

TO Kath Coombes, Acting Manager – Planning, Regional, North, West and Islands

FROM Kristen Lian, Policy Planner – Planning, Regional, North, West and Islands

DATE 27 November 2025

SUBJECT **Update requested to the Auckland Unitary Plan (Operative in Part 2016) (AUP)**

I request an update to the AUP as outlined below:

Reason for update	Designation confirmed
Chapter(s)	Chapter K Designations Watercare Services Limited Auckland Unitary Plan (OIP) GIS Viewer
Designation only	
Designation # 9386	Wellsford Water Treatment Plant Watercare Services Limited
Locations:	411 Wayby Valley Road, Wellsford LOT 3 DP 547258, and Section 1-2 Survey Office Plan 616738
Lapse Date	10 years from the date the designation is included in the AUP (Operative in Part)
Purpose	Water supply purposes, including abstraction, treatment and storage of water at the new Wellsford Water Treatment Plant (WTP).
Changes to text (shown in underline and strikethrough)	New designation and condition text in Chapter K Schedule and Designations - Watercare Services Ltd. Refer to Attachment 3.
Changes to diagrams	N/A.
Changes to spatial data	Removal of the Plan Modification – Notice of Requirement layer. Replace with new designation boundary and notation in the AUP Unitary Plan – Management Layers – Designations.
Attachments	Attachment 1 – Wellsford Water Treatment Plant – Recommendation (s169 & 171 Report) Attachment 2 – Watercare Decision – Wellsford WTP Attachment 3 – Updated Watercare Services Limited Schedule including new designation (Underscored) (Pg 360 – 369) Attachment 4 – Updated Watercare Services Limited Schedule including new designation (Clean) (Pg 370 – 379)

	Attachment 5 – Designation 9386 Wellsford Water Treatment Plant in the AUP GIS (OIP) Viewer (Before/After)
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Maps prepared by: Mitesh Bhula Geospatial Specialist	Text Entered by: Bronnie Styles Planning Technician
Signature: 	Signature: 
Prepared by: Kristen Lian Policy Planner Regional, North, West and Islands Planning Unit, Planning and Resource Consents	Reviewed by: Peter Vari Team Leader Planning Regional, North, West and Islands
Signature: 	Signature: 
Authorised by: Kath Coombes Acting Manager Planning – Regional, North, West and Islands	
Signature: 	

Attachment 1
Wellsford Water Treatment Plant – Recommendation
(s169 & 171 Report)

Combined s169 and s171 report - notice of requirement for a designation for the new Wellsford Water Treatment Plant under the Resource Management Act 1991 under the Auckland Unitary Plan Operative in Part



To: Hearing Commissioner

From: Kristen Lian, Policy Planner, Planning Regional, North, West & Islands

Date: 05 November 2025

Notice of Requirement:	Notice of Requirement to provide for the new Wellsford Water Treatment Plant
Requiring authority:	Watercare Services Limited (Watercare)
Site address:	411 Wayby Valley Road Wayby Valley 0974
Legal description:	LOT 3 DP 547258, and Section 1-2 Survey Office Plan 616738
Site size	$3500\text{m}^2 + 8291\text{m}^2 = 11,791\text{m}^2$

Summary

Watercare Services Limited (**Watercare**), as the requiring authority, has lodged a notice of requirement (**NoR**) for a designation for the proposed new water treatment plant at 411 Wayby Valley Road, Wellsford, in the Auckland Unitary Plan (operative in part) (**AUP**) under Section 168 of the Resource Management Act 1991 (**RMA**).

This Notice of Requirement application seeks to establish a new designation for the construction and operation of a replacement Wellsford Water Treatment Plant (WTP) at 411 Wayby Valley Road, Wellsford (Lot 3 DP 547258, and Section 1-2 Survey Office Plan 616738). The proposed designation area is approximately 11,800m², located in the Rural Production Zone, with frontage to Wayby Valley Road and currently in pastoral use.

The new WTP will replace the existing facility at 362 Wayby Valley Road, which currently abstracts water from the Hoteo River and is designated under Designation 9335 – Water Supply Purposes (Watercare Services Ltd.). The existing WTP is at capacity and cannot always meet the current demands, which is exacerbated by frequent shutdowns. Additionally, the connected population is expected to increase and the existing WTP infrastructure is at the end of its design life, and susceptible to contamination. Watercare has identified 411 Wayby Valley Road, Wellsford, as its preferred location for a new, upgraded WTP to replace the existing WTP. This application involves establishing a new designation on a different site, approximately 430 metres north of the current plant.

The project forms part of Watercare's wider programme to upgrade and future-proof water supply infrastructure in the Wellsford area. The existing water permit (WAT60400411, granted 30 June 2023) authorises abstraction from the Hoteo River, while the new designation is required to secure land use rights for the replacement treatment facility, to

enable the construction of the new WTP and provide for future upgrades on site. The designation will protect the site from future incompatible development and enable Watercare to undertake the proposed works and to adequately provide for the ongoing operation, maintenance and any future upgrades of the WTP.

Auckland Council (Council) must assess a NoR in two broad steps under the RMA:

Step 1: Notification (s169)

Within 10 working days of receiving the notice of requirement, and where a requiring authority has not requested that a NoR be fully notified, or has requested limited notification or non-notification, a notification decision must be made by the Council under, s149ZCB(1) to (4), 149ZCC(1) to (4), 149ZCE, and 149ZCF (which need to be read alongside s169).

If the Council requests further information from the requiring authority under section 92(1), but the requiring authority does not provide the information before the deadline concerned, or refuses to provide the information, public notification is required (s169(1A)).

Step 2: Recommendation by Territorial Authority (s171)

The territorial authority must provide a recommendation on the NoR, avoiding all unreasonable delay (s21). The territorial authority can decide to recommend to the requiring authority that the requirement be confirmed, modified, subject to conditions or withdrawn (s171(2)).

This report is set out in 2 parts:

- Part A being the notification recommendation under s169, and
- Part B being an assessment report to the Manager under s171.

These reports identify the following recommendations:

Part A: Recommendation

That in accordance with section 169 of the Resource Management Act 1991, the Notice of Requirement identified as D.002476 – to establish a new designation for the Wellsford Water Treatment Plant at 411 Wayby Valley Road, Wellsford (Lot 3 DP 547258, and Section 1-2 Survey Office Plan 616738) should proceed on a **NON NOTIFIED** basis for the following reasons:

- under section 149ZCB(2)(a): Overall the adverse effects are likely to be no more than minor. The effects associated with the operation of the Wellsford Water Treatment Plant are mainly confined to within the existing sites.
- under section 149ZCB(2)(b): The applicant has not requested public notification.
- under section 149ZCB(2)(c): There is no rule in the AUP or a National Environmental Standard that requires public notification.
- under section 149ZCB(4): There are no special circumstances that warrant notification.
- under sections 149ZCC(1)(a) and 149ZCF: there are no persons who are considered as an affected person (under section 149ZCF) (s149ZCC(1)(a)).

- under section s149ZCC(1)(b): there are no affected protected customary rights groups or affected customary marine title groups (limited notification) s149ZCC(1)(b)).

Part B: Recommendation

That in accordance with section 171(2) of the Resource Management Act 1991, Auckland Council makes the following recommendation to Watercare:

1. Confirm the notice of requirement for the new water treatment plant at 411 Wayby Valley Road, Wellsford, in the Auckland Unitary Plan (Operative in Part).
2. Impose conditions and include in Chapter K Designations of the Auckland Unitary Plan Operative in part.

The recommended conditions are shown below:

93XX Wellsford Water Treatment Plant

Designation Number	93XX
Requiring Authority	Watercare Services Limited
Location	411 Wayby Valley Road and part of 254 Whangaripo Valley Road, Wellsford, Auckland
Lapse Date	10 years from the date on which it is included in the Auckland Unitary Plan (Operative in Part)

Purpose

Water supply purposes, including abstraction, treatment and storage of water at the new Wellsford Water Treatment Plant (WTP).

Conditions

General Conditions

1. Except as provided for in the conditions below, and subject to final design and Outline Plan(s), works within the designation must be undertaken in general accordance with the Project Description in Section 2.1.1 of the Notice of Requirement document dated 23 June 2025.

Lapse Period

2. In accordance with section 184(1)(c) of the Resource Management Act 1991 (RMA), this designation will lapse if not given effect to within 10 years from the date on which it is included in the Auckland Unitary Plan (Operative in Part) (AUP).

Outline Plan of Works

3. An Outline Plan of Works (or Outline Plans) must be prepared in accordance with section 176A of the RMA. An Outline Plan (or Plans) must include the following management plans and plans:
 - a) Construction Management Plan (CMP) (required by Condition 5);
 - b) Construction Noise Management Plan (CNMP) (if required by Condition 9);
 - c) Construction Traffic Management Plan (CTMP) (required by Condition 11); and
 - d) Final Landscape Mitigation Planting Plan (LMPP) (required by Condition 14).
4. All management plans prepared as part of the Outline Plan of Works (or Plans) must be prepared by a suitably qualified person.

Advice note:

The requiring authority is advised that they shall provide confirmation of Engineering Plan Approval from the relevant Road Controlling Authority for:

- a) The design and construction of the permanent vehicle entrance to the operational site; and
- b) Any new stormwater discharge to the road network.

Where separate approvals or consents are required under the Auckland Unitary Plan or other relevant bylaws, these must be obtained prior to construction.

Construction Management Plan

5. The Requiring Authority must prepare a CMP for construction of the WTP and associated infrastructure. The purpose of the CMP is to set out the management procedures and construction methods to be undertaken in order to avoid, remedy or mitigate potential adverse effects arising from construction activities. The CMP must include:
- a) Contact details of the site or project manager;
 - b) An outline construction programme;
 - c) The proposed hours of work;
 - d) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/storage of rubbish, storage and unloading of construction materials and similar construction activities;
 - e) Procedures for controlling sediment run-off, dust and the removal of soil, debris, demolition and construction materials (if any) to public roads or places adjacent to the work site;
 - f) Procedures for ensuring that residents, road users and businesses in the immediate vicinity of construction are given prior notice of the commencement of construction activities and are informed about the expected duration and effects of the works;
 - g) Means of providing for the health and safety of the general public;
 - h) Procedures for responding to complaints about construction activities;
 - i) Procedures for the management of noise and vibration; and
 - j) actions to respond to warnings of heavy rain periods.

Operational noise

6. Noise from the operation of the WTP must meet the following noise limits at the notional boundary of rural zone receivers existing as at the date on which this designation is included in the AUP:

Receiving Zone	Daytime (7am – 10pm Mon – Sat, 9am – 6pm Sunday)	Night-time (All other times)	Assessment Position
Rural – Rural Production Zone	55 dB LAeq	45 dB LAeq 75 dB LAFmax	Notional boundary of receiver

Operational noise levels are to be measured in accordance with New Zealand Standard NZS 6801:2008 *Acoustics – Measurement of environmental sound* and assessed in accordance with New Zealand Standard NZS 6802:2008 *Acoustics – Environmental Noise*.

7. The WTP must be designed and operated to meet the operational noise limits in Condition 6.

Construction Noise

8. Noise from the construction of the WTP must be measured and assessed in accordance with the provisions of New Zealand Standard NZS 6803:1999 *Acoustics – Construction Noise* and comply with the limits in the following table.

Time	Weekdays (dBA)		Saturdays (dBA)		Sundays and Public Holidays (dBA)	
	L _{eq}	L _{max}	L _{eq}	L _{max}	L _{eq}	L _{max}
0630 – 0730	55	75	45	75	45	75
0730 – 1800	70	85	70	85	55	85
1800 – 2000	65	80	45	75	45	75
2000 – 0630	45	75	45	75	45	75

9. If concrete pours are to be undertaken between 10pm to 7am, a CNMP must be prepared for the proposed works as part of the Outline Plan of Works under Condition 3 prior to construction commencing. The purpose of the CNMP is to identify the best practicable option for management and mitigation of temporary construction noise effects.
10. The CNMP must include, but not be limited to, the following information:
 - a) Construction noise criteria;
 - b) Identification of the most affected premises where there exists the potential for noise effects;
 - c) Description and duration of the works, anticipated equipment and the processes to be undertaken;
 - d) Hours of operation, including specific times and days when construction activities causing noise would occur;
 - e) Mitigation options where noise levels are predicted or demonstrated to approach or exceed the relevant limits. Specific noise mitigation measures must be implemented which may include, but are not limited to, the temporary relocation of receivers;
 - f) The erection of temporary construction noise barriers where appropriate; and
 - g) Methods for monitoring and reporting on construction noise.

Construction Traffic Management Plan

11. A CTMP must be prepared for the proposed works as part of the Outline Plan of Works under Condition 3 in consultation with Auckland Transport. The purpose of the CTMP is to:
 - a) Manage the impacts of construction traffic on the road transport network for the duration of construction to minimise delays to road users;
 - b) Inform the public about traffic management on the road transport network for the duration of construction;
 - c) Protect staff and public safety;
 - d) Minimise damage to private and public property including roads;
 - e) Maintain vehicle access to, and manage traffic from, surrounding private properties adjacent to the construction site.
12. The CTMP must describe the measures that will be taken to avoid, remedy or mitigate the traffic effects associated with construction of the proposed works. In particular, the CTMP must describe:
 - a) Construction programme with a detailed schedule of the various work stages, deliveries and associated delivery routes;
 - b) Driver protocols;
 - c) Temporary traffic management controls:
 - i. to manage the effects of the delivery of construction material, plant and machinery;
 - ii. to maintain traffic capacity or minimise the impact on traffic capacity during weekdays and weekends; and
 - iii. to safely manage and maintain local property access.
 - d) Monitoring schedule of the traffic generation levels and the safety and effectiveness of the temporary traffic management controls during construction; and

- e) Procedures for communicating with local residents along the primary route, Auckland Transport, Auckland Council, emergency services, and / or any other affected person(s) including provision of prior notice of traffic arrangements and any road closures.
13. Any damage in the road corridor directly caused by heavy vehicles entering or exiting the construction site must be repaired as soon as practicable or within a timeframe agreed with Auckland Transport.

Landscape and Visual Effects Mitigation

14. A final Landscape Mitigation Planting Plan (LMPP) must be prepared for the proposed works as part of the Outline Plan of Works under Condition 3. The final LMPP must be in general accordance with the conceptual LMPP drawings (dated September 2025) which were provided alongside the Landscape and Visual Effects Assessment (dated 30 May 2025) and subsequent Boffa Miskell landscape memo (dated 8 September 2025). The purpose of the final detailed LMPP is to demonstrate how the planting undertaken and proposed planting on the site is the best practicable option for the mitigation of landscape and visual effects on surrounding visual audiences and provide details on the management regime for the implementation, maintenance and establishment of the required mitigation measures.
15. The final LMPP must contain, but not be limited to, the following:
- a) A plan of the planted area detailing the finished soil levels, plant species, plant sourcing, plant sizes at time of planting, plant locations, density of planting, and timing of planting; and
 - b) A programme of post establishment planting protection and maintenance with clear objectives as to what the planting is to achieve and how the planting is to be managed to achieve these objectives.
16. The final LMPP must be implemented as soon as practicable following completion of earthworks on the site, in order to establish planting as early as possible, and thereafter the planting is to be maintained for the life of the WTP to achieve the agreed planting establishment objectives.

Exterior finishing of buildings and structures

17. To ensure that buildings and structures within the WTP site integrate with the surrounding rural landscape, the materiality and form of the buildings and structures must be designed and constructed with rural aesthetics and features, including (where practical):
- a) Using natural materials and natural finishes that reflect the character of rural development and structures;
 - b) Design buildings with steel roofs in a dark/neutral/recessive colour;
 - c) Using neutral / low reflectivity finishes to the proposed structures to reduce glare and contrast with the surrounding rural landscape;
 - d) Not using bright yellow or red standard non safety elements of the structures to neutral or recessive colours;
 - e) Materials used for the retaining structures will be timber, timber clad or be finished with a dark or neutral colour that will appear recessive in the rural landscape; and
 - f) Fencing surrounding the WTP will use approved Watercare fencing using materials and finishes that are recessive in colour and use materials that are in keeping with the rural landscape aesthetic. This includes the 'high security' boundary fencing.

External lighting

18. Any external lighting within the WTP site must utilise the following mitigation measures to reduce the potential adverse effects on the rural amenity of people within adjacent properties to the site at during the hours of darkness:
- a) Limit the duration that lighting is used by timers;
 - b) Use directional cones to limit and focus the light downwards and reduce effects related to light spill, glare and sky glow; and
 - c) Use LED bulbs where possible to focus the light to a narrow area and reduce the amount of light spill. or otherwise demonstrate compliance with Lighting category 3 (medium brightness) from Table E24.6.1.1 of the AUP.

Archaeology and Heritage

19. Should works result in the identification of any previously unknown sensitive materials (i.e., archaeological sites), the requirements of land disturbance – Accidental Discovery Rule (E12.6.1) set out in the AUP in part must be complied with.

1 The proposal, site and locality description

1.1 Proposal

Watercare, as the requiring authority, has served a notice of requirement (**NoR**) on Auckland Council (**Council**) pursuant to section 168, Section 168A of the Resource Management Act 1991 (**RMA**) for the proposed new water treatment plant at 411 Wayby Valley Road, Wellsford.

This Notice of Requirement application seeks to establish a new designation for the construction and operation of a replacement Wellsford Water Treatment Plant (WTP) at 411 Wayby Valley Road, Wellsford (Lot 3 DP 547258). The proposed designation area is approximately 11,800m², located in the Rural Production Zone, with frontage to Wayby Valley Road and currently in pastoral use.

The new WTP will replace the existing facility at 362 Wayby Valley Road, which currently abstracts water from the Hoteo River and is designated under Designation 9335 – Water Supply Purposes (Watercare Services Ltd.). The existing WTP is at capacity and cannot always meet the current demands, which is exacerbated by frequent shutdowns. Additionally, the connected population is expected to increase and the existing WTP infrastructure is at the end of its design life, and susceptible to contamination. Watercare has identified 411 Wayby Valley Road, Wellsford, as its preferred location for a new, upgraded WTP to replace the existing WTP. This application involves establishing a new designation on a different site, approximately 430 metres north of the current plant.

The project forms part of Watercare's wider programme to upgrade and future-proof water supply infrastructure in the Wellsford area. The existing water permit (WAT60400411, granted 30 June 2023) authorises abstraction from the Hoteo River, while the new designation is required to secure land use rights for the replacement treatment facility. The designation will protect the site from future incompatible development and enable Watercare to undertake the proposed works and to adequately provide for the ongoing operation, maintenance and any future upgrades of the WTP.

Watercare have suggested a number of conditions to apply to the designation. In particular, these are proposed to manage construction traffic and effects, operational and construction noise, archaeology, land contamination and landscape and visual effects.

1.2 Locality Plan

The site at 411 Wayby Valley Road, Wellsford is zoned Rural Production Zone. The western part of the property is relatively flat, while the land slopes down towards the east. The site currently comprises grassed farmland bounded by wire and post fencing. No waterbodies or overland flow paths are identified within the site, and there are no recorded archaeological sites on or near the property.

The footprint of the NoR encompasses the entire site. The original property area was approximately 3,500m², however Watercare has acquired additional land from 254 Whangaripo Valley Road, Wellsford, increasing the total site area to 11,791m² (~11,800m²). The proposed designation will provide for the construction, operation, maintenance, and upgrade of the new WTP. The location of the subject site is illustrated in Figure 1 and Figure 2 below.



Figure 1: Aerial view of the proposed designation – wider context, GeoMaps



Figure 2: Aerial view of the proposed designation – close-up context, GeoMaps

The potential site layout (Watercare's AEE Appendix A) illustrates the proposed works, which comprise both underground and above-ground structures, landscaping, an accessway and footpath, a stage one earthworks platform, and boundary fencing. Provision is also made for stormwater management infrastructure, including an attenuation tank/basin (size and location still to be confirmed), as well as a potential second bore.

Construction activities will occur both below and above ground level. These works will involve removal of existing pasture vegetation, earthworks (where they are a district plan matter), installation of retaining structures, construction management, commissioning, site reinstatement, and any other activities required for both the establishment and long-term operation and maintenance of the WTP.

The purpose of the new designation is:

“Water supply purposes, including abstraction, treatment and storage of water at the New Wellsford Water Treatment Plant (WTP).”

1.3 Site and surrounding environment description

The requiring authority has provided a description of the subject site in a form and manner that is acceptable to Council. Having undertaken a site visit on 19 August 2025, I concur with the description of the site and have no further comment.

This can be found in the assessment of environmental effects (AEE) submitted as part of the NoR and entitled: *Wellsford Water Treatment Plant, Notice of Requirement, Watercare Services Limited*, paged 11 to 15, prepared by Aurecon New Zealand Limited, dated 23 June 2025.

2 Notification

Auckland Council must assess a NoR in two broad steps under the RMA. Firstly, where a requiring authority has not requested that a NoR be fully notified, or has requested limited notification or non-notification, a notification decision must be made under s149ZCB(1) to (4), 149ZCC(1) to (4), 149ZCE, and 149ZCF of the RMA (these sections must be read alongside section 169 of the RMA, which modifies these sections for the purposes of designations).

Secondly, a recommendation to the requiring authority needs to be made under s171(2) of the RMA, on whether the NoR should be confirmed, modified, or withdrawn or conditions are to be imposed.

In the case where Council is the requiring authority under s168A, the Council makes a decision to confirm, modify, or withdraw the requirement, or to impose conditions.

2.1 Public notification assessment (s149ZCB, and 149ZCD)

The requiring authority has not requested public notification.

If the Council requests further information from the requiring authority under section 92(1), but the requiring authority does not provide the information before the deadline concerned, or refuses to provide the information, public notification is required (s169(1A)(b)).

In this case, the Council requested further information from the requiring authority under section 92(1) and is satisfied that the relevant information has been provided by the requiring authority.

2.1.1 Adverse effects assessment (section 149ZCE)

The following assessment addresses the adverse effects of the activities on the environment.

Effects that must be disregarded - effects on persons who are owners and occupiers of the land in, on or over which the notice of requirement relates, or of land adjacent to that land

Under s149ZCE, Council is to disregard any effects on person who own or occupy any adjacent land. The adjacent land includes the following properties:

The land over which the NoR relates is 411 Wayby Valley Road, Wellsford and this site is owned by Watercare. Under s149ZCE, Council is to disregard any effects on person who own or occupy any adjacent land. The adjacent land includes the following properties identified in Table 1 and the map in Figure 3 and Figure 4:

Table 1

Address	Legal Description	Owner/Occupier
437 Wayby Valley Road	SECT 4 SO 616738	CC Nelson & R Hopkins & PA Nelson & AC N

Address	Legal Description	Owner/Occupier
487 Wayby Valley Road	SECT 3 SO 616738	CC Nelson & R Hopkins & PA Nelson & AC N
412 Wayby Valley Road	Lot 3 DP 165197	RK Sampson & C Kok
406 Wayby Valley Road	Pt Lot 2 DP 165197	Wayby Valley Limited
400 Wayby Valley Road	Pt Lot 2 DP 201813	GR Kerrigan & KEC Kerrigan
399 Wayby Valley Road	Pt Lot 1 DP 201813	Leigh Robert Henderson
351A Wayby Valley Road	Pt Lot 3 DP 201813, Lot 4 DP 201813	Patricia Shona McFadden

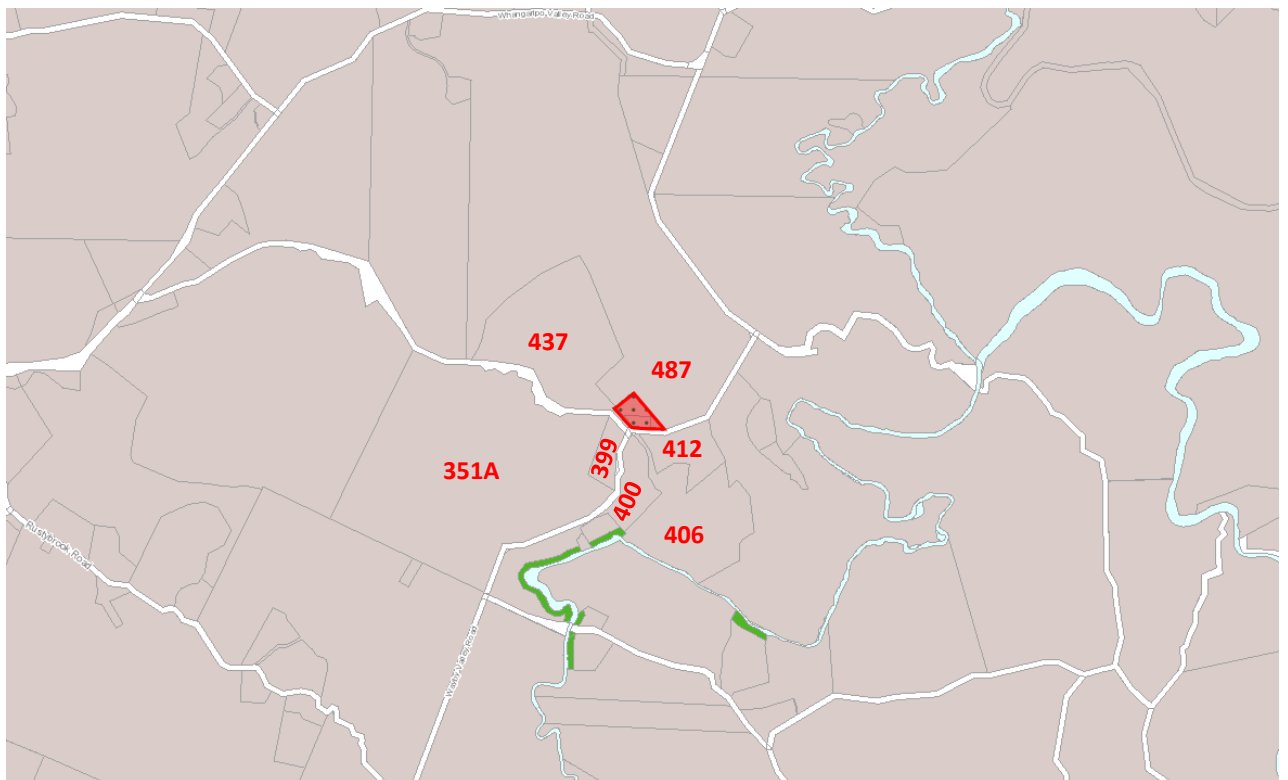


Figure 3: Adjacent land with zoning map, GeoMaps



Figure 4: Adjacent land with aerial basemap, GeoMaps

Effects that must be disregarded - any effect on a person who has given written approval to the notice of requirement and not withdrawn that approval prior to the notification decision being made. (s149ZCE(e))

The following persons have provided their written approval and any adverse effects on them have been disregarded:

Table 2

Address	Legal description	Owner / occupier
412 Wayby Valley Road	Lot 3 DP 165197	RK Sampson & C Kok
437 Wayby Valley Road	SECT 4 SO 616738	PA Nelson
487 Wayby Valley Road	SECT 3 SO 616738	PA Nelson

Effects that must be disregarded - effects of trade competition

Under section s149ZCE(d) the Council must disregard trade competition and the effects of trade competition.

