	360	-650
2022	1,405	645	-760
2023	1,670	890	-780
2024	2,020	1,275	-745
2025	2,265	1,900	-365
2026	2,615	2,985	370
2027	2,965	4,960	1,995
2028	3,315	5,615	2,300
2029	3,665	6,365	2,700
2030	4,015	7,225	3,210
2031	4,365	8,220	3,855
2032	4,715	9,370	4,655
2033	5,065	9,880	4,815
2034	5,415	10,435	5,020
2035	5,765	11,055	5,290

16 According to my calculations, by 2031, the difference between actual and projected growth in my study area will be 3,655 dwellings/DUEs. By 2034, that gap widens to more than 5,000 dwellings/DUEs.

Question (g)

What is the projected demand as at 2031 for water network capacity in the NH1 catchment?

17 I do not have the necessary information to calculate this demand. However, based on my response to question (e), it seems highly likely that actual water demand in 2031 will be far less than the AGS' projections imply. I understand that Mr White will comment further on this from his technical perspective.

Question (q):

Are the Housing and Business Development Capacity Assessment (HBA) plan enabled DUE numbers / Auckland Council Growth Scenario 2023 version 1.1 for the future Slaughterhouse WWPS catchment? If not, what is the difference between projected and actual growth?

18 I do not have the necessary information to answer this question, because the catchment served is too fine-grained to reconcile with publicly available information, which is available only at much coarser spatial levels.

Question (r):

Are the HBA projections for future growth realistic, or are these numbers likely to be conservative?

19 While noting my response above, I understand from Mr White's evidence that the catchment for Slaughterhouse WWPS will include Whenuapai and Redhills. In relation to those areas, I reiterate my response to Question (e) above.

Question (s):

As at 2031, what is the likely difference between HBA projected growth and likely projected growth in the future Slaughterhouse WWPS catchment?

20 I reiterate my response to Question (e) and (r) above.

Fraser James Colegrave

27 August 2025