Effects that may be disregarded – permitted baseline assessment

Sections 149ZCE(b) and 149ZCF(2)(a) provide that a territorial authority **may** disregard an adverse effect of the activity if a rule or national environmental standard permits an activity with that effect (this is referred to as the permitted baseline).

The permitted baseline refers to the adverse effects of permitted activities on the subject site.

The Environment Court in *Beadle v Minister of Corrections* A074/02 accepted that the obligation to apply permitted baseline comparisons extended to Notices of Requirement. In *Nelson Intermediate School v Transit NZ* (2004) 10 ELRNZ 369, the Court accepted that the permitted

baseline must define the “environment” under section 5(2) (b) and (c) and from that section 171(1). When considering the adverse environmental effects of a proposal, the effects may be considered against those from permitted baseline activities. As the effects resultant from permitted baseline activities may be disregarded, only those environmental effects which are of greater significance need be considered.

In *Lloyd v Gisborne District Council* [2005] W106/05, the Court summed up the three categories of activity that needed to be considered as part of the permitted baseline as being:

1. What lawfully exists on the site at present;
2. Activities (being non-fanciful activities) which could be conducted on the site as of right; i.e., without having to obtain a resource consent (see for example *Barrett v Wellington City Council* [2000] CP31/00); and
3. Activities which could be carried out under granted, but as yet unexercised, resource consents.

The application of the permitted baseline is at Council’s discretion and depends on the circumstances of the NoR. In this case, I note that Chapter E26 Infrastructure of the AUP:OP, Table E26.2.3.1 identifies water treatment plants as a permitted activity (A53) in all Rural zones. However, the associated standards in E26.2.5.2 restrict the building area to 30 m² and height to 2.5m. Only the effects of a very small-scale WTP could therefore be considered part of the permitted baseline. By contrast, the current NoR proposes a facility of significantly larger scale.

In addition, the following water, wastewater and stormwater activities are listed as permitted in rural zones under Chapter E26:

- Underground reservoirs
- Above ground reservoirs
- Underground pipelines and ancillary structures for the conveyance of water, wastewater and stormwater (including above ground ancillary structures associated with underground pipelines)
- Water, wastewater and stormwater pump stations
- Water, wastewater and stormwater pump stations that do not comply with standards E26.2.5.2(2)(a) or E26.2.5.2 (3)(a) *Centres zones and Business – Mixed Use Zone
- Water, wastewater and stormwater storage tanks
- Water treatment plants
- Water, wastewater and stormwater outfalls and ancillary structures
- Ventilation facilities, drop shafts and manholes
- Stormwater treatment devices; erosion protection; culverts; measuring devices (flows structures)

The Rural Production zone Chapter H19 Infrastructure of the AUP:OP, also permits a wide range of activities, including farming, forestry, conservation planting, greenhouses, poultry farming (where standards are met), free-range livestock, quarries (farm or forestry), produce sales, home occupations, markets, care centres (up to 10 people), recreation, customary use, mineral exploration/prospecting, one dwelling per site, and associated additions/alterations, rainwater tanks, and demolition.

While these activities form part of the permitted baseline, the effects they would generate on this site are anticipated to be less than minor and have very little overlap with the effects of the proposed WTP. The subject site has an overall area of 11,800 m². Once the 10m front yard and 12m side and rear yard setbacks are applied, the balance area available for permitted development is approximately 6,900 m² (refer Figure 5 below).

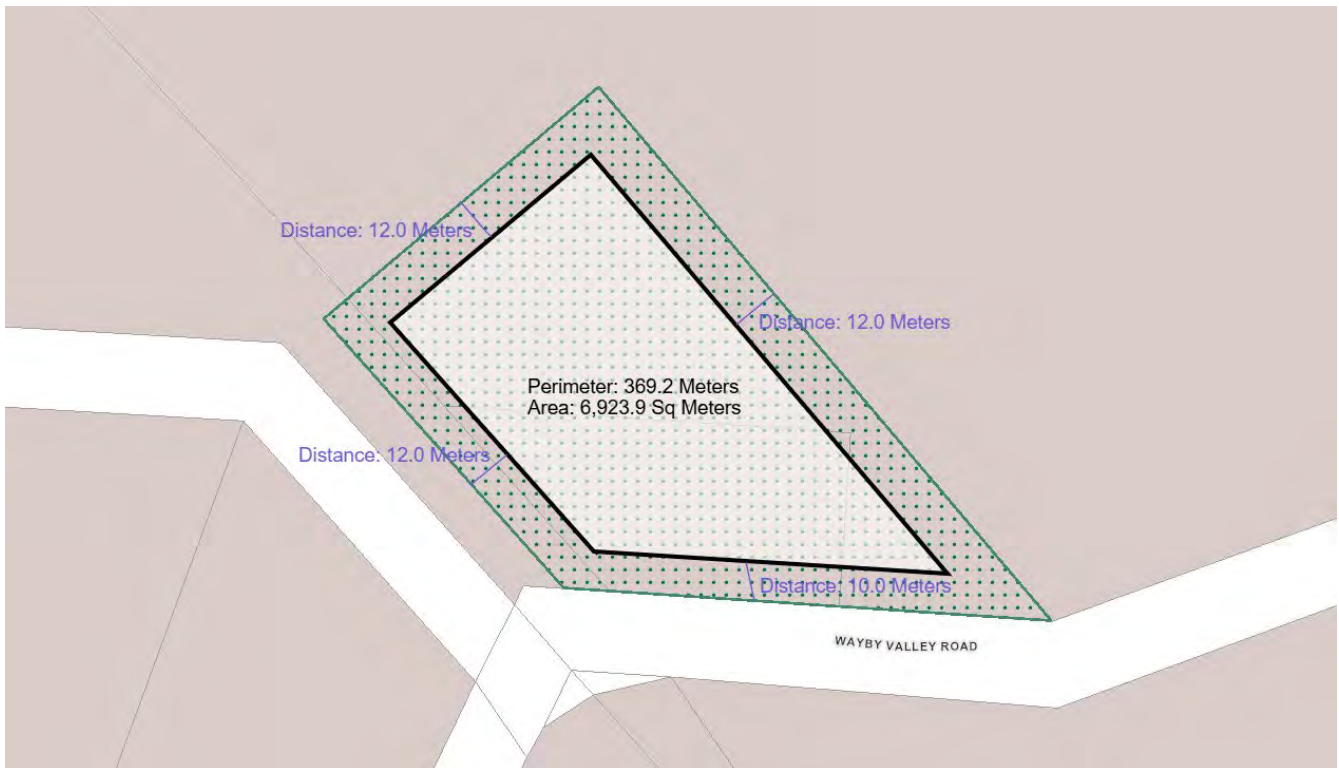


Figure 5: 411 Wayby Valley Road, Wellsford showing the indicative yard setbacks in the Rural Production zone and the balance of the site for development as a permitted activity, GeoMaps

Although I have listed the full range of permitted activities provided for under H19 Rural Production and E26 Infrastructure, I consider most of these to be irrelevant or ‘fanciful’ in the context of what is proposed for this site. For these reasons, I conclude that the permitted baseline should not be applied to the assessment of environmental effects for this NoR.

2.1.2 Assessment of adverse effects

The requiring authority has provided an AEE with the NoR. Each of the technical reports attached to the requiring authorities AEE has assessed the environmental effects of the Proposal. These include the following effects:

Landscape and visual effects

The requiring authority’s technical report “New Wellsford Water Treatment Plant – NoR, Landscape and Visual Effects Assessment” (dated 30 May 2025) prepared by Oliver May of Boffa Miskell Limited, provides an assessment of the potential landscape and visual amenity effects associated with the proposed Wellsford Water Treatment Plant (WTP) at 411 Wayby Valley Road, Wellsford.

The assessment is accompanied by a Landscape Mitigation Planting Plan (LMPP) and a graphic supplement, which together illustrate the proposed building footprints, finished contours, and mitigation planting design for the site.

The requiring authority concludes that, following implementation of the proposed mitigation planting, the residual adverse landscape and visual effects will be less than minor.

The Boffa Miskell (2025) assessment identifies the following key findings:

- The 11,800 m² site is located within the Rural – Rural Production Zone under the Auckland Unitary Plan (Operative in Part), within a rural farmland setting characterised by rolling topography, shelterbelts, and scattered dwellings.
- The WTP will include treatment buildings, storage tanks, control facilities, and access infrastructure, with building heights limited to 9 metres. Building materials will be finished in low-reflectivity, recessive colours consistent with the surrounding landscape.
- The proposed Landscape Mitigation Planting Plan (LMPP) provides a comprehensive planting framework along the site boundaries, using native species to soften and screen-built form, particularly along Wayby Valley Road and towards the northern and eastern boundaries where visibility from nearby properties may occur.
- Temporary construction effects will arise from vegetation clearance, exposed earthworks, and the presence of construction equipment. These effects are anticipated to be low (less than minor) due to the short duration and the existing vegetative screening along the road corridor.
- During operation, the completed WTP will present a low-profile built form set within a vegetated setting, resulting in very low to low (less than minor) visual effects for most viewing audiences.
- The assessment identifies that the most sensitive viewpoints are from nearby dwellings at 412 and 437 Wayby Valley Road, and from public viewpoints along Wayby Valley Road itself.
 - At 437 Wayby Valley Road, a consented but as yet unbuilt dwelling platform could experience moderate (more than minor) temporary adverse visual effects during construction, reducing to low (less than minor) following establishment of mitigation planting.
 - At 412 Wayby Valley Road and other nearby residences, effects are assessed as very low to low due to distance, intervening vegetation, and topography.
- Overall, residual adverse effects on rural character and amenity are assessed as less than minor, contingent on the full implementation and ongoing maintenance of the proposed LMPP and design controls.

Comments

Peter Kensington – Consultant Landscape Architect, Kensington Planning and Landscape Consultants Limited (KPLC)

Mr Kensington undertook a review of the requiring authority's landscape and visual assessment on behalf of Auckland Council. His review memo, dated 10 October 2025, confirms that the

Boffa Miskell report and LMPP provide an appropriate and robust evaluation of the potential effects.

Mr Kensington notes that the Boffa Miskell assessment was prepared in accordance with the NZILA Te Tangi a Te Manu (2022) guidelines and that the supporting graphics, photomontages, and representative viewpoints were appropriate and comprehensive. He visited the site and all identified viewpoints as part of his review.

Mr Kensington records that:

The assessment “is proportionate to the relevant issues and has been well prepared following an appropriate methodology... I concur with the description of the existing environment, of the visual catchment and viewing audiences, and the assessment of effects. The additional information provided by Watercare in response to Council’s request has also been very helpful in confirming my review findings.”

He agrees with Boffa Miskell’s conclusions that adverse landscape and visual effects will be less than minor, subject to implementation of the proposed mitigation planting and adherence to the proposed design controls.

Mr Kensington further notes that the requiring authority has obtained written approvals from the owners of 412, 437, and 487 Wayby Valley Road, and therefore no parties are considered specifically affected.

He recommends that the final designation include conditions requiring:

- Implementation of the Landscape Mitigation Planting Plan (LMPP);
- Maintenance of the planting for at least five years to ensure successful establishment; and
- Design and material controls on all future buildings and structures (height, colour, and finish) consistent with the LMPP and the AEE recommendations.

Mr Kensington confirms that Watercare’s revised draft conditions (submitted on 9 October 2025) now include these recommendations and are supported.

Construction-phase effects will be temporary and localised. Once the planting matures, the WTP will be well integrated into the rural landscape and will maintain the existing rural character and amenity of the area.

Overall, I adopt the findings of Boffa Miskell (2025) and Peter Kensington (KPLC, 2025) that, with the implementation of the proposed mitigation planting and design controls, the adverse landscape and visual effects of the Wellsford Water Treatment Plant will be less than minor.

Traffic and transportation effects

The requiring authority’s technical report “Watercare Services: Revised Wellsford Water Treatment Plant Proposal – Updated Transportation Assessment Report” (Document No. IS529800, Revision 2, dated 24 June 2025) prepared by Andrew Prosser of Jacobs New Zealand Limited assesses the potential transportation effects associated with the proposed Wellsford Water Treatment Plant (WTP) at 411 Wayby Valley Road, Wellsford.

The report considers both construction traffic effects and operational traffic generation, with respect to the standards and assessment criteria of AUP Chapter E27 – Transport.

Construction Traffic

The requiring authority's assessment identifies a construction period of approximately 24 months, comprising site clearance, bulk earthworks, installation of tanks and pipelines, building construction, and landscaping.

Construction activities will temporarily increase traffic volumes on Wayby Valley Road, particularly during peak earthworks and concrete pouring stages. The Jacobs report estimates a maximum of approximately 94 vehicle movements per day (47 inbound and 47 outbound), including light vehicles for workers and medium to heavy trucks for materials and equipment deliveries during peak construction period.

Access to the site will be provided via a single vehicle crossing on Wayby Valley Road. The access is designed to enable all vehicles to enter and exit in a forward gear, and sight distances are confirmed to meet the requirements of AUP E27.6.4.1(1) for a rural speed environment.

The requiring authority proposes that all construction traffic will travel to and from the site via Wayby Valley Road and State Highway 1 (SH1), avoiding unnecessary travel on local rural roads. Construction traffic volumes are low relative to the existing network capacity, and the Jacobs report concludes that the effects on road safety and efficiency will be no more than minor.

To manage temporary traffic effects, the requiring authority will prepare a Construction Traffic Management Plan (CTMP) prior to works commencing. The CTMP will detail:

- the expected number, type, and timing of construction vehicle movements;
- delivery scheduling to avoid commuter peaks and school bus hours;
- approved vehicle routes between the site and SH1;
- measures to manage potential dust, mud tracking, and verge damage;
- location of on-site worker parking and laydown areas; and
- procedures for complaints management and coordination with Auckland Transport.

Construction traffic effects are therefore considered to be temporary and no more than minor, subject to implementation of the CTMP and adherence to Auckland Transport's Temporary Traffic Management (TTM) requirements.

Operational Traffic

Once operational, the WTP will be remotely monitored and will not have permanent on-site staffing.

The Jacobs report confirms that operational traffic will consist of:

- approximately two light-vehicle visits per week by maintenance personnel; and
- occasional deliveries of treatment chemicals or equipment (approximately once per month).

All parking, loading, and servicing will occur within the site boundary, with sufficient space for vehicles to manoeuvre safely in a forward direction. The access will be retained post-construction and maintained to Auckland Transport's design standards.

The expected operational traffic generation is negligible compared to existing traffic volumes on Wayby Valley Road and will have no measurable impact on road safety, capacity, or efficiency.

Operational transport effects are assessed to be less than minor and consistent with the intent of AUP E27 Transport, which seeks to ensure safe and efficient movement of vehicles and the integration of land use and transport.

Comment

Steve Cavanagh, Development Engineer (Regulatory Engineering) – Auckland Council

Katherine Dorofaeff, Principal Planner (Spatial Planning and Policy Advice) – Auckland Transport

Both Council and AT specialists have reviewed the requiring authority's Updated Transportation Assessment Report (Jacobs, 24 June 2025), together with the accompanying AEE and supporting plans.

Mr Cavanagh notes that:

- Construction traffic effects will be temporary and can be adequately managed through the implementation of a CTMP in consultation with Auckland Transport;
- Operational traffic generation is minimal, and the site access arrangement is suitable for the low-intensity nature of the activity; and
- The proposal does not generate any need for off-site transport upgrades or mitigation.

The specialist therefore supports the requiring authority's findings that the transportation effects will be no more than minor, subject to the inclusion of appropriate designation conditions.

Ms Dorofaeff provided additional technical comments on access and road safety matters, including:

- The proposed access is located between road bends, with limited visibility to the south. AT recommends permanent warning and truck-turning signage on both approaches to alert motorists to the concealed access.
- Vehicle tracking confirms that left-in and left-out movements are achievable. AT supports restricting right-turn movements and reconstructing the access as a single wide driveway to accommodate heavy vehicle movements safely.
- AT also supports the requiring authority's approach to pre-arranged deliveries and on-site gate control to prevent trucks from waiting on the road shoulder.

Both specialists confirmed the proposed Construction Traffic Management Plan and road reinstatement conditions are appropriate to manage potential temporary effects on the local road network.

Accordingly, the transportation effects of the proposed Wellsford Water Treatment Plant are acceptable and consistent with the relevant objectives and policies of AUP E27 Transport.

Stormwater and flooding effects

The requiring authority's technical report "Wellsford Water Treatment Plant – Stormwater Site Assessment" (Memo Ref 521290-065, dated 17 April 2025) prepared by Tomas Paolo De Leon of Aurecon New Zealand Limited, provides an evaluation of the proposed stormwater management approach and potential flooding effects associated with the new Wellsford Water Treatment Plant (WTP) at 411 Wayby Valley Road, Wellsford.

The Site (11,800 m²) is greenfield and gently grades ~7% from south-west (≈RL 54.4 m) to north-east (≈RL 44 m). No mapped overland flow path crosses the property itself, although four external flow paths exist near the north, east and south boundaries, ultimately draining to the Hōteu River... The proposed WTP increases imperviousness to approximately 47% (5,580 m²).

Stormwater is proposed to be managed via grassed swales and overland discharge toward existing depressions/gullies at the eastern side of the Site. Three potential discharge options have been identified:

- Northeast low point following a natural overland flow path;
- Southeast gully that connects to an overland flow path on an adjacent property (subject to landowner approval if discharge crosses private land); and
- Wayby Valley Road open channel (AT water table) (subject to Auckland Transport approval).

Construction phase controls

Aurecon confirms standard erosion and sediment control measures (GD05) will be implemented: stabilised entry/exit, silt controls, progressive stabilisation, and post-rain inspections; and that clean catchment runoff will be diverted around the work area to avoid contamination.

Comment

Steve Cavanagh – Development Engineer (Regulatory Engineering), Auckland Council

Mr Cavanagh notes that "There are no immediate flood concerns for the site. There is downstream flooding however the Specialists have concluded the effects are less than minor." He also notes that "the proposal is to discharge stormwater directly to an AT water table. Permission is required from AT as the road-controlling authority to implement this. It is likely conditions would be proposed."

Mr Cavanagh initially suggested draft engineering conditions. However, as this is a NoR, imposing detailed technical conditions (e.g., specifying device sizing, outlet structure details, or third-party approvals) would be overly prescriptive. At designation stage, the focus is to confirm in-principle effects management, with detail to be resolved via Outline Plan and/or subsequent consents (including any AT approvals) as design is finalised.

In this case, I adopt Aurecon's findings and Mr Cavanagh's advice that stormwater and flooding effects are less than minor at the NoR stage.

Noise and vibration effects

The requiring authority's technical report "Wellsford Water Treatment Plant Acoustic Impact Assessment" (Report No. Rp 001 20241294, dated 9 June 2025) prepared by C. Fenemore of Marshall Day Acoustics addresses the potential noise and vibration effects associated with the construction and operation of the proposed Wellsford Water Treatment Plant (WTP) at 411 Wayby Valley Road.

The key matters considered in the report are:

- Compliance of operational noise emissions with the relevant provisions of the Auckland Unitary Plan (Operative in Part) (AUP:OP); and
- Management of construction noise and vibration effects to ensure compliance with the applicable New Zealand Standards.

Construction Noise and Vibration

The requiring authority's assessment was undertaken with reference to NZS 6803:1999 Acoustics – Construction Noise, as referenced in AUP E25.6.27.

Typical construction activities include bulk earthworks, foundation works, installation of tanks and pipework, and building construction, over a period of approximately 24 months.

Predicted daytime construction noise levels are expected to readily comply with NZS 6803:1999 limits of 70 dB LAeq and 85 dB LAFmax at the notional boundary of nearby rural dwellings when undertaken between 0730 and 1800 hours (Monday to Saturday). Noise may temporarily exceed these limits during early-morning concrete pours (0630–0730 hours).

To manage these instances, the requiring authority proposes the preparation of a Construction Noise and Vibration Management Plan (CNVMP) prior to the commencement of works.

The CNVMP will identify best-practicable mitigation measures, including:

- advanced notification and communication with potentially affected residents;
- use of low-noise plant and broadband reversing alarms;
- orientation of fixed plant away from sensitive receivers; and
- installation of temporary acoustic barriers where practicable.

No piling or vibratory compaction is proposed, therefore, construction vibration is predicted to be imperceptible and well below the guidance values contained in DIN 4150-3 (1999) and BS 5228-2 (2009).

Construction noise and vibration effects are considered temporary and no more than minor, subject to compliance with NZS 6803:1999 and implementation of a CNVMP.

Operational Noise

The requiring authority's acoustic report provides a comprehensive operational noise assessment based on a total site noise budget of 95 dB LWA for all mechanical plant operating concurrently.

Predicted operational levels at the notional boundary of the nearest dwellings (approximately 70 to 130 metres away) are ≤ 40 dB LAeq (15 min), thereby complying with AUP E25.6.3(1) noise limits for the Rural – Rural Production Zone:

Time Period	AUP Limit (LAeq 15 min)	Predicted Level	Compliance
Day (7 am – 10 pm Mon–Sat; 9 am – 6 pm Sun)	50 dB	40 dB	✓
Night (10 pm – 7 am)	45 dB	40 dB	✓

While the WTP may be audible at times during night-time conditions, the effects are considered reasonable, given the compliant sound levels, low-frequency content, and rural residential context.

Operational noise and vibration comply with AUP E25.6.3(1) and section 16 of the RMA. Residual effects are less than minor.

Comment

Bin Qiu, Senior Specialist – Contamination, Air and Noise (CAN), reviewed the requiring authority's acoustic report and confirmed that:

- Construction noise and vibration are expected to comply with NZS 6803:1999;
- Operational noise complies with AUP E25.6.3(1); and
- The proposed CNVMP condition is appropriate to ensure effective management of any temporary exceedances.

The Council's specialist concurs with Marshall Day Acoustics' 9 June 2025 report that, subject to the proposed designation conditions, noise and vibration effects will be no more than minor.

The requiring authority's proposed operational and construction noise conditions should therefore be adopted without modification.

Lighting effects

The requiring authority's documentation for the proposed Wellsford Water Treatment Plant (WTP) at 411 Wayby Valley Road, Wellsford includes a description of the proposed lighting arrangements as part of the operational and safety design.

The requiring authority confirms that:

- External lighting will be limited to essential operational and security purposes, including low-level perimeter and access lighting, entry lighting to key buildings, and occasional lighting around the control area during maintenance activities.
- The lighting design will incorporate LED luminaires with full cut-off fittings, ensuring downward light distribution to minimise light spill beyond the site boundary.

- Lighting will be automatically controlled and motion-activated, operating only when required for safety or maintenance activities, rather than continuous illumination.
- The site will not operate 24 hours per day with staff present; therefore, the majority of the site will remain unlit outside brief operational checks or security activation.
- The closest sensitive receptors are rural dwellings located approximately 70–130 metres from the site boundary, separated by pasture and intermittent vegetation.

The requiring authority concludes that, given the rural context, separation distances, and the proposed use of shielded and motion-controlled luminaires, lighting effects will be less than minor and consistent with the Auckland Unitary Plan (Operative in Part) (AUP:OP) E24 Lighting provisions.

Comments

Jared Osman – Team Leader, Contamination, Air and Noise (CAN), Auckland Council

Mr Osman reviewed the requiring authority's lighting proposal and site layout in context with AUP E24.6.1 performance standards. His comments can be summarised as follows:

- The site and surrounding properties are zoned Rural – Rural Production Zone, which falls under Lighting Category 3 (Medium Brightness) in Table E24.6.1.1. This is the same brightness category that applies to residential-zoned land in urban areas (including the Terrace Housing and Apartment Buildings Zone).
- The key standards for light spill and glare are contained in E24.6.1(6) and E24.6.1(8), which apply at the boundary of an adjacent site containing a dwelling or at the window of a habitable room. Compliance with either location is sufficient to meet the standard.
- For context, lighting that meets the AUP's technical limits can still be visible from a distance, particularly in a rural area with few other light sources, but visibility alone does not equate to non-compliance or adverse environmental effect.

Mr Osman notes that only two adjacent dwellings (400 and 412 Wayby Valley Road) have potential line-of-sight to the WTP, and even these are separated by substantial distances when compared to typical urban scenarios where the same Lighting Category 3 limits apply.

Property	Distance from WTP	Screening characteristics	Line of sight
399 Wayby Valley Road	~70 m	Screened by ridgeline & vegetation	None
400 Wayby Valley Road	~90 m	Partly obscured	Limited
412 Wayby Valley Road	~130 m	Open view	Visible

Mr Osman concludes that lighting effects are negligible, and no specific lighting condition is required beyond the general design principles already embedded in the requiring authority's draft designation conditions.

I adopt Mr Osman's assessment and consider that the proposed lighting associated with the Wellsford WTP will comply with AUP E24 Lighting standards and will result in less than minor adverse lighting effects.

Land contamination effects

The requiring authority did not provide a dedicated contaminated land investigation, noting that the site has historically been in agricultural use and has not been identified as a site of known contamination in Auckland Council's GeoMaps or the Ministry for the Environment's HAIL register.

The requiring authority notes that if any previously unrecorded contamination is discovered during works, standard accidental discovery and contamination management protocols will be implemented in accordance with AUP E30.6.1.10.

Comments

Sharon Tang – Senior Specialist, Contamination, Air and Noise (CAN), Auckland Council

Ms Tang reviewed the requiring authority's AEE, potential site layout and site visit photos. Her comments are summarised as follows:

- Historical aerials and Council records indicate the site has been used for rural farming purposes and is not listed as a HAIL site.
- No elevated contamination risk has been identified, and no detailed site investigation (DSI) is required at this stage.

Ms Tang concludes that, based on the current evidence, the risk of contamination is low and the potential effects on human health and the environment are less than minor.

I adopt the findings of Ms Tang and conclude that based on the low risk of contamination, any land contamination effects are considered to be less than minor, and no specific conditions relating to soil contamination are necessary. If any contamination is discovered during works, it can be appropriately managed through the regional consent process under Chapter E30 of the Auckland Unitary Plan (Operative in Part).

Archaeology effects

The requiring authority's technical report *411 Wayby Valley Road, Wellsford: Archaeological Assessment* by Kirstin Roth and Glen Farley of Clough & Associates Ltd in December 2023 states:

"Future development resulting from the proposed water treatment plant will have no known effects on archaeological values as no archaeological sites have previously been recorded within the boundaries of the Project Area and none were identified during the survey for this assessment."

"The inland location of the Project Area, generally unsuitable soils for horticulture, and the lack of recorded archaeological sites in close proximity mean that it is unlikely to contain unidentified archaeological sites associated with Māori occupation. It is noted that land was granted to early European settlers in the mid-19th century but there is no indication that the Project Area was used for anything other than general agricultural purposes."

“An Archaeological Authority is not required under the Heritage New Zealand Pouhere Taonga Act 2014. The accidental discovery protocols in standard E12.6.1 of the AUP will be complied with during the construction period”

Comment:

Mica Plowman – Principal Heritage Advisor, Cultural Heritage Implementation, Heritage Unit Planning and Resource Consents Department, Auckland Council

Ms Plowman has undertaken an assessment of the requiring authority’s NoR, AEE and associated technical report. Her comments are as follows:

“I agree with and support this assessment of the potential archaeological/historic heritage risk... For completeness, no places are recorded on the New Zealand Heritage List/Rārangi Kōrero for the NOR project areas.”

Ms Plowman recommends that a condition be added to the designation to manage the risk of unexpected archaeological discovery. The condition would read:

Should the consented works result in the identification of any previously unknown sensitive materials (i.e., archaeological sites), the requirements of land disturbance – Accidental Discovery Rule (Chapter E12.6.1) set out in the Auckland Unitary Plan Operative in part shall be complied with.

I adopt the findings of Ms Plowman that the effects on heritage/archaeology will be less than minor and I agree that the additional condition around accidental discovery is required.

2.1.3 Adverse effects conclusion

I consider that overall the adverse effects are no more than minor (noting that this assessment disregards effects on persons who are owners and occupiers of adjacent land).

2.1.4 Special circumstances and general discretion

Special circumstances

Special circumstances are those that are:

- exceptional or unusual, but something less than extraordinary;
- outside of the common run of applications (NoR in this case) of this nature;
- or circumstances which makes notification desirable, even where the conclusion is that the adverse effects will be no more than minor.

I consider that there are no special circumstances under s149ZCB(4) surrounding this NoR.

2.1.5 Public notification assessment conclusion

The NoR can be processed without public notification for the following reasons:

- the adverse effects are less than minor;
- there are no special circumstances.

2.2 Limited notification assessment (section 149ZCC)

If the NoR is not publicly notified, the Council must decide if there are any affected persons, or customary rights or title groups.

A person is affected if the adverse effects of the activity on them are minor or more than minor (but are not less than minor).

Also adverse effects:

- permitted by a rule or national environmental standard may be disregarded,
- on those persons who have provided their written approval must be disregarded.

Council must also have regard to any statutory acknowledgement under schedule 11 of the RMA. Within the Auckland region, the following are relevant:

- Te Uri o Hau Claims Settlement Act 2002
- Ngāti Manuhiri Claims Settlement Act 2012
- Ngāti Whātua Ōrākei Claims Settlement Act 2012
- Ngāti Whātua o Kaipara Claims Settlement Act 2013
- Te Kawerau ā Maki Claims Settlement Act 2015.

2.2.1 Adversely affected persons assessment (section 149ZCF)

The requiring authority has provided an assessment of potentially affected persons in Section 6 of its Assessment of Environmental Effects (AEE), Wellsford Water Treatment Plant – Notice of Requirement (Aurecon, 23 June 2025).

The AEE concludes that no persons are considered adversely affected by the proposed designation, as all potential adverse effects on the environment will be less than minor following implementation of the proposed mitigation measures.

Technical assessments for landscape and visual, noise and vibration, lighting, stormwater and flooding, and traffic effects all conclude that the residual adverse effects on surrounding properties will be less than minor, once the proposed mitigation measures are implemented.

Specialist assessments confirm:

Effect	Technical conclusion	Council specialist comment
Landscape & Visual	Less than minor post-mitigation (Boffa Miskell 2025)	Supported (Peter Kensington – KPLC 2025)
Noise & Vibration	Complies with AUP E25; less than minor	Supported (Bin Qiu – CAN 2025)
Lighting	Complies with AUP E24; negligible	Supported (Jared Osman – CAN 2025)

Stormwater & Flooding	Less than minor	Supported (Steve Cavanagh – Regulatory Engineering 2025)
Traffic & Transport	Less than minor	Supported (Steve Cavanagh – Regulatory Engineering 2025)
Archaeology	No known sites; less than minor	Supported (Mica Plowman – Heritage Unit 2025)
Land Contamination	Low risk; less than minor	Supported (Sharon Tang – CAN 2025)

The requiring authority has obtained written approvals from the following neighbouring landowners and occupiers:

Table 3

Address	Legal description	Owner / occupier
412 Wayby Valley Road	Lot 3 DP 165197	RK Sampson & C Kok
437 Wayby Valley Road	SECT 4 SO 616738	PA Nelson
487 Wayby Valley Road	SECT 3 SO 616738	PA Nelson

Under section 149ZCE(e) of the Resource Management Act 1991 (RMA), the effects on persons who have given written approval must be disregarded.

In addition:

- the land that is subject to the NoR is owned by Watercare.
- there are no protected customary rights groups or customary marine title groups affected by the NOR.
- Tangata Whenua: a Cultural Impact Assessment (CIA) has been prepared by Ngāti Manuhiri Settlement Trust, which supports the proposal subject to ongoing engagement and appropriate conditions (e.g., accidental discovery protocols). Accordingly, no iwi or hapū group is considered adversely affected.
- The proposal does not directly affect any existing public network infrastructure.
- No other Ministers of the Crown or statutory bodies are considered affected.

There are no affected protected customary rights or affected customary marine title groups requiring limited notification.

Overall, I agree with the AEE and concluded that all actual and potential adverse effects on the surrounding persons are assessed to be less than minor.

2.2.2 Limited notification assessment conclusion

Given the assessment above, it is recommended that the NoR not be considered on limited-notified basis.

3 Notification recommendation

This NoR should proceed on a non-notified basis because:

- a) under s149ZCB(2):
 - i. (a) the adverse effects on the environment will be less than minor, subject to the imposition of the recommended amendments to the proposed conditions
 - ii. (b) the requiring authority has not requested public notification of the NoR
 - iii. (c) there is no rule or national environment standard that requires public notification.
- b) under s149ZCB(4), there are no special circumstances to warrant notification
- c) under s149ZCC(1)(a) and s149ZCF, the adverse effects of the NoR on persons are considered to be less than minor, subject to the imposition of the recommended amendments to the proposed set of conditions.
- d) In addition, the land subject to the NoR is owned by Watercare.
- e) under s149ZCC(1)(b), there are no protected customary right groups or marine title groups in the region affected by this NoR.
- f) under s169(1A)(b), the requiring authority has provided all further information requested by the required date.

Accordingly I recommend that the notice of requirement for the proposed new water treatment plant at 411 Wayby Valley Road, Wellsford be processed on a **NON NOTIFIED** basis.

Report Prepared by:

Date 07 Nov 2025



Kristen Lian

Policy Planner

Planning Regional, North, West & Islands

Report reviewed and approved for release:

Name: Peter Vari

Title: Team Leader Planning, Regional North West & Islands

Signed:

P Vari

Date:

07 Nov 2025

4 Notification determination

Having read the NoR application, supporting documents, and the Council planner's report and recommendations on the NoR, I am satisfied that I have adequate information to consider the matters required by the Resource Management Act 1991 (the RMA) and to make a decision under delegated authority.

In particular, I have reviewed the NoR application prepared by Paige Green of Aurecon New Zealand Ltd on behalf of Watercare dated 23 June 2025 and supporting documentation, including the Acoustic Impact Assessment prepared by Marshall Day Acoustics and the Landscape and Visual Effects Assessment prepared by Boffa Miskell. I have also reviewed the report prepared by Kristen Lian, the Council's Policy Planner (dated 7 November 2025), as well as the various specialist memorandums. In summary the Council's assessment has recommended non-notification of the application, I concur with the Council's recommendation and accordingly confirm that under sections 149ZCB, 149ZCC, and 149ZCD of the RMA, this NoR be non-notified because:

- a) under s149ZCB(2):
 - i. the adverse effects on the environment will be less than minor, subject to the imposition of the recommended amendments to the proposed conditions;
 - ii. the requiring authority has not requested public notification of the NoR; and
 - iii. there is no rule or national environment standard that requires public notification.
- b) under s149ZCB(4), there are no special circumstances to warrant notification
- c) under s149ZCC(1)(a) and s149ZCF, the adverse effects of the NoR on persons are considered to be less than minor, subject to the imposition of the recommended amendments to the proposed set of conditions.
- d) In addition, the land subject to the NoR is owned by Watercare.
- e) under s149ZCC(1)(b), there are no protected customary right groups or marine title groups in the region affected by this NoR.
- f) under s169(1A)(b), the requiring authority has provided all further information requested by the required date.

Accordingly, this notice of requirement for the proposed new water treatment plant at 411 Wayby Valley Road, Wellsford shall proceed on a **NON-NOTIFIED** basis.

Name: Nicki Williams

Title: Hearing Commissioner

Signed:



Date: 24 November 2025

PART B: Section 171 recommendation and determination

5 Summary

This section of the combined report is limited to the section 171 recommendation on the section 168 notice of requirement for a designation for the purpose of 'Water supply purposes, including abstraction, treatment and storage of water at the New Wellsford Water Treatment Plant (WTP).'

A determination on notification can be found above in Sections 1 to 4 of the report. The reporting planner's recommendation is to process the NoR on a non-notified basis.

As Watercare is a Council Controlled Organisation (**CCO**), an Independent Hearings Commissioner will consider the notification report (Part A of this report) and section 171 recommendation (Part B of this report).

The reporting planner's recommendation, in Part A of this report, to the Independent Hearings Commissioner is that the NoR should be processed as **NON-NOTIFIED** for the following reasons:

- the requiring authority has provided all further information
- subject to the imposition of amended conditions, the adverse effects on the environment will be less than minor
- there is no rule or national environment standard that requires public notification and the requiring authority has not requested it
- there are no special circumstances
- no other persons are considered to be adversely affected by the NoR
- there are no protected customary rights groups or marine title groups in the region affected by this proposal.
- the land subject to the NoR is owned by Watercare

Note that the details of the proposal, site and locality description, and an assessment of effects have been considered within PART A: Section 169 notification recommendation so is not repeated within Part B.

6 Section 171 assessment

When considering a requirement, a territorial authority, must, subject to Part 2 of the RMA, consider the effects on the environment of allowing the requirement, having particular regard to the following:

- (a) any relevant provisions of—
 - (i) a national policy statement:
 - (ii) a New Zealand coastal policy statement:
 - (iii) a regional policy statement or proposed regional policy statement:
 - (iv) a plan or proposed plan; and
- (b) whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work if—
 - (i) the requiring authority does not have an interest in the land sufficient for undertaking the work; or
 - (ii) it is likely that the work will have a significant adverse effect on the environment; and
- (c) whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought; and
- (d) any other matter the territorial authority considers reasonably necessary in order to make a recommendation on the requirement.

An AEE was undertaken in Part A in section 2.1.2 of this report. I consider that the effects on the environment are less than minor with Watercare proposed conditions.

6.1 Part 2 Resource Management Act 1991

The purpose of the RMA is set out in section 5(1) which is: *to promote the sustainable management of natural and physical resources.*

Sustainable management is defined in section 5(2) as:

...managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while –

- (a) *sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
- (b) *safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
- (c) *avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

Section 6 of the RMA sets out the matters of national importance which must be recognised and provided for.

Section 7 of the RMA sets out other matters which shall be given particular regard to.

Section 8 of the RMA requires the principles of the Treaty of Waitangi to be taken into account.

Section 6.2.1 of Watercare's AEE discusses Part 2 matters. The requiring authority states that Part 2 of the RMA prescribes the purpose (Section 5) and principles (Sections 6-8) of the legislation. Therefore, based on the assessment of the application being consistent with Section 5-8, the application is considered to be consistent with Part 2.

I agree with this assessment and consider the following points:

- **Section 5 Purpose of the RMA:**
The designation will enable Watercare to construct, operate, and maintain essential water treatment facilities that support the social, economic, and health needs of the

Wellsford and Te Hana communities, while safeguarding the life-supporting capacity of the Hōteu River catchment and ensuring efficient use of natural and physical resources.

- Section 6 Matters of national importance:
The proposal will preserve the natural character of the abutting coastal environment and areas of significant indigenous vegetation/fauna; recognise the relationship of Māori and their culture and tradition; and management of potential risks from natural hazards (Section 6 of the RMA).
- Section 7 – Other matters:
The proposal promotes efficient use and development of natural and physical resources, maintains and enhances amenity values through landscape mitigation planting, and takes into account the effects of climate change by improving the resilience and reliability of Wellsford's water supply system.
- Section 8 – Treaty of Waitangi:
The proposal takes into account the principles of Te Tiriti o Waitangi through direct engagement with Ngāti Manuhiri and the preparation of a Cultural Impact Assessment, which states Manuhiri Kaitiaki Charitable Trust does not oppose the proposed relocation of the facility away from the Hōteu Awa.
- Restrictions, through the imposition of conditions, will ensure that the works will be conducted in a manner that avoids, remedies and mitigates any potential adverse effects on the environment.

In conclusion, I consider that the Notice of Requirement is consistent with Part 2 of the RMA and that the proposed designation will promote the sustainable management of natural and physical resources in accordance with Section 5 of the Act.

6.2 Section 171(1)(a) – Any relevant provisions of a national policy statement, a New Zealand coastal policy statement, a regional policy statement or proposed regional policy statement, a regional plan, a district plan or proposed district plan.

6.2.1 National Policy Statements and New Zealand Coastal Policy Statement

Section 171(1)(a)(ii) requires the council to, subject to Part 2, consider the effects on the environment of allowing the NoR, having particular regard to any relevant provisions of a national policy statement. The following national policy statements are considered to be relevant:

(i) National Policy Statements:

a) National Policy Statement on Urban Development (2020)

The National Policy Statement on Urban Development 2020 (**NPS-UD**) applies to the provision of well-functioning urban environments, planning decisions which improve housing affordability, and removal of overly restrictive barriers to development to allow growth 'up' and 'out' in locations that have good access to existing services, public transport networks and infrastructure.

The requiring authority's AEE has not specifically addressed the NPS-UD.

In regard to NPS-UD, I consider that the proposed designation of the Wellsford Water Treatment Plant provides critical infrastructure which supports ongoing use of the local community in accordance with the AUP, and the outcomes envisaged by the NPS-UD.

b) **National Policy Statement for Freshwater Management (2020)**

The purpose of the National Policy Statement for Freshwater Management 2020 (**NPS-FM**) is to ensure that natural and physical resources are managed in a way that firstly, prioritises the health and well-being of water bodies and freshwater ecosystems (Te Mana o te Wai), secondly the health needs of people and thirdly, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future. The community and Tāngata Whenua must be actively engaged to determine how Te Mana o te Wai applies to water bodies and freshwater ecosystems in the region.

While the Government has announced its intention to begin work on a replacement for the NPS-FM in 2024, the NPS-FM is still applicable until it is replaced.

The requiring authority has not undertaken an assessment against the NPS-FM. However, section 2.1.1 and 3.2.1 of the AEE addresses stormwater management and its effects and we consider that Watercare have made this assessment and there are no works planned, the project meets the requirements of the NPS-FM.

6.2.2 Regional Policy Statement or Proposed Regional Policy Statement

a) **Regional Policy Statement (Chapter B of the AUP) (RPS)**

The RPS sets the strategic direction for managing the use and development of natural and physical resources throughout Auckland.

Appendix C of the AEE addresses the RPS provisions that Watercare considers relevant to this NoR.

I adopt Watercare's assessment and agree that the NoR is consistent with the relevant objectives and policies of the RPS in the AUP.

6.2.3 Auckland Unitary Plan – district plan provisions

a) **Chapter D – Overlays**

There are no district plan overlays which apply to the subject site.

b) **Chapter E – Auckland-wide**

Appendix C of Watercare's AEE address the provisions of Chapter E including:

- Chapter E12: Land disturbance - District
- Chapter E25: Noise and Vibration
- Chapter E27: Transport

I agree with Watercare that the NoR is consistent with the provisions of Chapter E subject to the inclusion of the recommended amendments to the conditions.

c) **H – Zones**

Appendix C of Watercare's AEE addresses the AUP zoning of the subject site:

- Chapter H19: Rural zones

I agree with Watercare's assessment and discussion of the underlying zoning provisions. I have no further comments to add.

d) Chapter K – Designations

There are no existing designations which apply to the subject site.

6.2.4 Proposed Plan Change 120 - Auckland Unitary Plan

Plan Change 120 (PC120) is the only council-initiated proposed plan change to the AUP that is considered relevant to this NoR.

PC120 forms part of the wider Intensification Planning Instrument (IPI) plan changes that give effect to the National Policy Statement on Urban Development (NPS-UD) and related amendments to the Resource Management Act 1991 (RMA).

While the proposed plan change introduces higher-density provisions within identified urban and walkable catchment areas, this section of Wellsford has not been identified for intensification, nor was it subject to the Plan Change 78 Medium Density Residential Standards (MDRS). The subject site at 411 Wayby Valley Road lies within a Rural Production Zone, outside any identified urban environment affected by the PC120.

PC120 also strengthens the management framework for natural hazards, particularly in relation to Chapter E36 – Natural Hazards and Flooding of the AUP. The plan change seeks to ensure that future land use and development appropriately manage risks associated with flooding and other natural hazard events.

As part of this NoR assessment, potential flooding and stormwater management effects have been addressed through the Aurecon (2025) stormwater site assessment and Council's development engineering review, which confirm that the site is not subject to immediate flood risk and that downstream effects will be less than minor. Stormwater runoff will be managed on-site through grassed swales and controlled discharge, consistent with E36 objectives and policies to avoid exacerbating natural hazard risks.

Accordingly, the Notice of Requirement is not directly impacted by PC120, but remains consistent with its underlying intent – particularly the strengthened emphasis on natural hazard management and infrastructure resilience. The proposed Wellsford Water Treatment Plant will support ongoing and future development by providing a resilient and upgraded water supply network, consistent with the NPS-UD's objective of enabling well-functioning urban environments supported by adequate infrastructure.

In this context, the proposal is consistent with the intent of both the NPS-UD and PC120, as it provides essential public infrastructure that accommodates sustainable future growth while aligning with updated natural hazard management provisions under E36 Natural Hazards and Flooding.

6.3 Section 171(1)(b) Alternative sites, routes or methods

Section 171(1)(b)(i) establishes that if a requiring authority has an interest in the land sufficient to undertake the works, then it is not required to consider alternative sites, routes or methods.

Section 171(1)(b)(ii) does require an assessment of alternatives if there are going to be significant adverse effects arising from the designation. An assessment of the effects undertaken as part of the notification decision in Part A of this report concludes that the environmental effects are no more than minor.

Watercare's intent is to designate the site at 411 Wayby Valley Road, Wellsford to provide for the construction, operation, and maintenance of a new water treatment plant to replace the

existing facility at 362 Wayby Valley Road. The existing plant is nearing the end of its operational life, has limited capacity, and poses increased risk of contamination due to its proximity to the Hōteu River.

As the proposed designation enables the continued and reliable provision of potable water to the Wellsford and Te Hana communities, and the new site has been specifically acquired for this purpose, there are no other reasonable or practicable alternatives for the location of the facility.

Watercare's technical assessments, supported by Council specialists, confirm that the adverse effects of the designation will be less than minor, subject to the implementation of the proposed management plans and conditions.

I agree with Watercare's assessment that:

- they have sufficient interest in the land for undertaking the works (s171(1)(b)(i))
- the potential adverse environment effects, subject to the conditions, will not have a significant effect on the environment (s171(1)(b)(ii)).

Therefore, consideration of alternative sites, routes or methods is not required.

6.4 Section 171(1)(c) Necessity of Works and Designation

Section 171(1)(c) requires consideration of whether the work and designation are reasonably necessary for achieving the objectives for which the designation is sought.

Section 6.2.4 of Watercare's AEE provides comments on the reasonable necessity for the designation.

The AEE concludes that the work and designation are deemed necessary to meet Watercare's objectives for the project. The project objective are:

- Objective 1 – Improves the efficiency, resilience and safety of the local potable water supply;
- Objective 2 – Provides flexibility for Watercare to develop the site in a manner which supports current and future growth of Wellsford and surrounding areas;
- Objective 3 – Ensures security of supply by removing reliance on the Hōteu River source and its associated quality and quantity constraints; and
- Objective 4 – Meets Iwi aspirations for the Hōteu River.

I agree with Watercare that the proposed works provided by the NoR are reasonably necessary to achieve the above objectives.

6.5 Section 171(1)(d) Other matters

Section 171(1)(d) requires to the territorial authority to have particular regard to 'any other matter that the territorial authority considers reasonably necessary in order to make a recommendation on the requirement'.

Section 6.2.5 of the AEE states that there are no other matters the Council is required to consider in order to make a recommendation on the NoR.

I agree with Watercare that there are no other matters the Council is required to consider in order to make a recommendation on the NoR.

6.6 Designation lapse period – section 184(1)(c)

Section 184 of the RMA states that designations lapse within 10 years, if not given effect to, or an extension has been obtained under section 184(1)(b), or unless the designation in the AUP sets a different lapse period under section 184(1)(c).

7. Recommendation and Conditions

7.1 Recommendation

I consider that a recommendation in accordance with section 171(2) of the RMA is made to Watercare Services Limited that the notice of requirement be confirmed, subject to the amended conditions.

In accordance with section 171(3) of the RMA, the reasons for my recommendation are as follows:

- there are no effects of trade competition that are required to be disregarded when considering the NoR (s171(1A))
- the NoR is consistent with Part 2 of the RMA in that it enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety (s171(1))
- the effects on the environment of allowing the NoR have been considered, having particular regard to the relevant national environmental standards, national policy statements and the AUP (s171(1)(a)). I consider that:
 - the effects of the NoR will be no more than minor subject to the amended conditions
 - the NoR is consistent with and gives effect to the relevant national environmental standards, national policy statements and the AUP
- in terms of section 171(1)(b) of the RMA, that the consideration of alternative sites, routes or methods for undertaking the work is not required because:
 - Watercare owns the land subject to the NoR. The requiring authority has a sufficient interest in the land (s171(1)(b)(i)); and
 - the potential adverse environmental effects, subject to the conditions, as amended in this recommendation, are not likely to have a significant adverse effect on the environment (s171(1)(b)(ii)).
- in terms of 171(1)(c) of the RMA, the NoR is reasonably necessary to achieve the requiring authority's objectives
- there are no other matters considered reasonably necessary in order to make a recommendation on the NoR (s171(1)(d))
- restrictions, by way of conditions are imposed on the NoR as shown in Attachment B, and as agreed to by Watercare, to avoid, remedy or mitigate adverse environmental effects associated with the works.

7.2 Conditions

I consider that the imposition of the recommended conditions, as amended as shown in Attachment B, will ensure the effects of the NoR are less than minor (as discussed in Part A of this report).

Report prepared by:

Date: 07 Nov 2025



Kristen Lian

Policy Planner

Planning Regional, North, West & Islands

Report reviewed and approved for release by:

Name: Peter Vari

Title: Team Leader Planning, Regional North West & Islands

Signed:



Date: 07 Nov 2025

Attachments

Attachment A	Watercare Notice of Requirement (and attachments)
Attachment B	Written approvals
Attachment C	Recommended conditions (Final)
Attachment D	Request for further information and Watercare's response
Attachment E	Auckland Council Specialist memos

8. Recommendation

Having read the Council planner's report and recommendations on the NoR, I am satisfied that I have adequate information to consider the matters required by the RMA and to make a decision under delegated authority.

This power is exercised under delegated authority in accordance with section 34A of the RMA and the delegations set out in Part 6: Governing Body delegations to staff in the document titled "Chief Executives Delegation Register, July 2025, Version 2.1".

In accordance with section 171(2) of the RMA, Auckland Council makes the following recommendation to Watercare Services Limited:

1. That Watercare Services Limited (Requiring Authority) confirms the notice of requirement for a designation, for the purpose of 'water supply purposes, including abstraction, treatment and storage of water at the new Wellsford Water Treatment Plant (WTP).'; and
2. Imposes conditions, as shown in Attachment C, which are to be included in Chapter K Designations of the Auckland Unitary Plan (Operative in Part) (AUP).

The reasons for these recommendations are:

- there are no effects of trade competition that are required to be disregarded when considering the NoR (s171(1A))
- the NoR is consistent with Part 2 of the RMA in that it enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety (s171(1));
- the effects on the environment of allowing the NoR have been considered, having particular regard to the relevant national environmental standards, national policy statements and the AUP (s171(1)(a)):
 - the effects of the NoR will be no more than minor subject to the amended conditions
 - the NoR is consistent with and gives effect to the relevant national environmental standards, national policy statements and the AUP
- in terms of section 171(1)(b) of the RMA, that a consideration of alternative sites, routes or methods is not required because:
 - Watercare has a sufficient interest in the land for undertaking the works (s171(1)(b)(i))
 - it is not likely that the work will have a significant adverse effect on the environment (s171(1)(b)(ii))
- in terms of 171(1)(c) of the RMA, the NoR is reasonably necessary to achieve the Requiring Authority's objectives;
- there are no other matters considered reasonably necessary in order to make a recommendation on the NoR (s171(1)(d); and
- restrictions, by way of conditions attached to the NoR, as amended, have been recommended to avoid, remedy or mitigate adverse environmental effects associated with the works.
-











Name: Nicki Williams

Title: Hearings Commissioner




















Signed:



Date: 24 November 2024

Attachment A	Watercare Notice of Requirement (and attachments)					
						
Wellsford WTP NOR & AEE.pdf	Appendix H - Archaeological Assessment	Appendix G Water Permit WAT6040041	Appendix F Wellsford WTP Land	Appendix F Landscape and Visual	Appendix F Graphic Supplement	
						
Appendix E Acoustic Impact Assessment	Appendix D Transportation Assessment	Appendix A Potential Site Layout	20250417 Stormwater Memo.pdf			
Attachment B	Written approvals					

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Attachment C	Recommended conditions (Final)					
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Attachment D	Request for further information and Watercare's response					
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Attachment E	Auckland Council Specialist memos					
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Attachment A	Watercare Notice of Requirement (and attachments)
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Wellsford Water Treatment Plant

Notice of Requirement

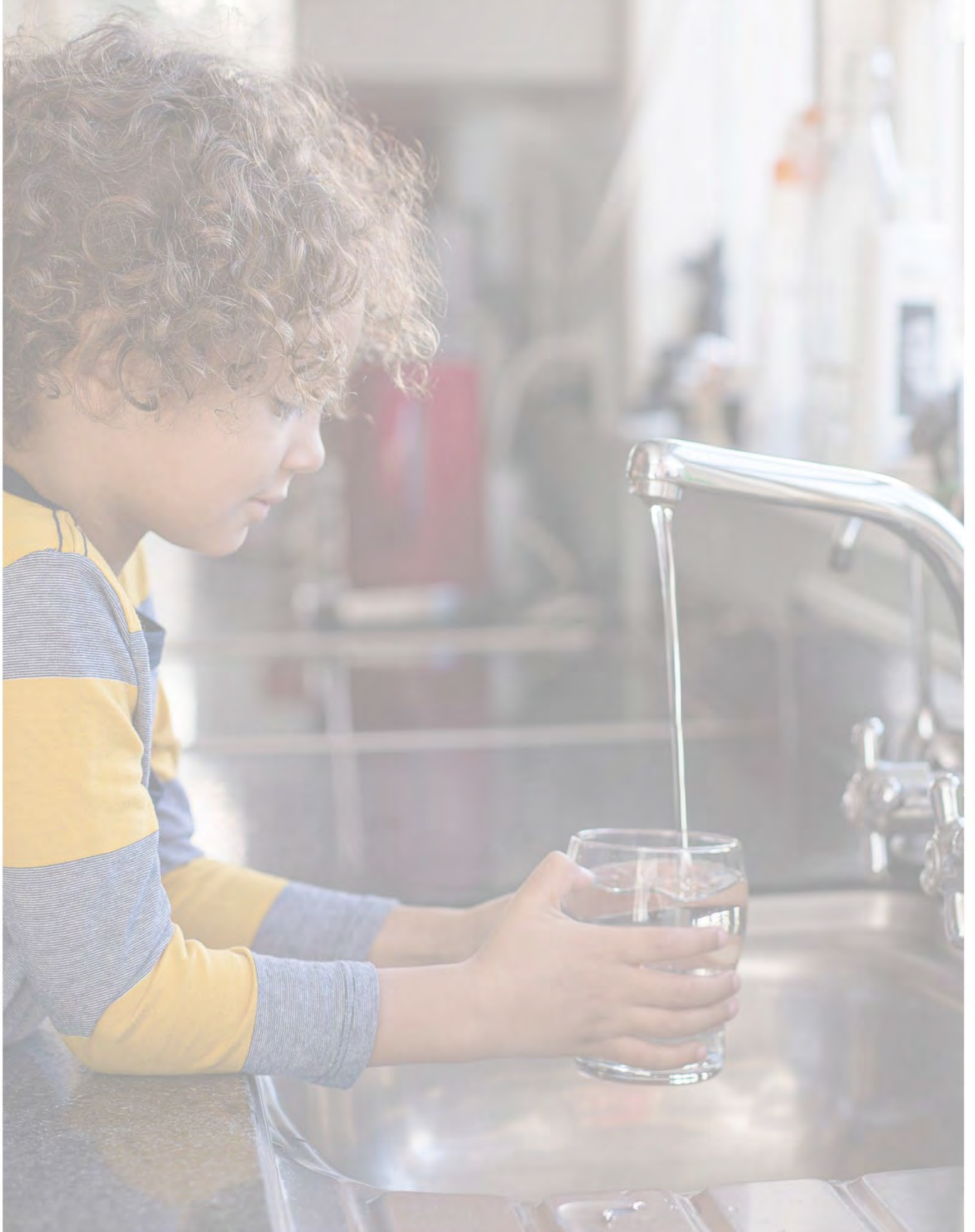
Watercare Services Limited

23-June-2025



Ki te ora te wai, Ka ora te whenua, Ka ora te tangata

When the water is healthy, the land and the people are healthy



Document control record

Document prepared by:

Aurecon New Zealand Limited

Level 3, Te Tihi

110 Carlton Gore Road,

Newmarket, Auckland 1023

PO Box 9762, Newmarket, Auckland 1149, New Zealand



New Zealand

T +64 9 520 6019

E auckland@aurecongroup.com

W aurecongroup.com

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Approval			
Author signature		Approver signature	
Name	Paige Green	Name	Margaret Cobeldick
Title	Senior Consultant, Environment and Planning	Title	Principal, Water

Executive Summary

Watercare Services Limited (Watercare) is a lifeline utility providing water and wastewater services to 1.7 million Aucklanders every day and the future growth of 2.3 million people. Its services are vital for life, keeping people safe and helping communities to flourish. Watercare is responsible for municipal water supply within Auckland, and the provider of bulk supply services to Pōkeno and Tuakau in the Waikato District. Our activities and programmes are funded through user charges and borrowings. Watercare is required by the Local Government (Auckland Council) Act 2010 to be a minimum-cost, cost-efficient service provider.

Watercare currently owns and operates the existing Wellsford Water Treatment Plant (WTP) at No.362 Wayby Valley Road, Wellsford, which abstracts water from the Hōteio River. The existing WTP is at capacity and cannot always meet the current demands, which is exacerbated by frequent shutdowns. The existing WTP infrastructure is at the end of its design life and susceptible to contamination. Additionally, the connected population is expected to increase which will worsen the current situation.

Following an assessment of alternative sites, Watercare has identified No.411 Wayby Valley Road, Wellsford, as its preferred location for a new, upgraded WTP to replace the existing WTP. The new WTP will take and treat groundwater from an existing Production Bore (and future second bore) on site to meet water demand and quality in Wellsford and Te Hana communities, supported by an existing Water Permit (WAT60400411) (**Appendix G**).

Watercare gives notice of a requirement (NoR) for a designation for the new WTP and associated activities at No.411 Wayby Valley Road, Wellsford, Auckland (Part Lot 1 DP 517895, Part Lot 2 DP 517895 and Lot 3 DP 547258). In doing so, these works will support the future growth and development of the Wellsford and Te Hana communities. The NoR is set out in the prescribed **Form 18** (accompanying this report) and is seeking to designate the full site (11,800 m²). In accordance with the NZ Gazette notice 2012-go3709 (page 1968, issue 69) confirming Watercare as a requiring authority pursuant to section 167 of the Resource Management Act 1991 (RMA), the purpose of the new designation is as follows: “*Water supply purposes, including abstraction, treatment and storage of water at the New Wellsford Water Treatment Plant (WTP)*”. The designation will provide for a new WTP that will replace the existing WTP and allow for potential future upgrades to the new WTP.

The new WTP will be designed to comply with the Water Services (Drinking Water Standards for New Zealand) Regulations 2022 (DWSNZ) and regulations from Taumata Arowai. The detailed design will be developed once the designation is secured and submitted with the Outline Plan of Works (OPW). The drawings (**Appendix A**) show a potential layout for the new WTP, which includes the following features:

- Electrical building and Chemical Storage building, pump rooms, UV rooms, treated water tank(s), chlorine contact tanks, holding tanks and clarifiers;
- Connections to the two Production Bores on site;
- Stormwater attenuation tank / basin and underground sewage tank;
- Vehicle access from Wayby Valley Road and on-site vehicle manoeuvring and parking spaces on site;
- Retaining walls (if required), boundary landscaping and security fencing (inside the boundary landscaping).

The following building envelope is proposed to allow for potential future upgrades that may be required over the life of the new WTP:

- No above ground structures within 3 m of the road frontage or any boundary;
- No structures over 5 m high, relative to finished ground level, within 15 m of road frontage or 5 m of the western boundary;
- No structures (excluding aerials) over 9 m high, relative to finished ground level, for the remainder of the site; and
- Maximum height of internal retaining walls, if required, at any point will be 3 m.

Construction activities associated with the proposed works will include the removal of pasture, earthworks, retaining structures, construction management, commissioning, site reinstatement and any other works necessary for the project and for construction of the new WTP.

Watercare has undertaken consultation and engagement with mana whenua, relevant stakeholders and interested parties on the new WTP and associated designation. Engagement with Ngāti Manuhiri, Te Rūnanga o Ngāti Whātua, Ngāti Maru and Ngāti Te Ata has been underway since the concept of the project in January 2023 to present. Ngāti Manuhiri have Statutory Acknowledgement and have provided Watercare with a Cultural Impact Assessment. Te Uri o Hau and Ngā Maunga Whakahii o Kaipara were also informed of the proposed works but have not expressed interest to date.

The site (**Records of Title** 93363, 810460 and 810461) is located within the Rural Production Zone and is relatively flat with a gentle slope to the northeast, comprising of grassed farmland bounded by wire and post fencing. There are no archaeological sites within or near the site. The site has no known history of Hazardous Activities and Industries List activity and is unlikely to be contaminated. There is a minor overland flow path along the northern boundary of the site. There are no waterbodies on site.

The new WTP will have a range of positive effects for the local community, such as improving the capacity and resilience of the water supply network to meet the current demand and supporting future growth and development of the Wellsford and Te Hana communities. The proposed designation will protect the site from future incompatible development and enable Watercare to undertake the proposed works and provide for any potential future upgrades of the new WTP.

During construction, the potential and actual effects of earthworks, traffic, noise and vibration will be managed by erosion and sediment controls, the Construction Traffic Management Plan and a Construction Noise Management Plan (if required). These management measures will ensure the adverse effects of the proposed works during construction will be *less than minor* on the environment and surrounding sensitive receivers. The proposed works during construction will have *less than minor* effects on the landscape character and values, and *less than minor* visual effects overall on surrounding viewing audiences. This is further mitigated by the transient and temporary nature of construction sites.

During operation, the traffic effects are considered to be minimal and have *less than minor* effects on the surrounding road network. Similarly, the noise and vibration produced during operation will be reasonable in the rural context, with *less than minor* effects on sensitive receivers. The proposed building design, setbacks and landscaping will have *less than minor* effects on the landscape character and values. The proposed works will change the view of the site to an extent that is *less than minor overall* for anticipated viewing audiences. The implementation of the Landscape Mitigation Planting Plan will reduce the landscape and visual effects over time as the vegetation on site matures.

Overall, it is considered that the construction and operation of the proposed works will be appropriately managed to ensure the adverse effects are *less than minor* in relation to earthworks, traffic, noise and vibration, landscape and visual effects. Further detail is contained in the Traffic Assessment Report, Acoustic Impact Assessment and Landscape and Visual Effects Assessment (**Appendices D – F** respectively).

Under section 169 of the RMA, Auckland Council must consider sections 149ZCB, 149ZCC and 149ZCF in their notification assessment. Public notification is not required under section 149ZCB as the adverse effects are less than minor overall and the applicant does not request public notification. Additionally, no rule or national environmental standard and no special circumstances requiring public notification exist in relation to this NoR. Limited notification is not required under sections 149ZCC and 149ZCF as there are no adversely affected parties, protected customary rights groups or customary marine title groups.

Under section 171 of the RMA, Auckland Council must consider the effects on the environment of allowing the requirement. The proposed WTP is considered to meet the purpose of sections 5 – 8 of the RMA and gives effect to Part 2. The proposed WTP is appropriate in the Rural Production Zone, in accordance with the relevant objectives and policies of the AUP and subsequently section 171(1)(a) of the RMA. Watercare owns the land to which the NoR relates as set out above there are no significant adverse effects on the environment from the proposed works, therefore no assessment of alternatives under section 171(1)(b) is required. The proposed works and designation are reasonably necessary for achieving the objectives of the project, in accordance with section 171(1)(c). It is considered there are no other matters Auckland Council is required to consider under section 171(1)(d) to make a recommendation on the proposed NoR.

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Abbreviations

Abbreviation	Full term
AUP	Auckland Unitary Plan (Operative in Part) 2016
bgl	Below ground level
CTMP	Construction Traffic Management Plan
CNMP	Construction Noise Management Plan
DSI	Detailed Site Investigation
DWSNZ	Water Services (Drinking Water Standards for New Zealand) Regulations 2022
LMPP	Landscape Mitigation Planting Plan
NoR	Notice of Requirement
OPW	Outline Plan of Works
PSI	Preliminary Site Investigation
RMA	Resource Management Act 1991
WTP	Water Treatment Plant

1 Introduction

Watercare Services Limited (Watercare) is a lifeline utility responsible for the planning maintenance, and operation of water services to communities throughout Auckland. Our activities and programmes are funded through user charges and borrowings. We are required by the Local Government (Auckland Council) Act 2010 to be a minimum-cost, cost-efficient service provider.

Watercare captures raw water from 28 different sources, operates 19 water treatment plants, moves it through 88 pump station and stores it in 95 water reservoirs to ensure it meets drinking water standards. The treated water is then supplied to households and businesses through approximately 9700km of pipeline.

Watercare's activities are intrinsically linked to the health of people and the natural environment, as shown in **Figure 1-1** below. Auckland's water sources must have sufficient volume and reliability to provide water for the region, and they must be protected from overuse. Collectively, around 440 million litres of water sourced per day, treated to the standards set out in Water Services (Drinking water Standards for New Zealand) Regulations 2022 (DWSNZ), and is supplied by Watercare.

Watercare carries out significant work to upgrade and build infrastructure, to maintain levels of service and provide capacity for a fast-growing population. Watercare ensures Auckland and its people continue to enjoy dependable services by upgrading its assets, planning, building, and delivering new infrastructure in cost-efficient ways.

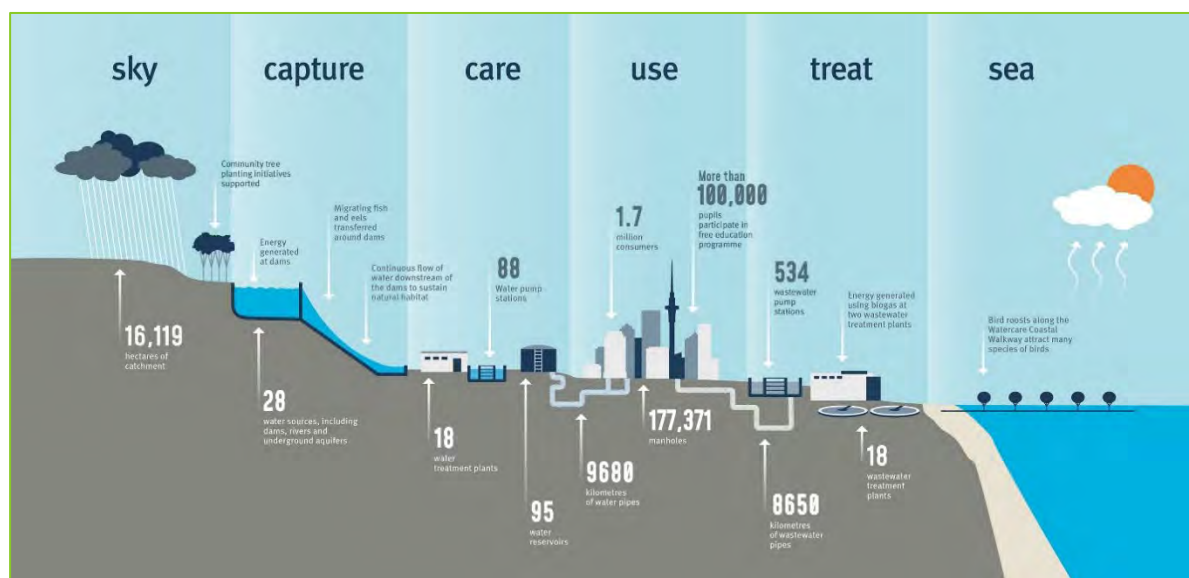


Figure 1-1: Overview of Watercare's activities across the Auckland region

Watercare gives notice of a requirement (NoR) to establish a new designation for the new Wellsford Water Treatment Plant (WTP) at No.411 Wayby Valley Road, Wellsford, Wellsford, Auckland.

The NoR is set out in the prescribed **Form 18** which accompanies this report. This report is an Assessment of Environmental Effects which accompanies and forms part of the NoR application. An assessment is provided in accordance with sections 168 to 179 of the Resource Management Act 1991 (RMA).

1.1 Requiring Authority – Watercare

Watercare has supplied wholesale water services since 1991 and is a council-controlled organisation, wholly owned by Auckland Council. In accordance with the NZ Gazette notice 2012-go3709 (page 1968, issue 69) confirming Watercare as a requiring authority pursuant to section 167 of the RMA, the purpose of Watercare's designation for this new Wellsford WTP is as follows:

"Water supply purposes, including abstraction, treatment and storage of water at the New Wellsford Water Treatment Plant (WTP)."

1.2 Project Background

Watercare currently owns and operates the existing Wellsford WTP at No.362 Wayby Valley Road, Wellsford, Auckland. The existing WTP was established around 1960 and abstracts water from the Hōteio River immediately south of the existing WTP, from which water is abstracted to feed into the existing WTP.

The existing WTP currently serves approximately 2,100 residents in the Wellsford and Te Hana communities and is at capacity and cannot meet the current demands at times. The connected population is expected to increase to approximately 4,200, which cannot be met by the existing WTP. The existing WTP also experiences frequent shut-downs due to its proximity to the Hōteio River, especially during wet weather events.

Following an assessment of potential sites, Watercare has identified No.411 Wayby Valley Road, Wellsford, as its preferred location for the new Wellsford WTP to replace the existing WTP. The new WTP will take and treat groundwater from the existing Production Bore on site to meet water demand and quality in Wellsford and Te Hana, as detailed in section 2.1. A second bore is yet to be constructed on site. These two bores and associated groundwater take were consented on 30 June 2023, as detailed in section 4.1.2 (WAT60400411). Watercare is seeking to designate the full site to provide the new WTP to replace the existing WTP, to meet the designation purpose detailed in section 1.1. Ngāti Manuhiri support moving the Wellsford water supply away from Hōteio River, as detailed in section 3.1.1.

The NoR provides for a new WTP and allows for potential future upgrades to the new WTP, as detailed in section 2.1.1, thereby increasing the capacity and improving the resilience of the water supply network. In doing so, these works will support the future growth and development of the Wellsford and Te Hana communities.

1.3 Project Objectives

Watercare's objectives for the project are to provide potable water supply to Wellsford and Te Hana communities in a manner that:

- **Objective 1** – Improves the efficiency, resilience and safety of the local potable water supply;
- **Objective 2** – Provides flexibility for Watercare to develop the site in a manner which supports current and future growth of Wellsford and surrounding areas;
- **Objective 3** – Ensures security of supply by removing reliance on the Hōteio River source and its associated quality and quantity constraints; and
- **Objective 4** – Meets Iwi aspirations for the Hōteio River.

The designation, which provides for a new WTP that will replace the existing WTP and allows for potential future upgrades to the new WTP, is reasonably necessary for achieving the objectives of Watercare and meeting the designation's purpose (refer to sections 1.1 and 1.4). In summary:

- A designation is necessary because the construction, operation and maintenance of infrastructure for water supply purposes is not specifically permitted under the relevant Auckland Unitary Plan (Operative in Part) 2016 (AUP) provisions that currently apply to the site;
- A designation will provide Watercare with flexibility to develop the new WTP in a manner which both supports the current needs of the Wellsford and Te Hana communities, as well as the ability to potentially upgrade the WTP and its operations in moving forward to support the future growth of these communities; and
- By enabling potential future upgrades of the WTP facilities via a designation, this improves the resilience of the water services network in the area for years to come.

1.4 Purpose of the Designation

The NoR is to allow Watercare, as a requiring authority, to establish a new designation at No.411 Wayby Valley Road, Wellsford. The footprint of the new designation will cover the entire site (1.18 hectares (ha)).

As detailed in section 1.1 above, the purpose of the designation is for: “*Water supply purposes, including abstraction, treatment and storage of water at the New Wellsford Water Treatment Plant (WTP).*”

Further details of the proposed works on site and existing environment are provided in sections 2 and 4 of this report (respectively). **Form 18** accompanies this report. The envelope for bulk and shape is overlaid on a potential WTP layout drawing contained in **Appendix A** and the new designation plan is contained in **Appendix B**.

1.5 Purpose and structure of this report

This report is intended to provide all the information necessary for a full understanding of the background, purpose and any actual and potential effects that the proposed designation may have on the environment. The following information is included with the notice:

- A description of the proposed works (section 2);
- Consultation and engagement undertaken (section 3);
- A description of the site and surrounding environment (section 4);
- An assessment of the actual and potential environmental effects of the proposed designation (section 5); and
- An assessment of the proposal having regard to the RMA and the AUP (section 6), including an objectives and policies assessment in **Appendix C**; and
- A conclusion (section 7).

The following are provided alongside this NoR:

- Form 18;
- Records of Title;
- **Appendix A** – Potential WTP Layout Drawing;
- **Appendix B** – New Designation Plan;
- **Appendix C** – Objectives and Policies Assessment;
- **Appendix D** – Traffic Assessment Report;
- **Appendix E** – Acoustic Impact Assessment;
- **Appendix F** – Landscape and Visual Effects Assessment;
- **Appendix G** – Existing Water Permit (WAT60400411);
- **Appendix H** – Archaeological Assessment.

2 Proposed Works

2.1 Indicative Design of the new Wellsford WTP

Watercare currently owns and operates the existing Wellsford WTP at No.362 Wayby Valley Road, Wellsford. As detailed in section 1.2 of this report, the existing WTP is at capacity, cannot always meet the peak current demands and the infrastructure is at the end of its design life. The existing WTP also experiences frequent shutdowns, especially during wet weather events. Additionally, the connected population is expected to increase.

In order to meet water demand and quality in the Wellsford and Te Hana communities, it is proposed to establish a new replacement WTP at 411 Wayby Valley Road, Wellsford, approximately 430 m north of the existing WTP.

The new WTP will be designed to comply with the DWSNZ and new regulations in effect from Taumata Arowai. The detailed design will be developed once the designation is secured and submitted with the Outline Plan of Works (OPW).

Instead of drawing water from Hōteio River, the new WTP will draw and treat groundwater from the Hōteio Waitematā Aquifer via the existing Production Bore (ID 30446) and a second (yet to be drilled) Production Bore on site¹. The new WTP will meet a peak daily demand of 4,048 m³/day, a significant increase from the existing WTP capacity of 1,440 m³/day. The average daily demand is expected to be 2,438 m³/day.

2.1.1 Project Description

The proposed works within the designation involve the establishing a new Wellsford WTP for water supply purposes, including abstraction, treatment and storage of water, as detailed in section 1.1 and 1.4.

The proposed features within the designation include, but are not limited to:

- Electrical building and Chemical Storage building;
- Pump rooms, UV rooms, treated water tank(s), chlorine contact tanks, holding tanks and clarifiers;
- Connections to the two Production Bores on site (as detailed in section 4.1.2);
- Stormwater attenuation tank / basin;
- Underground sewage tank;
- New security fencing around the site, inside screening strips;
- Vehicle access from Wayby Valley Road;
- On-site vehicle manoeuvring and parking spaces on site; and
- Retaining walls.

The site will gain access via Wayby Valley Road from a new dual entry and exit located next to each other at the south-western corner of the property, facing onto Wayby Valley Road as detailed in the Traffic Assessment Report (**Appendix D**). The vehicle crossing will be gated. These gates will be constructed in accordance with Auckland Transport's Traffic Design Standards and provide the appropriate entry and exit sealed tapers. An internal road surface will enable vehicles to enter and then exit safely and efficiently.

A palette of materials, colours and finishes for the new WTP will be chosen to make the buildings appear recessive within the landscape and against the rural backdrop. The rural landscape has the capacity to accommodate a range of different buildings and structures to support rural production, management and maintenance activities. The proposed height, materials and scale of the WTP buildings and structures will be

¹ Water Permit (WAT60400411) for groundwater take and use from two Production Bores (ID 30446) at 411 Wayby Valley Road was granted by Auckland Council to Watercare 30 June 2023.

designed to complement and integrate with the character of the landscape, as detailed in the Landscape and Visual Effects Assessment (**Appendix F**).

The proposed planting on site is provided in the Landscape Mitigation Planting Plan, as part of the Landscape and Visual Effects Assessment (**Appendix F**). The proposed planting on site shall include:

- A screening strip (trees), approximately 3 m wide, planted along the northern, western and southern (road) boundaries, except at entrance/exit gates; and
- The existing screening strip (trees), approximately 6 m wide, will be maintained along the eastern boundary.

Security fencing (approximately 1.8 – 2.2 m high) shall be established on site inside the vegetated screening strips.

A swale may be established along the northern boundary of the site, if required. Stormwater runoff can be collected in this swale and discharged towards either the existing overland flow path to the northeast, or natural gully to the southeast, or the open channel in the Wayby Valley Road reserve to the south. The stormwater design on site is to be confirmed with an OPW, or separately through a regional resource consent if required (refer to section 2.3 below).

For illustration purposes, a potential layout for the new WTP is shown in **Figure 2-1** below, which is also contained in **Appendix A**. As previously mentioned, the detailed design of the new WTP and final contours of the site are to be confirmed with an OPW.

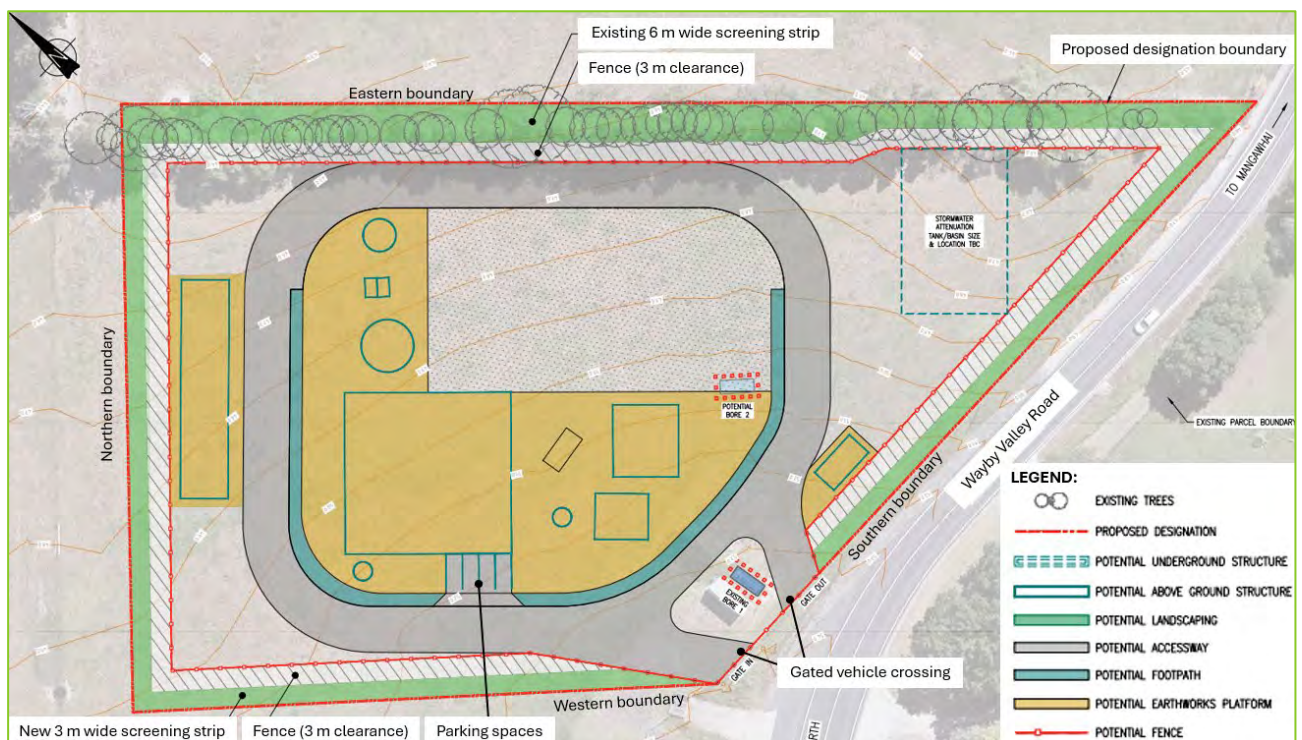


Figure 2-1: Potential WTP Layout

The following building envelope for any above ground structure is proposed for the designation to allow for potential future upgrades that may be required over the life of the new WTP and as the Wellsford and Te Hana communities may continue to grow:

- No above ground structures within 3 m of the road frontage or the eastern boundary;
- No structures over 5 m high, relative to finished ground level, within 15 m of the road frontage or within 5 m of the western boundary;
- No structures (excluding masts, antennas, aerials or other ancillary structures) over 9 m high, relative to finished ground level, for the remainder of the site; and
- Maximum height of internal retaining walls, if required, at any point will be 3 m.

2.2 Indicative Construction Methodology

The construction of the proposed works on site will occur during the day time (7.00am to 6.00pm), excluding Sundays and public holidays. Construction activities involving machinery and power tools shall only commence from 7.30am onwards. All concrete pours are likely to be scheduled to occur during the day time, however, early morning concrete pours *may* be required from 5am. *If* early morning concrete pours are required, a Construction Noise Management Plan (CNMP) will be prepared for the construction period as recommended in the Acoustic Impact Assessment (**Appendix E**).

It is anticipated that the construction period for the proposal will be approximately 24 months.

The proposed works will occur both above and below ground level. The proposed works have been conservatively estimated to require approximately 15,500 m³ of cut and 500 m³ of fill (balance of 15,000 m³). Erosion and sediment controls will be established on site prior to works commencing and used during construction in accordance with Auckland Council's GD05 guidelines².

The new WTP is likely to be constructed in the following key stages:

- Enabling works (site establishment and utility relocations);
- Main construction works (accessways, platforms, retaining walls (if required), structures, pipelines, utilities, drainage and security fence); and
- Commissioning and testing (system integration, site reinstatement and demobilisation).

Most of the landscaping on the site boundaries will likely be conducted prior to the construction period. Additional planting may be conducted towards the end of the construction period as necessary, such as adjacent the site entrance. Construction details are to be confirmed with an OPW, as part of a Construction Management Plan (CMP). Construction activities associated with the proposed works will also include:

- Construction management, such as traffic, noise and vibration management; and
- Commissioning, site reinstatement and any other works necessary for the project and for construction of the WTP.

During the construction period of the WTP, heavy commercial vehicles will deliver construction materials and conduct concrete pours. A Construction Traffic Management Plan (CTMP) will be prepared for the proposed works to ensure efficient regulation of all construction-related traffic, as detailed in the Traffic Assessment Report (**Appendix D**).

The typical construction equipment includes (but is not limited to) excavators, bulldozers, static/vibratory rollers, 3-axle dump trucks, truck and trailer units, water cart and trucks, concrete truck and pumps, generators, articulated delivery trucks, grinders and hand tools.

2.3 Future Statutory Authorisations

Other statutory authorisations and approvals may be required under the RMA and other relevant legislation for the construction of the new WTP, as summarised below.

Based on the current and previous land use of the site, it is expected that there is minimal contamination from farming practices that have occurred on site, as detailed in section 4.2.1 of this report. It is recommended that a Preliminary Site Investigation (PSI) or a Detailed Site Investigation (DSI) is prepared for the site to confirm whether the soil on site is contaminated or not. Although it is unlikely to be required, it is noted that a regional resource consent under the AUP may be required from Auckland Council for the disturbance of potentially contaminated land during construction of the proposed works on site. A resource consent may also be required under the Resource Management (National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 from Auckland Council if additional soil testing confirms there are contaminants on site above the human health criteria.

² Auckland Council's 'Erosion and Sediment Control Guide for Land – Disturbing Activities in the Auckland Region' Guideline Document 2016/005.

There are no waterbodies on site and the closest stream is approximately 93 m west of the site, as detailed in section 4.2.2 of this report. It is recommended that an ecological survey is conducted to determine whether any natural inland wetlands are within 100 m of the site, however it is noted that the site itself is elevated in relation to the surrounding paddocks and therefore unlikely to hydrologically affect any nearby wetlands. Although it is unlikely to be required, it is noted that a resource consent may be required under the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 from Auckland Council if the proposed earthworks are within 100 m of a natural inland wetland *and* will drain or hydrologically affect these wetland(s).

Any regional resource consents required under the AUP from Auckland Council will be sought separately.

The Archaeological Assessment (**Appendix H**) confirms that there are no archaeological records on site, as detailed in section 4.1.3 of this report. Therefore, an Archaeological Authority is not required under the Heritage New Zealand Pouhere Taonga Act 2014. The accidental discovery protocols in standard E12.6.1 of the AUP will be complied with during the construction period.

It is noted that a new pipeline will be installed within the road reserve of Wayby Valley Road using permitted activity rules under the AUP. This new pipeline will be a treated water pipe, and likely to be approximately 580 m long and 200 mm in diameter. The purpose of this new pipeline is to connect the new WTP to the existing treated water network that currently connects to the existing WTP site. The new pipeline will connect the new WTP to the existing pipeline, which in turn feeds into the Matthews Road reservoirs. Once the new WTP is operational, the existing WTP will be decommissioned. Separate resource consents for these works will be sought separately, as required.

3 Consultation and Engagement

Watercare has undertaken consultation and engagement with relevant stakeholders and interested parties on the proposed WTP and associated designation. In addition to the consultation already undertaken, Watercare is committed to maintaining an on-going relationship with Iwi and key stakeholders through the NoR process and beyond. Details of the consultation process, including methodology and parties consulted are set out below.

3.1 Mana Whenua

An established process is in place for mana whenua engagement on projects initiated by Watercare. This process includes early notification of projects to be undertaken by Watercare which do or are likely to, require resource consent.

A “Kaitiaki Managers Projects List” is provided on a monthly basis to nominated representatives of all 19 mana whenua in the Auckland Council area. A brief summary of each project is included in the list by which mana whenua are invited to indicate which projects they have an interest in. This project was added to Watercare’s Kaitiaki List in July 2023.

In July 2023, Watercare sent updates to all Iwi that had previously shown interest in the application for the groundwater take and bores on site (resource consent WAT60400411 granted on 30 June 2023, as detailed section 4.1.2). This update included Ngāti Manuhiri, who have statutory acknowledgment in the area under the Ngāti Manuhiri Claims Settlement Act 2012, and Te Uri o Hau, who have statutory acknowledgment of the Hōteio River as a tributary of the Kaipara Harbour under the Te Uri o Hau Claims Settlement Act 2002. The following Iwi have expressed interest in this application:

- Ngāti Manuhiri;
- Te Rūnanga o Ngāti Whātua;
- Ngāti Maru; and
- Ngāti Te Ata.

Te Uri o Hau and Ngā Maunga Whakahii o Kaipara were also informed of the proposed works but have not expressed interest. The proposed works have received support from local iwi based upon supporting the health of the Hōteio River and shifting to a groundwater source, as detailed below and provided in the key consultation records in **Appendix I**.

3.1.1 Ngāti Manuhiri

Ngāti Manuhiri expressed interest in the groundwater take application located at No.411 Wayby Valley Road, which was granted on 30 June 2023. A copy of the groundwater take decision was forwarded on 3 July 2023, along with advice that Watercare was starting the concept design for the new WTP and anticipated lodging a NoR for 411 Wayby Valley Road for Water Supply Purposes. Ngāti Manuhiri reaffirmed their interest in the project in July 2023.

Watercare meet online with Ngāti Manuhiri representatives on 2 April 2024 to discuss the project and followed this up with an update email the same day. An on-site meeting was held on 16 May 2024. At this on-site meeting, Ngāti Manuhiri confirmed their aspirations for the Wellsford water supply to move away from the Hōteio River. Ngāti Manuhiri provided a Cultural Impact Assessment (CIA) for the earlier NOR that has been withdrawn and have confirmed the CIA remains applicable to the updated NOR. A copy of the Final Draft of the application was sent to Ngāti Manuhiri July 2025.

Communications with Ngāti Manuhiri will be ongoing so that Watercare can continue to understand any potential cultural effects and address any concerns which may arise.

3.1.2 Te Rūnanga o Ngāti Whātua

Te Rūnanga o Ngāti Whātua expressed interest in the groundwater take application located at No.411 Wayby Valley Road, which was granted on 30 June 2023. A copy of the groundwater take decision was forwarded on 3 July 2023, along with advice that Watercare was starting the concept design for the new WTP and anticipated lodging a NoR for No.411 Wayby Valley Road for Water Supply Purposes. Te Rūnanga o Ngāti Whātua reaffirmed their interest in the project in July 2023.

An update email was sent to Te Rūnanga o Ngāti Whātua on 2 April 2024. This was followed by a request from Te Rūnanga o Ngāti Whātua to be part of a joint site visit with other interested iwi. An on-site meeting was held on 16 May 2024. Te Rūnanga o Ngāti Whātua were unable to attend but advised they were happy for the on-site meeting to go ahead without them, as long as Ngāti Manuhiri were represented (refer to section 3.1.1 above). A copy of the Final Draft of the application was sent to Te Rūnanga o Ngāti Whātua July 2025.

Communications with Te Rūnanga o Ngāti Whātua will be ongoing so that Watercare can continue to understand any potential cultural impacts and address any concerns that may arise.

3.1.3 Ngāti Maru

Ngāti Maru expressed interest in the groundwater extraction application at No.411 Wayby Valley Road, which was granted on 30 June 2023. A copy of the groundwater take decision was forwarded on 3 July 2023, along with advice that Watercare was starting the concept design for the new WTP and anticipated lodging a NoR for No.411 Wayby Valley Road for Water Supply Purposes. Ngāti Maru reaffirmed their interest in the project in July 2023.

An update email was sent to Ngāti Maru on 2 April 2024. No response has yet been received. A Final Draft of the application was sent to Ngāti Maru July 2025. Communications with Ngāti Maru will be on going so that Watercare can continue to understand any potential cultural effects and address any concerns, which may be raised.

3.1.4 Ngāti Te Ata

Ngāti Te Ata expressed interest in the project in January 2024. An update email was sent to Ngāti Te Ata on 2 April 2024. Ngāti Te Ata requested to meet to discuss the project, which is being organised with Watercare. A Final Draft of the application was sent July 2025. Communications with Ngāti Te Ata will be on going so that Watercare can continue to understand any potential cultural effects and address any concerns, which may be raised.

3.1.5 Te Uri o Hau Trust

Te Uri o Hau expressed interest in the groundwater take application situated at No.411 Wayby Valley Road, which was granted on 30 June 2023. A copy of the groundwater take decision was forwarded on 3 July 2023, along with advice that Watercare was starting the concept design for the new WTP and anticipated lodging a NoR for No.411 Wayby Valley Road for Water Supply Purposes. No response expressing interest in the project has been received from Te Uri o Hau Trust.

3.1.6 Ngā Maunga Whakahii o Kaipara

Ngā Maunga Whakahii o Kaipara was forwarded a copy of the groundwater take decision on 3 July 2023, along with advice that Watercare was starting the concept design for the WTP and anticipated lodging a NoR for No.411 Wayby Valley Road for Water Supply Purposes. No response expressing interest in the project has been received from Ngā Maunga Whakahii o Kaipara.

3.2 Adjacent landowners, Occupiers, and Stakeholders

3.2.1 Auckland Council

Watercare has been in discussions with Auckland Council officers regarding the discharge of stormwater from the future WTP into the Auckland Transport drainage swale, which will be covered by a regional resource consent if required. The stormwater discharge can meet permitted activity standards but will require engineering plan approval. There will be ongoing discussions with Auckland Council officers regarding this project and the engineering plan approval will be sought at the end of detailed design.

3.2.2 Adjacent Landowners

Watercare has undertaken consultation with the landowners of the following properties in relation to this NoR and associated effects of the proposal: No's 351A, 399, 400, 406, 412, 437, and 487 Wayby Valley Road, all of which are owner-occupied.

The owner of No.351A Wayby Valley Road rang Watercare to discuss the proposed WTP. They asked to be updated on any future tie in works for the Water Supply Line at the boundary of their property. This is not directly related to the WTP site. They advised that they had no further interest in being consulted for the WTP site itself.

During consultation with the remaining landowners, various concerns were raised by the landowners. Issues raised regarding construction included requests for construction to be restricted to normal working hours and advanced notice for activities like concrete pours. Additionally, concerns were voiced about construction noise, especially its potential impact on nearby horses at No.412 Wayby Valley Road, traffic impacts, and the planting of screening trees along road boundaries. Regarding the operational phase of the WTP, questions arose about its appearance, noise levels, potential odours from chemical use, and safety implications for nearby driveways. Watercare has addressed these concerns by conducting assessments and developing mechanisms to mitigate potential any adverse effects. As a result of this feedback, Watercare altered the design to relocate the proposed security fencing on the inside of the proposed boundary tree planting, to ensure the plants screen the fence, buildings and structures on site.

The landowners were subsequently invited to visit the Warkworth WTP on 23 April 2024, which was built in 2018 and treats a similar water source. The purpose of this visit was to provide an understanding of chemical handling at a water treatment plant and expected noise levels. All landowners attended this site visit, apart from the landowners of No.351A Wayby Valley Road, who advised they had no further interest in the WTP. Discussion at the site visit after been shown around the plant did not highlight any new issues but did help provide more understanding of concerns already raised. However, landowners were happy with the level of noise during the treatment process and the effectiveness of the internal walls. They did share the area is prone to power cuts and that this should be taken into consideration during design.

The screen planting proposed along the northern and western boundaries in the Landscape and Visual Assessment (**Appendix F**) was done in consultation with and agreed to by the landowners of No.437 Wayby Valley Road and No.254 Whangaripo Road.

Communications with the landowners will be on going so that Watercare can continue to understand potential effects and where possible address any concerns that may be raised. A communication strategy to keep the landowners informed of up-coming construction activities will form part of the CMP for the construction period, such as the expected duration and effects of the works (as informed by the CTMP and CNMP (if required)).

4 Existing Environment

4.1 Site and Locality

The new WTP site is approximately 1.18 ha and is located at No.411 Wayby Valley Road, Wellsford, Auckland, as shown in **Figure 4-1** below. No.411 Wayby Valley Road is legally described as Part Lot 1 DP 517895, Part Lot 2 DP 517895 and Lot 3 DP 547258 and owned by Watercare. The Record of Title (810460, 810461 and 93363) is provided alongside this NoR.

There is one existing production bore (ID 30446) and one production bore to be drilled on site (at No.411 Wayby Valley Road). The existing bore is screened between 195 m below ground level (bgl) and 279 m bgl. The second bore will be drilled and screened to the same depth.



Figure 4-1: Location of the site at 411 Wayby Valley Road and the approximate location of the existing and future Production Bores on site (Source: AUP(OP) GeoMaps)

The site is relatively flat with a gentle slope to the north, comprising of grassed farmland bounded by wire and post fencing, as shown in **Figure 4-2**, **Figure 4-3** and **Figure 4-4** below. The eastern boundary is screened by trees.



Figure 4-2: View of the site facing north (from within the site), showing fencing along the western and northern boundaries (Source: Archaeological Assessment (Appendix H))



Figure 4-3: View of the site facing northeast (from within the site), showing the vegetation along the eastern boundary and fence along the northern boundary (Source: Archaeological Assessment (Appendix H))



Figure 4-4: View of the site facing east (from within the site), showing vegetation along the eastern boundary (Source: Archaeological Assessment (Appendix H))

4.1.1 Planning context

The site is subject to the following planning layers under the AUP, as shown in **Figure 4-5** below:

- Rural Production Zone (as is the surrounding area);
- Macroinvertebrate Community Index Control (Rural); and
- Ngāti Manuhiri Statutory Acknowledgement Area.

The site is not subject to any controls, overlays, designations or any other planning features. It is noted that the NoR at No.411 Wayby Valley Road shown on the AUP GeoMaps has been withdrawn by Watercare.



Figure 4-5: Planning layers (Source: AUP GeoMaps, June 2025)

4.1.2 Existing consents

In early 2023, Watercare sought a resource consent from Auckland Council for the take and use of groundwater to supply municipal water from the Hōteio Waitematā Aquifer to the Wellsford service area via the existing Production Bore (ID 30446) on site. Auckland Council granted this Water Permit (WAT60400411) to Watercare on 30 June 2023, which is contained in **Appendix G**. The Water Permit has a lapse period of 10 years, a total duration of 35 years and is subject to conditions relating to water level drawdowns, measurement guidance, mitigation plans, monitoring and reporting.

4.1.3 Archaeology

An Archaeological Assessment has been prepared for the site, which is contained in **Appendix H**. No archaeological sites have previously been recorded on the site, and no archaeological remains were

identified during the field survey. Recorded archaeological sites associated with Māori settlement and occupation in the general area (apart from isolated find spots) are generally located near major waterways or along the coast.

4.2 Natural Environment

4.2.1 Contamination

The new WTP site is used for farming practices and has been so since at least 1966 based on early aerials of the site from the Archaeological Assessment in **Appendix H**. The site was either farmed or vegetated in 1885 based on early maps and plans of the area. On this basis, it is expected that minimal contamination from farming practices has occurred on site. It is recommended that a PSI or a DSI is prepared for the site to confirm whether the soil on site is contaminated or not.

4.2.2 Water

The site is within the Wayby stormwater catchment, where Kaipara Harbour is the receiving environment. The site is underlain by the Northwest Waitemata aquifer zone and Hōteio Waitemata sub-aquifer. Groundwater is abstracted from the Hōteio Waitemata Aquifer.

Auckland Council GeoMaps shows that the general topography of the property falls from the southwest to the northeast, with its lowest point at the northeastern corner. There is a minor overland flow path on the northern boundary of the site, as shown in **Figure 4-6** below. This overland flow path ultimately feeds into Hōteio River approximately 93 m west of the site. There are no flood plains, flood prone areas, rivers or streams on site. The closest flood plain is approximately 4 m west of the site.



Figure 4-6: Surface water features on and around the site (Source: Auckland Council GeoMaps, June 2025)

4.3 Surrounding environment

The area surrounding the site is made up of grassed farmland, shelter belts and groves of trees. The site is surrounded by rural properties, with some containing dwellings, and the site's southern boundary adjoins Wayby Valley Road. There are residential houses surrounding the site; No.399 Wayby Valley Road is situated approximately 75 m southwest of the site, No.400 Wayby Valley Road is approximately 88 m south of the site, and No.412 Wayby Valley Road is approximately 120 southeast of the site.

Wayby Valley Road is a collector road with a single lane each direction, a posted speed limit of 100 km/hour and an estimated traffic volume of 1,880, with 8% of that figure being heavy vehicles. In this area, the road is relatively windy and varies in topography. Wayby Valley Road provides a link between SH1 and Whangaripo Valley Road on the outskirts of Wellsford. Wellsford is approximately 3 km west of the Project area.

There is an existing WTP at No.362 Wayby Valley Road (Lot 1 DP 52819), approximately 430 m south of the site, which was established around 1960. The existing WTP is made up of treated water tanks, a control room building and a raised pipeline which extracts water from Hōteio River immediately south of the site.

5 Assessment of Effects on the Environment

This section assesses the actual and potential effects of the construction and operation of the works associated with the NoR. The assessment draws on the technical assessments attached in **Appendices D – F** and the details contained in section 2.

5.1 Positive effects

The new WTP brings about a range of positive effects for the local community, as it significantly enhances the efficiency, resilience, and safety of the local potable water supply. By ensuring a reliable and secure water source, the WTP mitigates risks associated with potential operational disruptions or contamination, safeguarding the health and well-being of residents. Moreover, the strategic location of the WTP facilitates seamless tie-in connections to existing pipelines and infrastructure, contributing to improved operational efficiency and reduced costs over time.

The WTP provides flexibility for Watercare to support the current and future growth of the Wellsford and Te Hana communities and its surrounding areas, by meeting increasing water demands effectively. Furthermore, the use of groundwater reduces reliance on the Hōteio River source, enhancing the reliability and resilience of the water supply network. Using groundwater also meets the aspirations of Ngāti Manuhiri to move the Wellsford water supply to move away from the Hōteio River. This diversification of water sources strengthens the community's resilience to potential disruptions and environmental challenges, ensuring uninterrupted access to safe and clean drinking water.

Additionally, by providing additional network capacity and reliability, the WTP supports the aspirations of local communities while facilitating sustainable growth and development initiatives. Through strategic planning and investment in critical infrastructure, the WTP lays the foundation for a resilient and sustainable water supply system, benefiting both present and future generations.

5.2 Earthworks effects

Earthworks are required during construction of the proposed WTP. To avoid erosion and the mobilisation of sediment beyond the site boundary and ensure compliance with the relevant standards, the contractor will carry out earthworks in line with best practice and erosion and sediment controls in accordance with Auckland Council's GD05 guidelines. Erosion protection on excavated surfaces shall be provided. Disturbed areas will be minimised and stabilised as soon as practicable to minimise erosion and soil mobilisation. If required, soil will be dampened with a water cart to avoid dust spreading beyond the boundary of the site. . Erosion protection on excavated surfaces shall be provided. Disturbed areas will be minimised and stabilised as soon as practicable to minimise erosion and soil mobilisation. If required, soil will be dampened with a water cart to avoid dust spreading beyond the boundary of the site. The measures proposed will ensure soil is not trafficked by trucks and transported onto public roads and will be included as part of the CMP. Overall, the soil will be appropriately managed during construction to ensure the potential and actual effects of soil disturbance are *less than minor*.

5.3 Traffic effects

The construction and operational traffic effects are detailed in the Traffic Assessment Report (**Appendix D**) and summarised in the following sections.

5.3.1 Construction traffic

The majority of traffic generated by the new WTP will occur during the construction period, particularly during the site and building foundation establishment stages of the works (peak construction). The construction of the WTP will result in additional light and heavy vehicles moving to and from the site, which has the potential to generate additional traffic and create adverse safety effects on the surrounding road network. During peak

construction, it is conservatively estimated that approximately 94 vehicle movements per day is expected (47 arrivals and departures). There is expected to be a couple of one-off days for concrete pours and other deliveries involving a larger number of truck movements. It is predicted that the construction volumes can be accommodated by Wayby Valley Road and the nearby intersection with SH1.

A site-specific CTMP will be prepared for the construction period, which will include the recommended heavy vehicle routes and access arrangements, driver and communication protocols. The CTMP will manage traffic flow and safety around the site, and to ensure that construction activities proceed safely and efficiently while minimizing disruptions to the surrounding community and environment. Oversized and large deliveries will be scheduled to occur outside peak hour traffic periods to reduce the effects of increased traffic volumes on the local roads. On this basis, the adverse effects of construction traffic will be temporary in nature and appropriately managed to be *less than minor*.

5.3.2 Operational traffic

During the operational phase of the WTP, traffic flow is anticipated to include up to two daily site visits (light vehicles) associated with operation and maintenance, and one materials delivery per month (heavy vehicle). Any such deliveries will be pre-arranged, and staff will be on site to open and close (and lock) the double gateway. This small traffic volume will have little, to no effect on the surrounding transport network.

The proposed vehicle crossing will be located at the south-western corner of the property, facing onto Wayby Valley Road. The vehicle crossing will be constructed in accordance with Auckland Transports standards, and it will therefore provide the appropriate entry and exit sealed tapers. It is also noted in this regard that there already is a wide sealed shoulder adjacent the proposed entrance which will be fully utilised by the final entrance design. Sightlines for motorists exiting the proposed vehicle crossing have been confirmed through photographs (refer to **Appendix D**), along with on-site speed assessments indicating typical passing vehicular speeds. Supplementary chevrons highlight the curved alignment of Wayby Valley Road, prompting caution and speed reduction. Additionally, observations of existing farm gates and private property entranceways reveal restricted sightline provisions, prompting landowners to prefer traveling southwest on Wayby Valley Road to avoid limited sightlines when crossing the road centre line.

The internal layout of the site provides for on-site vehicular manoeuvring to ensure only forward movements are undertaken onto Wayby Valley Road. The provision of staff parking spaces on site will prevent staff from parking on the side of Wayby Valley Road.

On this basis, the adverse effects of operational traffic on the local road network and safety will be *less than minor*.

5.4 Noise and vibration effects

The potential and actual construction noise and vibration effects and the operational noise effects are detailed in Acoustic Impact Assessment (**Appendix E**) and summarised in the following sections.

5.4.1 Construction noise and vibration

The proposed works will temporarily increase noise and vibration during the construction period, which may be disruptive for residential occupants on neighbouring properties. Four sensitive receivers were identified at No's 399, 400, 412 and 437³ Wayby Valley Road, which are all in rural-residential areas between 75 – 150 m from the site.

Noise from construction activities, such as the operation of construction machinery for construction of the WTP (refer to 2.2 of this report), will comply with the daytime (7.30am to 6pm) noise limits⁴. As the construction period is temporary, the noise produced from these activities is considered to be reasonable

³ At 437 Wayby Valley Road there is an approved building platform (shown in Appendix C of the Acoustic Impact Assessment (**Appendix E**)) and makes up part of the consented environment so has been included in the operational effects assessment. It is noted that there is no building consent for the building platform.

⁴ Standard E25.6.27(1) and (4) of the AUP.

given the level of (compliant) noise in the context of the rural receiving environment. Therefore, no adverse noise effects are anticipated to occur on these sensitive receivers during the construction period.

Vibration from construction activities, such as compaction via vibratory roller, will readily comply with the relevant vibration limits⁵ at the closest dwellings. Therefore, no adverse construction vibration effects are anticipated to occur on these sensitive receivers during the construction period.

Overall, the noise and vibration produced during construction of the WTP will be temporary in nature and will comply with the relevant guideline limits; therefore, the adverse effects on sensitive receivers will be *less than minor*.

All concrete pours are likely to be scheduled to occur during day-time hours only, as detailed in section 2.2, when they would readily comply with the daytime noise limit. However, if early morning concrete pour(s) are required (from 5am), a CNMP will be prepared for the construction period as recommended in the Acoustic Impact Assessment (**Appendix E**). If required, a CNMP will manage construction noise during the early morning concrete pour(s), which may include the possibility of relocating the sensitive receivers while the concrete pours are occurring. If early morning concrete pours are required, the CNMP will be prepared as part of the OPW to address any potential effects on the sensitive receivers.

5.4.2 Operational noise and vibration

The new WTP has the potential to increase noise and vibration during operation in comparison to the existing acoustic environment, which may be disruptive for residential occupants on neighbouring properties. The same four sensitive receivers were identified at No's 399, 400, 412 and 437 Wayby Valley Road as above.

The existing acoustic environment is a quiet, rural environment, influenced by occasional traffic on Wayby Valley Road. Specific equipment has not been selected at this stage of the project; therefore a 'noise budget' approach has been adopted in calculating the WTP's noise envelope. A noise budget typically allocates a percentage of the total noise that an activity can generate (whilst complying with the relevant noise limits) to individual items of plant.

Based on this noise budget, the operational noise of the WTP will likely be above the existing night-time ambient noise when vehicle noise is not present, whilst still being compliant with the AUP noise limits. The operational WTP noise may be faintly audible inside some dwellings with windows ajar for ventilation at times at some receivers. With windows closed, the operational WTP noise will likely be inaudible. Therefore, it is considered that the operation of the WTP will have negligible effects on sensitive receivers in the night-time period as the effects are considered reasonable given it complies with the relevant noise standards⁶, the fact that it is steady-state and that receivers will typically be inside their homes at night. The noise effects on sensitive receivers in the daytime are considered to be negligible.

It is anticipated that the operation of the WTP will generate minimal levels of vibration at the closest dwellings and therefore no adverse vibration effects will occur on these sensitive receivers.

Overall, the noise and vibration produced during operation of the WTP is considered reasonable in this context, and comply with the relevant noise and vibration standards. Therefore, the adverse operational noise and vibration effects on sensitive receivers are anticipated to be *less than minor*.

5.5 Landscape and visual effects

The potential and actual effects on landscape character and visual amenity as a result of the proposed works on site are detailed in the Landscape and Visual Effects Assessment (**Appendix F**) and summarised below.

⁵ British Standard BS 5228-2:2009 "Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration"

⁶ The Rural Production Zone night-time limit of 45 dB LAeq in AUP Standard E25.6.3(1).

5.5.1 Landscape effects

The new WTP has the potential to adversely affect the landscape characteristics and values of the surrounding rural environment. The proposed works will alter the landform across the entire site and introduce new buildings, structures (e.g. tanks) and potentially retaining walls (refer to the building envelope in section 2.1.1) to the rural landscape.

Buildings and structures within this rural landscape context, whilst dispersed, are not uncommon. The rural landscape has the capacity to accommodate a range of different buildings and structures to support rural production, management and maintenance activities. The proposed height, materials and scale of the new buildings and structures on site will be designed to complement and integrate with the character of the landscape and to not appear prominent or dominant. As detailed in section 2.1.1, no above ground structures will be located within 3 m of the boundaries of the site and no structures over 5 m in height will be located within 15 m of the southern boundary (road frontage) or within 5 m of the western boundary, to reduce any potential for dominance effects on adjacent properties and the road. Although retaining walls are not a common feature within the local landscape context, any potential internal retaining walls on site will be a maximum of 3 m high. The potential retaining walls will be well contained within the context of the site and will not be a conspicuous or overt feature in the landscape. Additionally, the existing strip of vegetation along the eastern boundary is proposed to be maintained and will partially screen the site. In the short-term, the proposed works are expected to have *low* adverse effects on the landscape.

The proposed new tree planting along the northern, western and southern boundaries of the site is expected to take place prior to construction commencing and will mitigate the effects on the landscape through screening and integration into the surrounding area. The planting will be undertaken in accordance with the LMPP, as recommended in the Landscape and Visual Effects Assessment (**Appendix F**). The screening provided by this vegetation is expected to increase over approximately six years as the plants grow and mature, gradually reducing the initial adverse landscape effects to a *very low* adverse level in the long term.

The proposed building design, setbacks and landscaping will ensure the adverse effects on the surrounding landscape character and values will be *less than minor* and will reduce over time as the proposed vegetation on site matures.

5.5.2 Visual effects

The construction and operation of the new WTP will alter the existing views for surrounding viewing audiences and may impact on the amenity values and the quality of the environment. Views towards the site are anticipated to be contained due to the rising topography to the west and screened or heavily filtered by existing vegetation to be retained on the eastern boundary.

During the construction phase it is anticipated that views of tall construction machinery may be visible to some viewing audiences over the intervening vegetation and glimpsed views of construction activity through vegetation. The proposed earthworks, plant and materials will be a relatively small feature within the context of the wider view and the backdrop and will be similar in appearance to the construction of any other rural structure or building. It is noted that the visual effects on viewing audiences will be temporary in nature and change on a daily basis.

During operation of the WTP, the buildings and structures on site will be screened by the existing vegetation on the eastern boundary and partially screened by the proposed new tree planting along the northern, western and southern boundaries of the site. As previously noted, once the new trees have matured and reached a height of approximately 6 m (after approximately six years), the screening provided by this vegetation will effectively soften views of the WTP.

Four viewing audiences were assessed to determine the nature and degree of visual effects during construction and operation, as shown in **Figure 5-1** below.



Figure 5-1: Viewpoint locations (Source: Graphic Supplement, Appendix 2 of the Landscape and Visual Effects Assessment (**Appendix F**))

Viewing Audience Group 1 (from viewpoint locations 7, 8 and 9) includes the residents at properties located at No.487 Wayby Valley Road and No.240 Whangaripo Valley Road, as well as road users travelling south on Wayby Valley Road between Whangaripo Valley Road and Homeward Bound Drive. During construction, it is anticipated that visual effects on these viewers will be *very low* (less than minor). During operation, with the proposed vegetation on site, the adverse visual effects on these viewers will be between *neutral* and *very low* (less than minor).

This viewing audience group also includes the potential future viewing audience located at the undeveloped building platform at No.437 Wayby Valley Road⁷, which makes up part of the consented, 'existing' environment. There is no building consent for the undeveloped building platform and the design of the building has not been determined. Therefore, the effects assessment for this viewing audience has been based on a worst-case scenario in the Landscape and Visual Effects Assessment (**Appendix F**). During construction it is anticipated that visual effects on these potential future viewers will generally be *low-moderate* (no more than minor), however may be up *moderate* (more than minor) during peak construction periods only. As previously noted, visual effects during construction are transient as the works on site vary daily and are temporary in nature. Additionally, these visual effects during construction will not be applicable if there is no dwelling on the platform during construction or will be lower depending on the orientation and design of the potential future dwelling. During operation, with the proposed vegetation on site, the adverse visual effects on these potential future viewers may be *low-moderate* (no more than minor). Once the vegetation on site has matured, the adverse effects will be reduced to *low* (less than minor). Again, these visual effects during operation may be lower depending on the orientation and design of the potential future dwelling.

⁷ At 437 Wayby Valley Road there is an approved building platform (Resource consent: SUB60035869A).

Viewing Audience Group 2 (from viewpoint locations 1 and 2) includes the residential properties located at No's 399, 400, 406 and 412 Wayby Valley Road and road users travelling north on Wayby Valley Road. At No.399 Wayby Valley Road, it is anticipated that visual effects will be *very low* during construction and operation. At No's 400, 406 and 412 Wayby Valley Road and road users, it is anticipated that visual effects will be *low to very low* (less than minor) during construction and operation immediately after construction, depending on the elevation of the viewing audience. Once the proposed vegetation on site has matured, the adverse effects will be reduced to *very low to neutral* (less than minor) during operation.

Viewing Audience Group 3 (from viewpoint location 2) includes road users on Wayby Valley Road south of Homeward Bound Drive and residential properties accessed from Homeward Bound Drive. It is anticipated that visual effects on these audiences will be range from *very low* (less than minor) to no effects during construction and operation immediately after construction. Once the proposed vegetation on site has matured, the adverse effects will be reduced to *neutral* during operation.

Viewing Audience Group 4 (from viewpoint locations 4, 5 and 6) includes residential properties at No's 31, 89, 109, 119, 141, 177 and 199 Rustybrook Road and No's 38, 64, 66 and 96 Whangaripo Valley Road, as well as the road users on Rustybrook Road and Whangaripo Valley Road. It is anticipated that during the construction and operation phase of works, that the WTP will not be visible from this audience group. With the above in mind, it is considered that visual effects will be *neutral* during construction and operation.

Based on the above, the proposed works will change the view of the site during construction and operation to an extent that is *less than minor overall* for the anticipated viewing audiences.

5.6 Summary

The proposed works will provide a new WTP, which will have a range of positive effects for the local community. The new WTP will ensure required DWSNZ standards are met, improve the capacity and resilience of the water supply network and support future growth and development of the Wellsford and Te Hana communities.

The erosion and sediment controls utilised on site during construction, as part of the CMP, will ensure the potential and actual effects of soil disturbance on the environment will be *less than minor*.

With the implementation of the CTMP during construction, the potential adverse safety and efficiency effects of additional heavy vehicles movements and usage of the surrounding road network will be *less than minor*. The traffic effects generated by the operation of the proposed WTP are considered to be minimal and *less than minor*.

In terms of noise and vibration, the effects for both operation and construction effects are anticipated to generate minimal levels of noise and vibration to the closest dwellings and are considered to have *less than minor* effects on sensitive receivers. If early morning concrete pours are required during construction, a CNMP will be prepared as part of the OPW to address any potential effects on the sensitive receivers.

Through the implementation of the LMPP, it is anticipated that the adverse effects on the landscape characteristics and values of the site as a result of the proposed works will be *less than minor*. The proposed works will change the view of the site during construction and operation to an extent that is *less than minor overall* for the anticipated and potential future viewing audiences.

Overall, it is considered that the construction and operation of the proposed works will be appropriately managed to ensure the adverse effects are less than minor in relation to earthworks, traffic, noise and vibration, landscape and visual effects.

6 Statutory Assessment

Section 168(2) of the RMA states that a requiring authority, for the purposes approved under section 167, may at any time give notice in the prescribed form to a territorial authority of its requirement for a designation. The following sections consider the NoR under the requirements of sections 169 and 171.

6.1 Section 169 Further information, notification, submissions, and hearing for notice of requirement to territorial authority

Under Section 169, the territorial authority must consider sections 149ZCB, 149ZCC, 149ZCE and 149ZCF of the RMA in their notification assessment of a NoR, as detailed in the following section.

6.1.1 Section 149 – Notification Assessment

Section 149ZCB relates to the public notification assessment, which states:

- (1) The Minister may, in his or her discretion, decide whether to require the EPA to publicly notify an application or a notice.*
- (2) Despite subsection (1), the EPA must publicly notify an application or a notice if—*
 - (a) the Minister decides (under section 149ZCE) that the activity that is the subject of the application or notice will have, or is likely to have, adverse effects on the environment that are more than minor; or*
 - (b) the applicant requests public notification of the application or notice; or*
 - (c) a rule or national environmental standard requires public notification of the application or notice.*
- (3) Despite subsections (1) and (2)(a), the EPA must not publicly notify the application or notice if—*
 - (a) a rule or national environmental standard precludes public notification of the application or notice; and*
 - (b) subsection (2)(b) does not apply.*
- (4) Despite subsection (3), the EPA may publicly notify an application or a notice if the Minister decides that special circumstances exist in relation to the application or notice...*

Public notification of the NoR is not required for the following reasons:

- Based on the assessment in section 5, the adverse effects are considered to be less than minor overall, with the implementation of the CMP, CTMP, LMPP and CNMP (if required);
- As detailed in section 5.5.2, the effects on the potential future viewing audience from the undeveloped building platform at 437 Wayby Valley Road must be considered as it is part of the consented, 'existing' environment. The potential temporary visual effects on this potential future viewing audience during construction will *generally* be no more than minor; therefore, any potential for effects on this audience is excluded from the public notification assessment and included in the limited notification assessment below;
- The applicant does not request public notification;
- No rule or national environmental standard requires public notification of the NoR; and
- No special circumstances requiring public notification exist in relation to this NoR. In particular, it is for an ordinary activity, as the site is not within a notable area under the AUP and has not been identified as a site of significance by Mana Whenua.

Sections 149ZCC, 149ZCE and 149ZCF relate to the limited notification assessment. Section 149ZCC states:

- (1) If the Minister decides not to require the EPA to publicly notify an application or a notice, the Minister must, in relation to the activity,—
 - (a) decide if there is any affected person (under section 149ZCF); and*
 - (b) identify any affected protected customary rights group or affected customary marine title group.**
- (2) The EPA must give limited notification of the application or notice to any affected person unless a rule or national environmental standard precludes limited notification of the application or notice.*
- (3) The EPA must give limited notification of the application or notice to an affected protected customary rights group or affected customary marine title group even if a rule or national environmental standard precludes public or limited notification of the application or notice.*
- (4) In subsections (1) and (3), the requirements relating to an affected customary marine title group apply only in the case of applications for accommodated activities...*

Section 149ZCF states:

- (1) The Minister must decide that a person is an affected person, in relation to an activity, if the adverse effects of the activity on the person are minor or more than minor (but are not less than minor)...*

Limited notification of the NoR is not required for the following reasons:

- Based on the assessment in section 5 of this report, the potential and actual adverse effects of the proposed works on the owners and occupants of neighbouring properties⁸ are considered to be less than minor overall, with the implementation of the CMP, CTMP and LMPP, and CNMP (if required). As such, in accordance with sections 149ZCC(1)(a) and 149ZCF(1), there are no adversely affected parties;
- As previously mentioned, the potential visual effects for one possible future viewing audience (from the undeveloped building platform at 437 Wayby Valley Road) are anticipated to be no more than minor in the short term and reduced to less than minor in the long term;
- There are no affected protected customary rights groups or affected customary marine title groups, in accordance with section 149ZCC(1)(b), (2), (3) and (4).

Section 149ZCE is not applicable as the proposed works will have less than minor effects overall.

6.2 Section 171 Recommendation by Territorial Authority

6.2.1 Part 2 – Purpose and Principles

When considering a requirement and any submissions received under section 171 of the RMA, a territorial authority must, subject to Part 2, consider the effects on the environment of allowing the requirement, having particular regard to the following matters. Part 2 of the RMA prescribes the purpose (Section 5) and principles (Sections 6-8) of the legislation.

Section 5 – Purpose

The purpose of the RMA is to promote the sustainable management of natural and physical resources which means:

⁸ Three sensitive receivers identified at 399, 400 and 412 Wayby Valley Road in the Acoustic Impact Assessment (**Appendix E**) (refer to section 5.4) and Viewing Audience Groups 1 – 4 identified along Wayby Valley Road, Whangaripo Valley Road, Homeward Bound Drive and Rustybrook Road in the Landscape and Visual Effects Assessment (**Appendix F**) (refer to section 5.5).

“managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—

- (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
- (b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
- (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.”*

All persons exercising functions and powers under the RMA are required to reflect the principles of the RMA in accordance with Sections 6 – 8 of the RMA in order to achieve the purpose of the legislation.

In accordance with section 5(a) of the RMA, the proposed works and designation will enable Watercare to promote the sustainable management of natural and physical resources to meet the current and future needs of those in the northern catchments of the Auckland region. The designation will protect the site from incompatible developments and allow Watercare to continue safeguarding the life-supporting capacity of water, accordance with section 5(b) of the RMA. The proposed works will be appropriately managed by the CMP, CTMP, LMPP and CNMP (if required) to avoid, remedy, or mitigate adverse effects on traffic, noise and vibration, and landscape character to an extent that they are less than minor overall, as detailed in section 5 of this report in accordance with section 5(c) of the RMA.

Section 6 – Matters of National Importance

Section 6 of the RMA requires the recognition and provision for matters of national importance in relation to the management, use, development and protection of natural and physical resources, which is assessed in **Table 1** below.

Table 1: Section 6 of the RMA assessment

Section 6 Matters of national importance	Comment
<i>(a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:</i>	The existing 6 m wide strip of vegetation along the eastern boundary of the site will be retained to preserve the existing natural character of the rural landscape.
<i>(b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:</i>	Not applicable as there are no outstanding natural features or landscapes, or areas of significance.
<i>(c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:</i>	Not applicable as there are no indigenous vegetation or habitats on site.
<i>(d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:</i>	Not applicable as the new WTP is not near any coastal marine area, lakes, and rivers:
<i>(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:</i>	Mana Whenua expressed no specific objection to the construction of the WTP on the site. Ngāti Manuhiri have confirmed their aspirations to move the water supply away from the Hoteō River, which will be enabled by the new WTP.
<i>(f) the protection of historic heritage from inappropriate subdivision, use, and development:</i>	Not applicable as there are no areas of historic heritage or protected customary rights on site.
<i>(g) the protection of protected customary rights:</i>	

<i>(h) the management of significant risks from natural hazards.</i>	Not applicable as there are no significant risks or natural hazards applicable to the site
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Section 7 – Other Matters

Section 7 of the RMA requires the recognition and provision for other matters in relation to the management, use, development and protection of natural and physical resources, which is assessed in **Table 2** below.

Table 2: Section 7 of the RMA assessment

Section 7	Comment
<i>(a) kaitiakitanga:</i>	Watercare is implementing kaitiakitanga (the ethic of stewardship) through the appropriate management of construction activities on site to minimise effects on the environment and development of safe and efficient water infrastructure, in accordance with section 7(a) and (aa). Ngāti Manuhiri support the new WTP and associated groundwater use as it will meet their aspiration to move the water supply away from the Hoteō River, to implement kaitiakitanga and protect the river.
<i>(aa) the ethic of stewardship:</i>	
<i>(b) the efficient use and development of natural and physical resources:</i>	The proposed works will improve the capacity and resilience of the water supply network in a manner that is in a manner that is a more efficient use of this finite resource, in accordance with section 7(b) and (g).
<i>(ba) the efficiency of the end use of energy:</i>	
<i>(g) any finite characteristics of natural and physical resources:</i>	
<i>(c) the maintenance and enhancement of amenity values:</i>	The proposed vegetation removal on site will be pastoral grass. Vegetation on the site boundary will be retained to maintain amenity values, in accordance with section 7(c) and (d). Additional vegetation will be planted on site to enhance the amenity values.
<i>(d) intrinsic values of ecosystems:</i>	
<i>(f) maintenance and enhancement of the quality of the environment:</i>	The site will be cleared of rubbish, enhancing the quality of the environment in accordance with section 7(f).
<i>(h) the protection of the habitat of trout and salmon:</i>	Not applicable to the proposed WTP.
<i>(i) the effects of climate change:</i>	The design of the WTP on site will take into account the effects of climate change, such as ensuring the final design of the building platform levels and stormwater system do not exacerbate flood levels on surrounding properties, in accordance with section 7(i).
<i>(j) the benefits to be derived from the use and development of renewable energy.</i>	Not applicable to the proposed WTP.

Section 8 – Te Tiriti o Waitangi

Section 8 of the RMA requires the principles of Te Tiriti o Waitangi (Treaty of Waitangi) to be taken into account in relation to the management, use, development and protection of natural and physical resources. As detailed in section 3 of this NoR, Mana Whenua have been engaged on about the proposed works since the beginning of the design process. Mana Whenua expressed no specific objection to the construction of the WTP on the site. Ngāti Manuhiri have Statutory Acknowledgement and support moving the Wellsford

water supply away from the Hōteio River, therefore support the groundwater use enabled by the new WTP, as detailed in section 3.1.1 of this NoR and in **Appendix I**. In summary, the above assessments conclude that the proposed WTP meets the purpose of sections 5 – 8 of the RMA is therefore consistent with giving effect to Part 2 of the RMA.

6.2.2 Section 171(1)(a) Relevant Planning Documents

When considering a requirement the territorial authority must, subject to Part 2, consider the effects on the environment, having regard to section 171(1)(a) of the RMA:

(a) any relevant provisions of—

(i) a national policy statement:

(ii) a New Zealand coastal policy statement:

(iii) a regional policy statement or proposed regional policy statement:

(iv) a plan or proposed plan; and...

An assessment of the relevant objectives and policies of the Regional Policy Statement (Chapter B) and relevant chapters of the AUP is contained in **Appendix C**, which is based on the zoning of the site and the district matters in relation to the proposed works on site. Overall, with the implementation of the CMP, CTMP, LMPP and CNMP (if required), it is considered that the proposed works are in accordance with the objectives and policies of the AUP. The proposed WTP is essential to the functionality of the surrounding community and considered to be appropriate in the Rural Production Zone.

6.2.3 Section 171(1)(b) Alternative Sites, Routes or Methods

In accordance with section 171(1)(b) of the RMA, Auckland Council is required to consider:

(b) whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work if –

(i) the requiring authority does not have an interest in the land sufficient for undertaking the work; or

(ii) it is likely the work will have a significant adverse effect on the environment.

Watercare owns the land to which the NoR relates, therefore no assessment of alternatives against Section 171(1)(b) of the RMA is required. However, it is noted that consideration of alternatives was given during earlier stages of the project which identified the site as the most appropriate location for the new WTP to replace the existing WTP. Groundwater abstraction is provided for on site under the existing resource consent WAT60400411 (**Appendix G**), which reduces reliance on the Hōteio River source and enhances the reliability and resilience of the water supply network. There are no other suitable alternative water sources in the area. In addition, the assessment of effects in section 5 of this report confirms the potential adverse effects associated with the construction and operation of the proposed WTP will be less than minor overall with the implementation of the CMP, CTMP, LMPP and CNMP (if required).

6.2.4 Section 171(1)(c) Reasonably Necessary

Section 171(1)(c) of the RMA states that:

(c) whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought; and...

Watercare, as a requiring authority, seeks to establish a designation for “*Water supply purposes, including abstraction, treatment and storage of water at the New Wellsford Water Treatment Plant (WTP)*”, which aligns with the objectives of the project, detailed in section 1.3 of this report.

The proposal involves replacing the existing WTP with a new WTP in a nearby location, which aligns with the project objectives as follows:

- The new WTP will enhance the efficiency, resilience, and safety of the local potable water supply, in accordance with Objective 1;
- The new WTP will offer flexibility for Watercare to develop the site in a manner conducive to supporting the current and future growth of Wellsford and its surrounding areas, in accordance with Objective 2;
- The new WTP will ensure the security of water supply by eliminating reliance on the Hōteio River source and mitigating associated quality and quantity constraints, in accordance with Objective 3; and
- Meeting the aspirations of Iwi for the Hōteio River is an integral part of the project's objectives, in accordance with Objective 4.

On this basis, it is considered that the proposed works are reasonably necessary to achieve the objectives of the requiring authority.

The NoR itself will protect the site from future incompatible development which may preclude or put at risk the construction or operation of the proposed works. The NoR will enable Watercare to undertake works in accordance with the designation in a comprehensive and integrated manner and provide for the ongoing operation, maintenance and any potential future upgrades of the new WTP and associated features.

As such it is concluded that the NoR to establish this new designation that provides for the new WTP in Wellsford is reasonably necessary to achieve Watercare's project objectives.

6.2.5 Section 171(1)(d) Other Matters

Section 171(1)(d) of the RMA states that:

(d) any other matter the territorial authority considers reasonably necessary in order to make a recommendation on the requirement.

The existing WTP is at capacity and cannot meet the current demands (at peak times) of the Wellsford and Te Hana communities. The connected population is expected to increase, which cannot be met by the existing WTP. Additionally, the existing WTP experiences frequent shut-downs due to its proximity to the Hōteio River. The new WTP will significantly enhance the efficiency, resilience, and safety of the local potable water supply. By ensuring a reliable and secure water source, the WTP mitigates risks associated with disruptions or contamination, safeguarding the health and well-being of residents. The WTP provides flexibility for Watercare to support the current and future growth of Wellsford, Te Hana and its surrounding communities, by meeting increasing water demands effectively. It is considered there are no other matters Auckland Council is required to consider in order to make a recommendation on the proposed NoR.

7 Conclusion

This NoR is to establish a new designation in the AUP with Watercare as the Requiring Authority. This NoR has been prepared in accordance with sections 168 – 179 of the RMA and is sought in order to establish, operate and maintain a new WTP at No.411 Wayby Valley Road, Wellsford, Auckland.

The new WTP will improve the capacity and resilience of the water supply network in order to meet the current demands, as well as support future growth and development of the Wellsford and Te Hana communities. The designation will protect the site from future incompatible development and enable Watercare to replace the existing WTP with a new WTP in a nearby location and allow for any potential future upgrades of the new WTP.

The assessment of actual and potential effects on the environment at section 5 concludes that the adverse effects can be managed and mitigated to an extent that they are less than minor overall, with the implementation of the CMP, CTMP, LMPP and CNMP (if required). In accordance with the assessments completed under sections 149ZCB and 149ZCC of the RMA, public or limited notification is not warranted.

Appendix A – Potential Proposed WTP Layout

Appendix B – Designation Plan



Appendix C – Objectives and Policies Assessment

The following objectives and policies assessment under the AUP is based on the zoning of the site and the district matters in relation to the proposed works on site.

Objective / Policy	Assessment
Chapter B Regional Policy Statement – B3 Ngā pūnaha hanganga, kawekawe me ngā pūngao / Infrastructure, transport and energy	
Objective B3.2.1 (1) Infrastructure is resilient, efficient and effective.	The WTP is essential to the function and operation of the water network. Therefore, a WTP is proposed to replace the existing WTP to improve capacity and resilience of the water supply network in accordance with objective B3.2.1. (1) and (4). The proposed designation will enable the efficient development, operation, maintenance and upgrading the new WTP, in accordance with Policy B3.2.2.(1).
Objective B3.2.1 (4) The functional and operational needs of infrastructure are recognised.	
Policy B3.2.2 (1) Enable the efficient development, operation, maintenance and upgrading of infrastructure.	
Objective B3.2.1 (2) The benefits of infrastructure are recognised, including: (a) providing essential services for the functioning of communities, businesses and industries within and beyond Auckland; (b) enabling economic growth; (c) contributing to the economy of Auckland and New Zealand; (d) providing for public health, safety and the well-being of people and communities; (e) protecting the quality of the natural environment; and (f) enabling interaction and communication, including national and international links for trade and tourism	<p>The new WTP will provide an essential service to the surrounding community, which will meet the current demands and support future growth and development of the Wellsford and Te Hana communities, in accordance with Objective B3.2.1. (2).</p> <p>The new WTP will be designed to meet the required health and safety standards therefore providing for public health, safety and the well-being of staff and the community, as well as protecting the quality of freshwater, in accordance with Objective B3.2.1. (2).</p> <p>Through recognising the value of investing in existing infrastructure proposed, the new WTP will replace the existing WTP, in accordance with Policy B3.2.2. (2).</p>
Policy B3.2.2 (2) Recognise the value of investment in existing infrastructure.	
Objective B3.2.1 (6) Infrastructure is protected from reverse sensitivity effects caused by incompatible subdivision, use and development.	The designation protects the site from future incompatible development which may preclude or put at risk the construction or operation of the proposed works, in accordance with Objective B3.2.1 (6).
Objective B3.2.1 (8) The adverse effects of infrastructure are avoided, remedied or mitigated.	The new WTP and associated features will be designed to ensure the adverse effects arising from the operation of the site are avoided and mitigated to an extent that they are less than minor, as detailed in section 5, in accordance with Objective B3.2.1. (8). The proposed works during construction will be managed by appropriate erosion and sediment controls to avoid, remedy and mitigate adverse effects on the environment, in accordance with Policy B3.2.2. (8).
Policy B3.2.2 (8) Avoid, remedy or mitigate the adverse effects from the construction, operation, maintenance or repair of infrastructure.	
Chapter E12 Land disturbance – District (noting that the relevant rules in the AUP are contained in Chapter E26 Infrastructure, Table E26.5.3.1 – Earthworks all zones and roads [district plan] (dp))	
Objective E12.2 (1) Land disturbance is undertaken in a manner that protects the safety of people and avoids, remedies or mitigates adverse effects on the environment	The proposed works will be managed by appropriate erosion and sediment controls, as part of the CMP, to ensure earthworks are undertaken safely and minimises

<p>Policy 12.3 (2) <i>Manage the amount of land being disturbed at any one time, to:</i></p> <p>(a) <i>avoid, remedy or mitigate adverse construction noise, vibration, odour, dust, lighting and traffic effects;</i></p> <p>(b) <i>avoid, remedy or mitigate adverse effects on accidentally discovered sensitive material; and</i></p> <p>(c) <i>maintain the cultural and spiritual values of Mana Whenua in terms of land and water quality, preservation of wāhi tapu, and kaimoana gathering.</i></p>	<p>adverse effects on the surrounding environment, in accordance with Objective E12.2. (1).</p> <p>The proposed works will be managed by a CNMP, if required, appropriate erosion and sediment controls and a CTMP in accordance with Policy E12.3. (2) (a). Appropriate accidental discovery protocols will be utilised during construction, in accordance with Policy E12.3. (2) (b). If required, an Archaeological Authority will be sought prior to construction.</p> <p>Mana Whenua expressed no specific objection to the construction of the WTP on the site.</p> <p>The proposed earthworks are necessary to establish the WTP, which will improve the capacity and resilience of the water supply network and provide for the health and well-being of everyone in the community in accordance with Policy E12.3. (3).</p>
Chapter E25 Noise and vibration [dp]	
<p>Objective E25.2 (1) <i>People are protected from unreasonable levels of noise and vibration.</i></p>	<p>As detailed in section 5.4, the proposed WTP will be designed to minimise the operational noises to an extent that the adverse effects on sensitive receivers in the surrounding residential environment will be less than minor, in accordance with Objective E25.2 (1)</p> <p>The noise and vibration produced during construction will be temporary in nature and comply with the relevant guideline limits. As detailed in section 5.4, the adverse effects on sensitive receivers will be negligible, in accordance with Objective E25.2 (4) and Policy E25.3 (10).</p> <p>In recognition of sensitive receivers in the surrounding residential environment, construction will typically be undertaken during the day, in accordance with Policy E25.3 (10). If required, the CNMP will minimise, where practicable, noise and vibration on site to mitigate adverse effects on adjacent sites, in accordance with Policy E25.3 (2).</p>
<p>Policy E25.3 (9) <i>Avoid, remedy or mitigate the adverse effects of noise in the rural environment, having regard to the working nature of this environment.</i></p>	
<p>Objective E25.2 (4) <i>Construction activities that cannot meet noise and vibration standards are enabled while controlling duration, frequency and timing to manage adverse effects.</i></p>	
<p>Policy E25.3 (2) <i>Minimise, where practicable, noise and vibration at its source or on the site from which it is generated to mitigate adverse effects on adjacent sites.</i></p>	
<p>Policy E25.3 (10) <i>Avoid, remedy or mitigate the adverse effects of noise and vibration from construction, maintenance and demolition activities while having regard to:</i></p> <p>(a) <i>the sensitivity of the receiving environment; and</i></p> <p>(b) <i>the proposed duration and hours of operation of the activity; and</i></p> <p>(c) <i>the practicability of complying with permitted noise and vibration standards.</i></p>	
Chapter E27 Transport	
<p>Objective E27.2 (4) <i>Parking, loading and access is safe and efficient and, where parking is provided, it is commensurate with the character, scale and intensity and alternative transport options of the location.</i></p>	<p>The proposed staff parking spaces and separate loading areas on site are designed to be safe and efficient, having regard to the functional and operational</p>

<p>Policy E27.3 (17) <i>Require parking and loading areas to be designed and located to:</i></p> <p><i>(a) avoid or mitigate adverse effects on the amenity of the streetscape and adjacent sites;</i></p> <p><i>(b) provide safe access and egress for vehicles, pedestrians and cyclists;</i></p> <p><i>(c) avoid or mitigate potential conflicts between vehicles, pedestrians and cyclists; and</i></p> <p><i>(d) in loading areas, provide for the separation of service and other vehicles where practicable having regard to the functional and operational requirements of activities</i></p>	<p>requirements of the WTP in accordance with Objective E27.2 (4) and Policy E27.3(17)(d).</p> <p>The staff parking on site will prevent staff from parking on the side of Wayby Valley Road, to avoid adverse effects on the amenity of the streetscape and potential conflicts between various road users in accordance with Policy E27.3(17)(a) and (c).</p> <p>The internal layout of the site provides for vehicular manoeuvring to ensure only safe, forward movements are undertaken onto Wayby Valley Road in accordance with Policy E27.3(17)(b). This design will maintain the effective, efficient and safe operation of the road and provide safe and functional access to staff, in accordance with Policy E27.3(18)(a) and (c).</p>
<p>Policy E27.3 (18) <i>Require parking and loading areas to be designed so that reverse manoeuvring of vehicles onto or off the road does not occur in situations which will compromise:</i></p> <p><i>(a) the effective, efficient and safe operation of roads, in particular arterial roads; ...</i></p> <p><i>(c) safe and functional access taking into consideration the number of parking spaces served by the access, the length of the driveway and whether the access is subject to a vehicle access restriction.</i></p>	
<p>Objective E27.2 (6) <i>Road/rail crossings operate safely with neighbouring land use and development.</i></p>	
<p>Policy E27.3 (20) <i>Require vehicle crossings and associated access to be designed and located to provide for safe, effective and efficient movement to and from sites and minimise potential conflicts between vehicles, pedestrians, and cyclists on the adjacent road network.</i></p>	<p>The vehicle crossing will be constructed in accordance with Auckland Transports standards, with appropriate entry and exit sealed tapers. The existing wide sealed shoulder adjacent the proposed entrance which will be fully utilised by the final entrance design. As noted above, only forward movements will be made by vehicles onto Wayby Valley Road. Overall, the design and location of the vehicle crossing will provide safe, effective and efficient movement to and from site and minimise potential conflicts between road users in accordance with Objective E27.2 (6) and Policy E27.3(20).</p>
<p>Chapter H19 Rural zones [dp]</p>	
<p>Objective H19.2 (1) <i>Rural areas are where people work, live and recreate and where a range of activities and services are enabled to support these functions.</i></p>	<p>The proposed WTP is essential to providing clean and efficient water supply to support the community's overall functionality and while being in accordance with objective H19.2(1).</p>
<p>Policy H19.2.2 (5) <i>Enable a range of rural production activities and a limited range of other activities in rural areas by: ...</i></p> <p><i>(c) managing the effects of activities in rural areas so that;</i></p> <p><i>(i) essential infrastructure can be funded, coordinated and provided in a timely, integrated, efficient and appropriate manner; and</i></p> <p><i>(ii) reverse sensitivity effects do not constrain rural production activities.</i></p> <p><i>(d) acknowledging that, in some circumstances, the effective operation, maintenance, upgrading and development of infrastructure may place constraints on productive land and other rural activities; or...</i></p>	<p>The proposed WTP works will be managed by appropriate erosion and sediment controls and various management plans to minimise adverse effects on the rural surroundings during construction which is in accordance with policy H19.2.2(5)(c)(ii).</p>

Appendix D – Traffic Assessment Report

Appendix E – Acoustic Impact Assessment

Appendix F – Landscape and Visual Effects Assessment

Appendix G – Existing Water Permit (WAT60400411)

Appendix H – Archaeological Assessment

Memorandum

To	Abby Barry (Watercare) Max Uribe Vasquez (Watercare) Paul Futter (Watercare)	From	Tomas Paolo De Leon
Copy	Tian Lee (Aurecon)	Reference	521290-065
Date	2025-04-17	Pages (including this page)	18
Subject	Wellsford Water Treatment Plant – Stormwater Site Assessment		

1 Purpose

The preliminary stormwater plan for the proposed **Water Treatment Plant (WTP) development located at 411, and partially at 487 Wayby Valley Road, Wellsford**, is presented in this memorandum. In which the development will be referred to as “the Site” for the rest of this document. This follows a previously submitted memorandum, dated 09-April-2024, that detailed the stormwater management strategy for a smaller development, which was only within 411 Wayby Valley Road.

The objective of this memorandum is to undertake a preliminary stormwater management strategy and based on the proposed site layout for the Site located in Appendix A for a reference.

The following references and guidelines have been used for this assessment:

- Stormwater Management Devices in the Auckland Region (Guidance Document 2017/001, Incorporating Amendment 2)
- Guidelines for stormwater runoff modelling in the Auckland Region (TP108)
- Auckland Unitary Plan (AUP), Operative in Part (OiP) (Accessed March 2025)
- Schedule 4 of Regionwide Auckland Council Network Discharge Consent (Accessed in March 2025)
- The Auckland Code of Practice for Land Development and Subdivision – Chapter 4: Stormwater v4 (Accessed in March 2025)

The following input information has been used for the assessment:

- Auckland Council GIS Viewer (GeoMaps) (Accessed March 2025)
- The proposed site layout Figure 2 below.
- LiDAR 2016 (Vertical Datum NZVD2016) provided by Land Information New Zealand (LINZ)
- Project Site Survey Data (January 2025)
- The outcome of the discussion with Auckland Council representative (Steve Cavanagh) about stormwater management dated 21/03/2024.
- Auckland Council Flood Model – Regionwide Rural Rapid Flood Model 2022 Unit R (Accessed April 2024)

2 Wellsford Wastewater Treatment Plant Development

The Site is in an area classified as a “Rural – Rural Production Zone”, based on the Auckland Unitary Plan (AUP), with a total land area of 11,800 m².

Auckland Council GeoMaps shows that the general topography of the property falls from the southwest to the northeast, with its lowest point at the northeastern corner. The general slope of the site is at approximately 7%, with its lowest and highest elevations of 44 mRL, and 54.4 mRL, respectively, based on the survey data collected.

There are four external flow paths, in the form of natural valleys, located at the vicinity of the site, specifically at the north, east, and southern boundaries. These flow paths ultimately flow into the Hotoe River. Figure 1 shows the Site catchment areas that currently drain to these external flow paths.

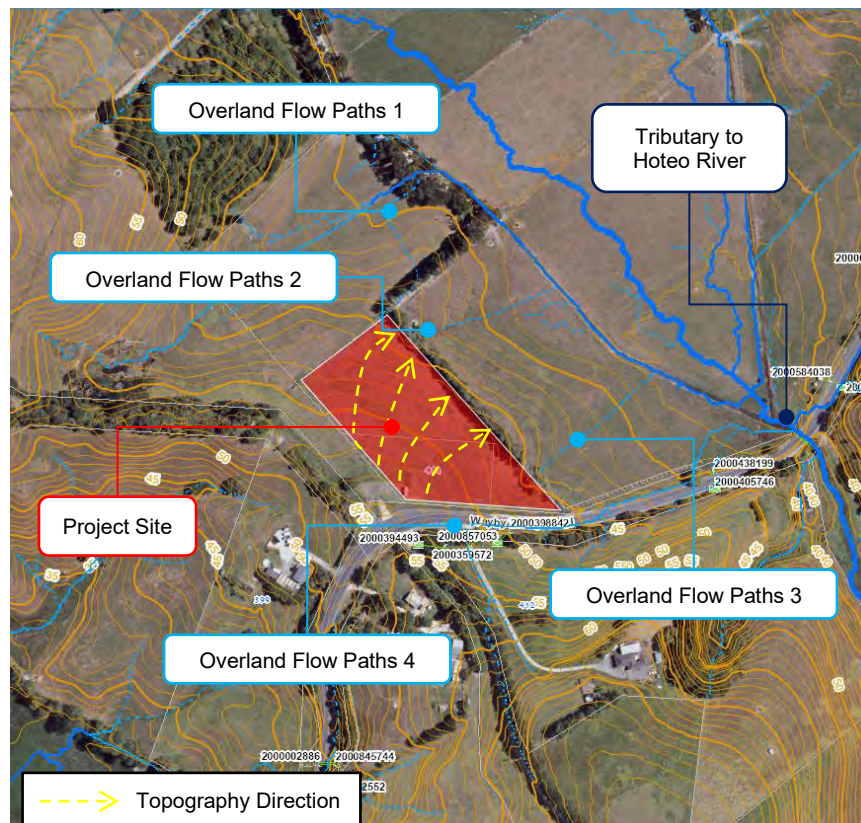


Figure 1: Site Catchments and Outlet Points

Proposed Site development

The proposed Site development is a self-contained water treatment facility that will be owned, operated, and maintained by Watercare (Figure 2). It contains the following components:

- Filter Room
- Water Treatment Chemicals Storage Facility
- Diesel Tank
- Access Road
- Control Rooms and Working Spaces
- Generator Room
- Treated Water Tank



Figure 2: Proposed Water Treatment Plant

It should also be noted that clean water from the surrounding properties coursing through the Site will be diverted to prevent any possibility of contamination. The overall earthworks will be graded in such a way that external runoff will convey around the site, towards their natural overland flow paths.

3 Technical Guidelines and Previous Correspondences

3.1 NDC Requirements

Figure 3 shows the overall decision tree for the stormwater network discharge consent (NDC) provided by Auckland Council. Since the Site is classified as a greenfield area, the stormwater management plan can possibly have four components: water quality, stream hydrology, flooding (10% and 1% AEP), and assets.

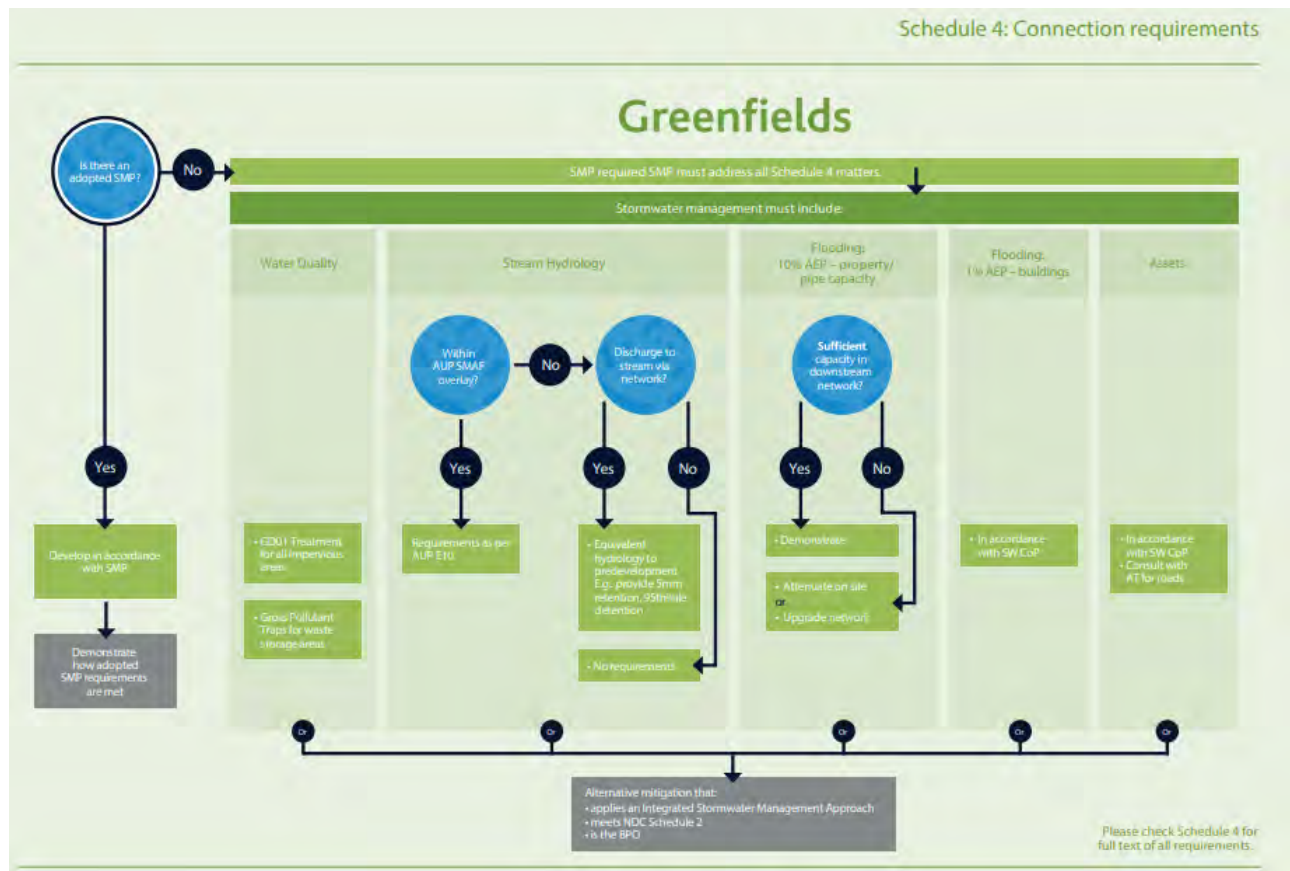


Figure 3: NDC Greenfield Connection Requirements Workflow

3.2 AUP Requirements

Table 1 shows stormwater management plan requirements, based on the AUP (OiP) for the Site.

Table 1: Stormwater requirements of the Site (AUP)

Clause	Description
E36.2.3	Subdivision, use and development on rural land for rural uses is managed to ensure that the risks of adverse effects from natural hazards are not increased and where practicable are reduced
E36.2.16	In rural areas, avoid where practicable locating buildings accommodating more vulnerable activities in the 1 per cent annual exceedance probability (AEP) floodplain and manage other buildings and structures so that flood hazards are not exacerbated.
E39.3.30(a)	The treatment and disposal of stormwater in a way that does not lead to significant adverse off-site effects including degraded water quality, erosion, land instability, creation or exacerbation of flooding
E39.6.1.3.1	For all proposed sites capable of containing a building, or for cross-lease, unit title, strata title or company lease, each building must be designed and located so that provision is made for all of the following services: (a) collection, treatment and disposal of stormwater;
E39.6.1.5(2)	Stormwater must exit the site in a location that does not increase the risks of hazards to downstream properties

3.3 Auckland Council Discussion

A discussion was conducted on March 21, 2024, with Auckland Council, represented by Steve Cavanagh (Development Engineer). The following are the key outcomes of the meeting:

- It was confirmed that the Site is not located in a 'Stormwater Management Area Flow' zone and therefore hydrological mitigation is not required.
- An assessment will be provided by Aurecon with regards to water quantity and quality management for Auckland Council approval.

3.4 411 Wayby Valley Road Water Treatment Plant – Stormwater Site Assessment (Dated: 2024-04-09)

The previous memo presented the stormwater strategy of the original project site, with a focus on maintaining the pre-development flows, and a goal of preventing any amplified negative effects to the surrounding and downstream areas. The discussions with Auckland Council (Section 3.3) were also considered in the stormwater strategy, which excluded any requirements for SMAF, but provided an assessment for water quantity (10- and 100-year ARIs, with climate change +2.1 °C temp. increase) and quality.

Water Quality measures were not included in the previous stormwater strategy since the Site is in a very low traffic area, with its development only requiring less than 30 parking slots, and less than 1000 m² of parking space. Based on the *AUP Section E9. Stormwater Quality – High Contaminant Generating Car Parks and High Use Roads*, the Site is not considered as a highly contaminated area, and did not require any water quality treatment measures.

Generally, the previous stormwater strategy for water quantity recommended to convey flows towards the external flow paths, as fast as possible to prevent the coinciding of the time of peak flows of the Site, and the Hoteo River. Attenuating measures can ultimately decrease the peak flow, but can also stretch the hydrograph, and potentially add to the peak flow of the Hoteo River when peak times coincide. As a result, attenuating the peak flow potentially increases the impact to the downstream buildings.

4 Design Rainfall

Rainfall depths have been derived from TP108 rainfall maps and adjusted for climate change using the adjustment factors provided in *The Auckland Code of Practice for Land Development and Subdivision: Chapter 4: Stormwater* (version 4). The rainfall depths used in the analysis are shown in Table 2

Based on the AC SWCoP (version 4), the climate change adjustment assumes a 2.1°C temperature increase for the 10-year ARI, while a 3.8 °C temperature increase for the 100-year ARI, by year 2090.

Table 2: Design Rainfall Intensity and Depth

Rainfall Events	TP108 24 hr Rainfall Depth (mm)	TP108 24hr Rainfall Depth + CC (mm) +2.1C – 10-year; +3.8C – 100-year	10-Minute rainfall intensity + Climate Change (mm/hr)
10-year ARI	181	212	156
100-year ARI	273	362	280

5 Peak flow assessment

The proposed development increases the imperviousness of the site from being a completely greenfield area, to approximately 47% impervious. This will change the local hydrology that discharges to the surrounding areas. Table 3 shows the changes to the project site's permeability, pre- and post- development.

It is to be noted that the proposed development area is based on the preliminary design layout.

Table 3: Pre- and Post-development changes to Site catchment permeability

Scenario	Impervious Area (m ²)	Pervious Area (m ²)	% Impervious	Total (m ²)
Pre-development	0	11927	0	11927
Post-development	5580	6347	47%	11927

A peak flow assessment was conducted based on the TP108 and SWCoP V4 guidelines for both the Pre- and Post-Development Scenarios. The Pre-Development Scenario comprises of the existing site conditions (completely greenfield), and the existing rainfall depths without climate change. The Post-Development Scenario includes the proposed development of the Site, with rainfall depths adjusted to climate change conditions, namely a 2.1 °C increase for the 10-year ARI, and a 3.8 °C increase for the 100-year ARI.

Table 4 shows the calculated discharge, and respective percentage changes, for the existing and proposed conditions.

Table 4: Pre- and Post-development Peak Flows

Scenario	Unit	10-Year ARI peak flow	100-Year ARI peak flow
Pre-development (no CC)	m ³ /s	0.26	0.45
Post-development (with CC)	m ³ /s	0.40	0.77
Difference	m ³ /s	0.14 (+53%)	0.32 (+71%)

6 Stormwater Management Plan

A high-level stormwater management assessment for the Site was carried out in accordance with the following guidelines:

- Auckland Regionwide Stormwater Network Discharge Consent (NDC) – Schedule 4: Connection Requirements
- Auckland Unitary Plan (Operative in Part)
- Initial discussion with Auckland Council has been carried out and flood model inputs have been provided by Healthy Waters (Appendix A).

Based on the undertaken site assessment, the high-level stormwater management plan (SMP) is designed to be consistent with the Regionwide NDC, AUP, and AC SWCoP V4 requirements summarised in the diagram shown in Figure 4. Therefore, both categories will need to be covered in the SMP. Refer to Section 6.1 for Stormwater Disposal, Section 6.2 for Stormwater Quality for further detail.

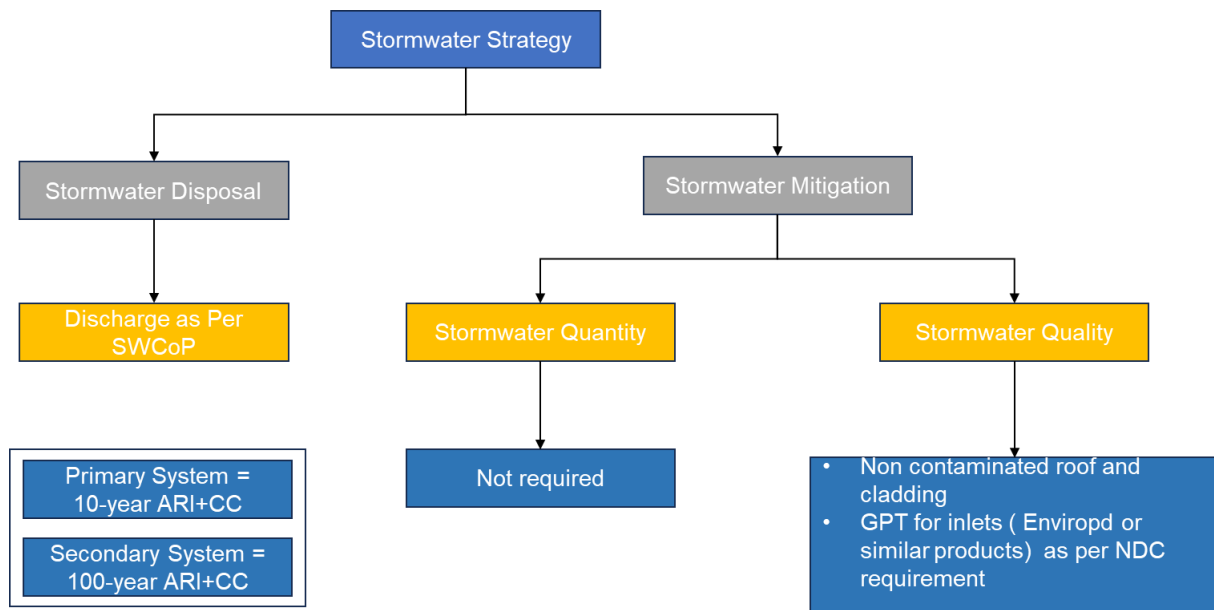


Figure 4: Proposed stormwater strategy for the Site

6.1 Stormwater Disposal

Figure 5 shows the proposed disposal areas of the excess runoff generated from the Site. Two low points have been determined along the alignment of the potential swale, located at the eastern boundary. Disposal Point 1 intersects an existing overland flow path within the project area, while Disposal Point 2 has a natural gully that leads to an existing overland flow path located at the adjacent property (Option A). Another option is to discharge to an existing open channel near the southeastern boundary which can also be a conveyance towards the tributary leading to the Hoteo River (Option B).

Figure 5 Also shows that the adjacent property is within a flood plain and is naturally flooded in extreme rainfall events. Even if the adjacent property is within a naturally flooded area, Auckland Council can potentially require us to seek approval from the property owner for the Site to discharge its collected excess runoff.



Figure 5: Project Site Disposal Points

6.1.1 Option A

Figure 6 shows the proposed swale that will run across the landscaping and clearance zone areas of the Site. The survey data collected was also used to perform a profile assessment on the feasibility of the swale, considering its overall grade and alignment. Indicative bed slopes were developed, with the objective of hugging the overall terrain in order to avoid any major cuts or fills that might require slope protection measures, or huge embankments. Generally, excess runoff will be collected by the swale and are directed towards 2 disposal points. Table 5 shows the pros and cons of the proposed disposal strategy.

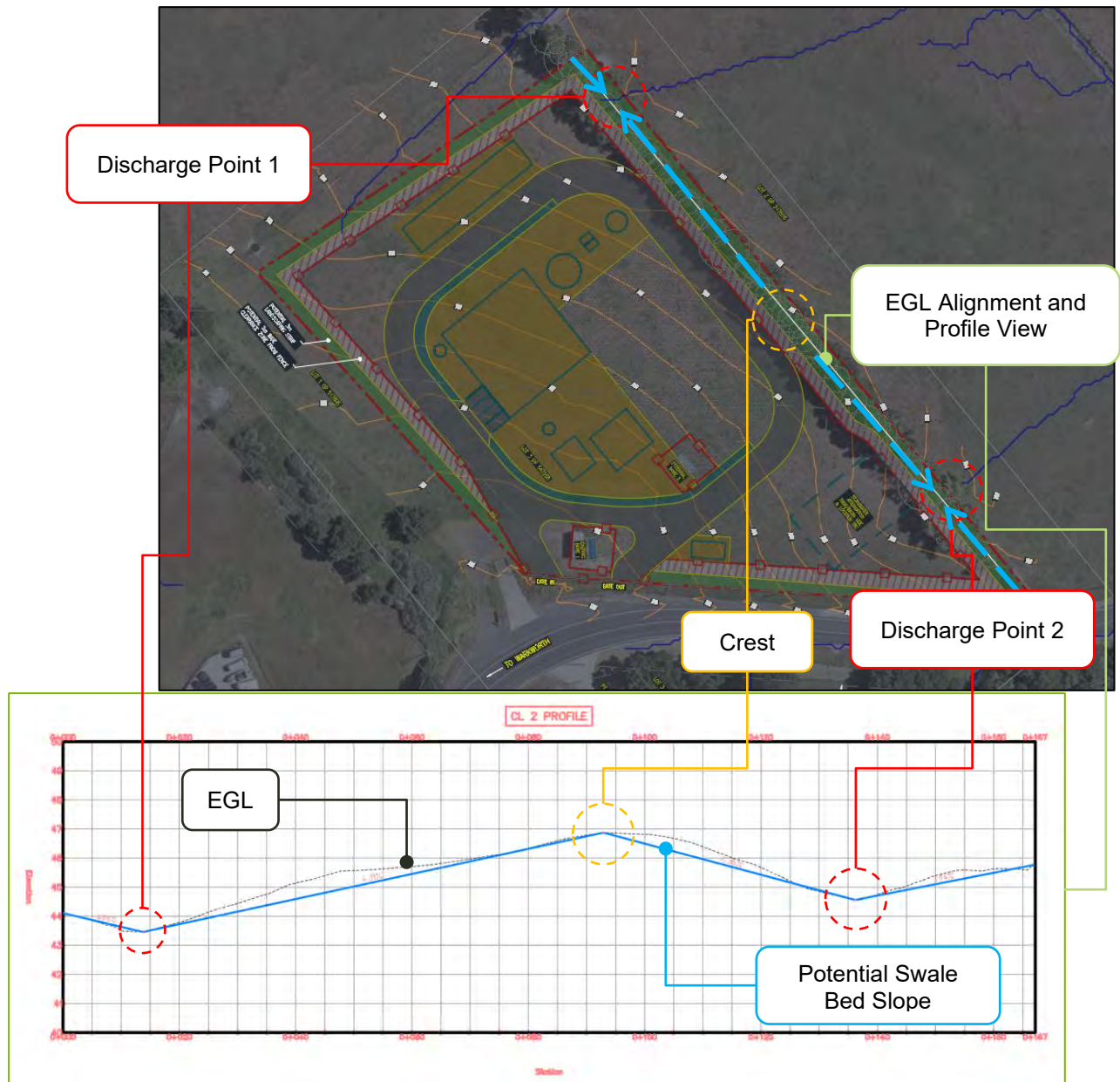


Figure 6: Profile View Assessment of Option A

Table 5: Stormwater Disposal Pros and Cons

Pros	Cons
Follows the overall terrain of the Site	Relies on discharge through private property
Natural discharge point of the site is utilized	

6.1.2 Option B

The same profile assessment was also conducted for Option B, which will force the swale to slope towards the open channel near the southeastern corner. This will utilize the existing open channel located at the adjacent property, which eventually discharges to the Hoteo River. Confirmation on-site

is needed to locate exactly the end of the open channel, since ideally, we should be discharging within the Site. In case that the end of the open channel is located outside of the Site, then it would require us to seek approval from the adjacent property owner.

The capacity of the said open channel needs to be assessed, and potentially be improved, if needed. Figure 7 shows the profile view assessment of the Option B. The indicative bed slope of the swale will require fills in certain parts of the existing topography, to attain a 0.40% slope. Table 6 shows the pros and cons of Option B.

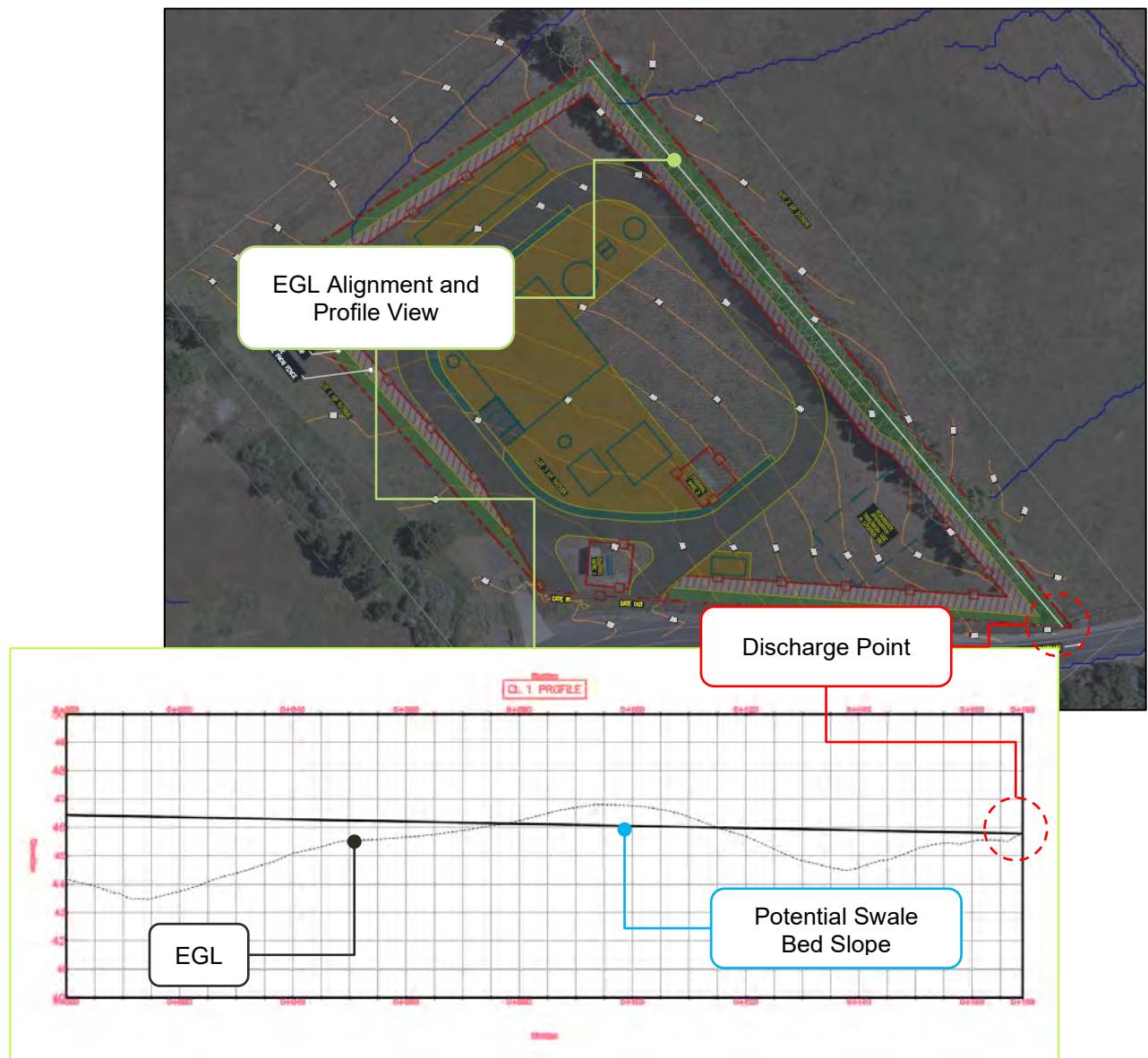


Figure 7: Profile View Assessment of Option B

Table 6: Option B Stormwater Disposal Pros and Cons

Pros	Cons
Has an existing open channel that naturally conveys water to the river	Requires approval from AT for design

	Capacity of the open channel needs to be confirmed, and potentially improved
	Possibility of having a reverse grade for the swale to connect to the open channel
	Will require heavy earthworks such as filling and cutting in some areas

6.2 Stormwater Mitigation

6.2.1 Water Quality

Figure 2 shows the proposed development of the Site, with all the water treatment facilities and chemical storages located indoors. It also shows that the Site only needs four parking slots, with an approximate total area of 80 m².

Since the treatment facilities are located indoors, it is expected that discharge will be contained within the facility and not contaminate the surrounding environment through the stormwater system in an event of a chemical spill. Additionally, according to *Section E9: Stormwater Quality – High Contaminant Generating Car Parks and High Use Roads*, of the AUP, only developments with more than 1000 m² of parking area is considered to be a source of highly contaminated runoff. Inert building materials for the roofing and cladding will also be used to prevent any changes to the pre-development conditions of the Site.

Overall, the Site is concluded as a low contaminant generating area.

The proposed water quality mitigations for the Site comprise of:

- All building materials shall be inert and non-contaminant generating.
- Gross pollutant traps, as per the NDC requirements, in commercial/industrial waste storage/handling or loading/unloading areas.

6.2.2 Stream Hydrology – Mitigation from Stream Protection

As per the previous discussions with Auckland Council (Section 3.3), it was confirmed that the Site is located outside of the SMAF control areas, therefore hydrological mitigation in the form of retention and detention is not required.

6.2.3 Flooding

Stormwater Quantity Mitigation for Stormwater Network Capacities (10-year ARI+CC events)

Stormwater Networks are considered as the primary conveyance system that has a capacity up to a 10-year ARI + CC rainfall event. In the case of the Site, no stormwater networks are present, and most of the excess runoff are conveyed through natural overland flow paths, or as a sheet towards the tributary of the Hoteo River, at the eastern side of the Site.

The strategy utilises a swale at the northeastern boundary of the Site where runoff can be naturally collected and eventually discharged towards either the overland flow path located at the northern part of the Site, or at the natural gully which connects to the overland flow path near the southeastern section (Figure 8). For consistency, the NDC requirements for Stormwater Network capacities (10-year ARI + CC) will be used to design the capacity of the swale. No peak flow control measure is needed as long as the swale can accommodate the 10-year ARI + CC rainfall event.



Figure 8: Stormwater Swale

Stormwater Quantity Mitigation for Downstream Flooding (100-year ARI+CC events)

The secondary stormwater system mainly caters to stormwater runoff from less-frequent rainfall events, i.e. rainfall events of 100-year ARI + CC. This is higher than the capacity of the stormwater network and can induce floods to properties and buildings.

An impact assessment of the proposed development has been considered in the following three locations (refer to Figure 9 and Figure 10):

Location 1: the downstream neighbouring property (487 Wayby Valley Road).

Location 2: the floodplain affecting existing culvert (SAP ID 3000109886) at Wayby Valley Road downstream of the Site.

Location 3: the floodplain along Hoteo River downstream of the Site.

Runoff from the culvert (Location 2) will merge with the main reach of the catchment, the Hoteo River (Location 3), and will eventually discharge to the Kaipara Harbour. AC GeoMaps show that the upstream catchment area where the nearest stream to the Site merges with the Hoteo River (Location 3) is 183.3 km². Overall, the total catchment area, until the outlet towards the Kaipara Harbour, is 360 km². This concludes that the Site is situated in the lower half of the catchment of the Hoteo River.

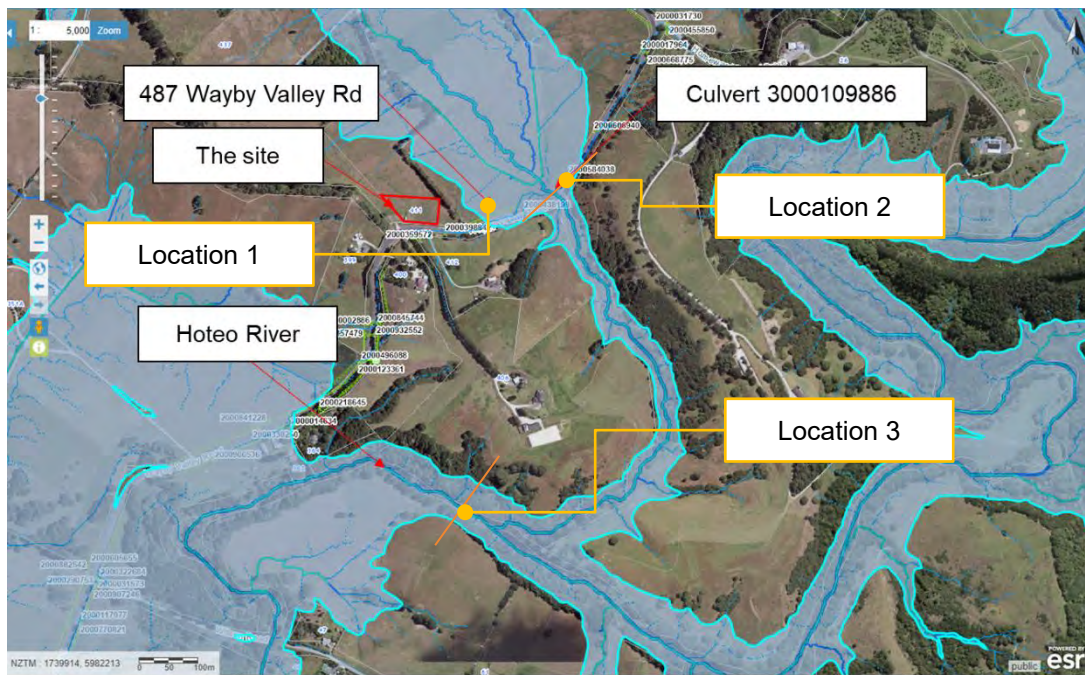


Figure 9: Stormwater Quantity Mitigation Locations Analysis

Based on AC GeoMaps and available aerial photography, there are no existing structures within the neighbouring property of 487 Wayby Valley Rd, downstream of the Site. In addition, it is proposed that the runoff discharges as sheet flow towards the neighbouring property. By considering the AUP requirements for a rural area, the impact of the development due to the increase of the peak flow discharging from the site does not impact on any downstream building structure at the downstream neighbouring property. Therefore, the impact of the increasing peak flow at the downstream property is considered minor.

There is an existing culvert downstream of the Site under Wayby Valley Road (Location 2), conveying stormwater runoff from its contributing upstream catchment area towards the southeast (Figure 10). Auckland Council Healthy Waters provided the flow hydrograph at the eastern side of the road for a 100-year ARI + CC (+3.8 °C) rainfall. The results show that the time to peak of the flow at this location is 7 hours after the peak rainfall at 12:00. The time to peak of the flow from the Site to reach location 2 was computed to be 10 minutes, which is considerably faster than the peak of the stormwater runoff from the upstream catchment.

Based on flow hydrograph (Location 3) provided by Auckland Council Healthy Waters, the peak discharge for the Hoteo River occurs at around 19:00, 7 hours after the peak rainfall at 12:00. Comparing the time of peak of the river with the time of peak of the Site, additional runoff from the development of the project Site should be discharged as quickly as possible, to prevent coincidence of the time of peak flow. Given that the surrounding communities are classified as rural lands, vulnerability is assumed to be low, which consequently ensures that no flood risk is imminent.

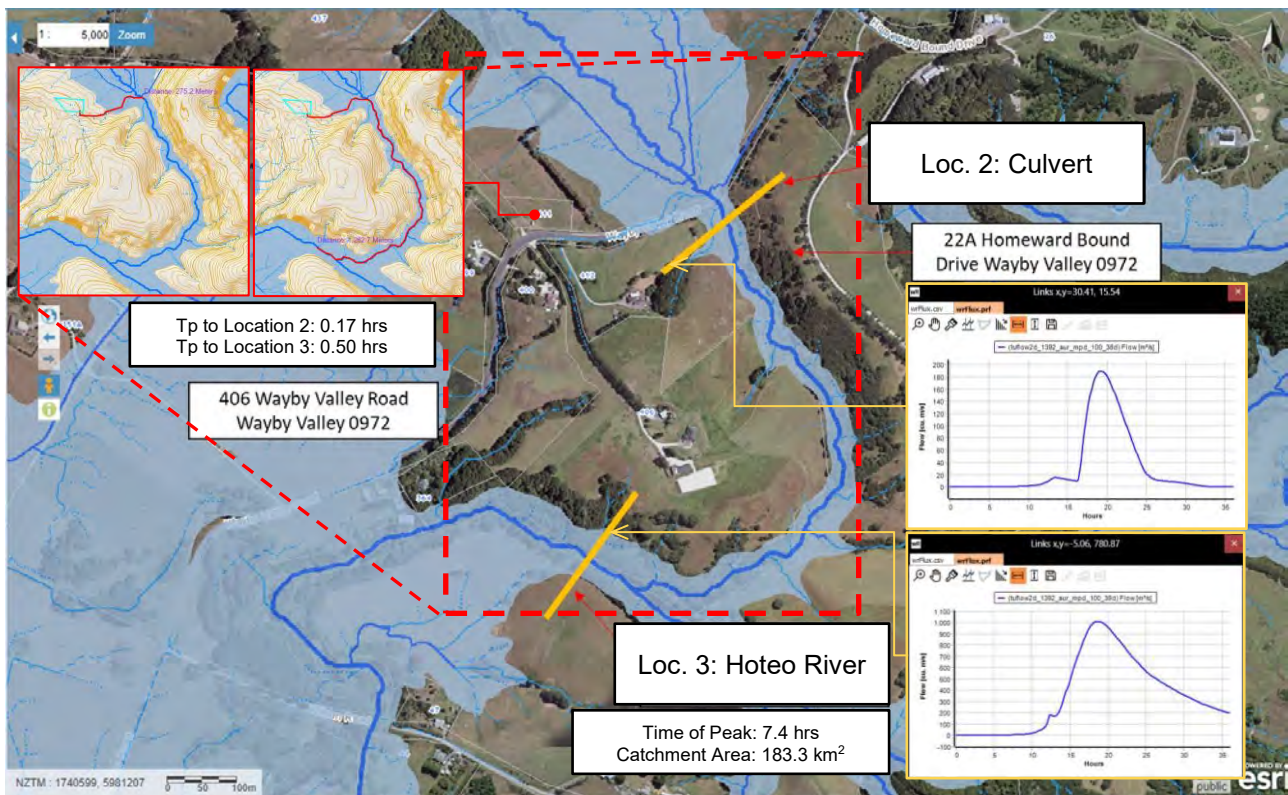


Figure 10: Hydrograph Analysis of Two Cross Sections near the Project Site

By considering the above-mentioned assessment, it is proposed to discharge the flow from the site with no water quantity mitigation. Table 7 shows the benefits and risks of this mitigation scheme.

Table 7: Benefits and Risks - No Attenuation

Benefits	Risks
No need for any attenuating structures and measures	Addition of houses, buildings and structures at the adjacent property will change the overall vulnerability, and consequently, a higher flood risk
Minimal water quantity mitigation measures	Disapproval of the adjacent property owner to discharge excess runoff to their area

6.3 Additional Considerations

The overall approach of the management plan is to discharge the excess runoff to natural overland flow paths near the Site as quickly as possible, given that no high flood risk is eminent. The approach is to be approved by Auckland Council Healthy Waters.

In condition of water quantity mitigation requirement by Auckland Council Healthy Waters, a stormwater mitigation device may not required to mitigate the stormwater runoff. Table 8 shows the volumes needed for each component of the Stormwater Management Plan, as detailed in the NDC. These volumes will be used if stormwater attenuating device such as tanks or ponds are required later and will be incorporated in the overall development.

Table 8. Excess Runoff Volumes for Attenuation

NDC Component	ARI	Pre-Development Volume [m ³]	Post-Development Volume [m ³]	Difference - Potential Attenuation Volume [m ³]
Stream Hydrology	95 th Percentile	69	225	+156 (+226%)
Flooding – Pipe Capacities	10-year	1388	2066	+678 (+49%)
Flooding – Downstream Areas	100-year	2388	3801	+1413 (+59%)

The Current site layout has the potential to accommodate the maximum attenuation volume of 1,413m³ across all attenuation devices as indicated in Table 8 above. Location of the attenuating device will be confirmed in the future stages of design, since this will be affecting the other facilities within the development. Table 9 shows the benefits and risks of the attenuation device.

Table 9: Benefits and Risks - with Attenuation

Benefits	Risks
All flows are ensured to maintain pre-development levels and existing conditions	Will need a huge area for the stormwater attenuating structure
Development does not affect any flows connected to the Site	More construction works is needed
	More complex planning and design to fit all the components of the water treatment plant
	Disapproval of the adjacent property owner to discharge excess runoff to their area

7 Conclusion

The memorandum including Table 10, summarises the proposed Stormwater Management Plan for the Wellsford Water Treatment Plant. It is based on a Stormwater Assessment that included peak flow analysis and identified potential disposal methods and mitigation measures for excess runoff.

Three potential stormwater disposal locations have been identified based on existing site topography:

1. **Northeastern corner** – This is the lowest point on site and follows a natural overland flow path toward the Hoteo River.
2. **Southeastern gully** – Discharge could occur into an existing gully that connects to an overland flow path on an adjacent property.
 - o *Note: Discharge across private land may require the neighbouring owner's approval, subject to Auckland Council requirements.*
3. **Wayby Valley Road open channel** – A possible connection point, but currently considered the least viable option as it depends on final site levels, which are yet to be confirmed.

The Stormwater Mitigation plan involves three components: Water Quality, Stream Hydrology, and Flooding, as per the Regionwide Stormwater Network Discharge Consent. No Water Quality mitigation is needed for the site since it was concluded that it is a low contaminant generating area. No attenuation is needed for the Stream Hydrology since no stormwater network is present around the area and all excess runoffs will course through overland flow paths. Mitigation for Stormwater Network capacities (10-year ARI +CC) only cover the development of a swale along the northeastern boundary. Finally, no

attenuation structures are required for the Mitigation for Downstream Areas to prevent any coincidence of the peak flows of the project Site, and the Hoteo River. Runoff will be discharged as soon as possible, given that the flood risk at the downstream areas is maintained to a minimum level – little to no vulnerability.

Additional considerations to the management plan are to provide attenuating structures, only if the council requires for the excess runoff to be stored and discharged gradually. This will result to placing stormwater tanks or ponds up to a maximum combined capacity of 1,413m³ which would take up a lot of space in the project site.

Table 10: Benefits and Risks - with Attenuation

Stormwater Management Plan (SMP) Summary Table			
NDC Component	ARI	Potential Attenuation Volume [m ³]	Comment
Stream Hydrology	95 th Percentile	156m ³	Not required unless requested by Healthy Waters
Flooding – Pipe Capacities	10-year	678m ³	Not required unless requested by Healthy Waters
Flooding – Downstream Areas	100-year	1413m ³	Not required unless requested by Healthy Waters
Site Area	11,800m ²		
Impervious Area – Stage 1	Approx.. 3.800m ²		
Impervious Area – Stage 2	Approx.. 5,000m ²		
Receiving Environment	Hotea River		
Zone (AUP)	Rural – Rural Production		
Stormwater Disposal Method	Overland flow discharge proposed; alternative options under consideration (e.g. diversion to AT roadside channel)		
Hydraulic Neutrality Achieved	No – Runoff will be discharged as soon as possible, given that the flood risk at the downstream areas is maintained to a minimum level – little to no vulnerability		
Water Quality Treatment Provided	None required – site has low traffic volumes and parking area is <1,000 m ²		
Water Quantity Control Provided	Not required unless requested by Healthy Waters.		
Peak Flow Mitigation	Refer Table 8 above		
Overland Flow Path Affected	No mapped overland flow path affected		
Public Network Connection	Potential connection to Auckland Transport (AT) roadside channel, subject to feasibility and design outcomes		
Consent / Approval Required	NDC or EPA, depending on final stormwater discharge option selected		

Schedule 4 Requirements Met	Further assessment of Schedule 4 requirements will be undertaken during future design phases. At this Notice of Requirement stage, the stormwater management approach is indicative and subject to refinement based on site-specific investigations and final outlet design
Designation	Water supply purposes - pump station and associated structures (Proposed)

8 Limitations

This memorandum, prepared by Aurecon for Watercare, is intended solely for the use and reliance of Watercare, strictly for the purposes agreed upon between Aurecon and Watercare. Aurecon otherwise disclaims responsibility to any party other than Watercare in connection with this report. Additionally, Aurecon excludes implied warranties and conditions, to the extent legally permissible.

The opinions, conclusions, and any recommendations contained in this memo are based on the conditions and information available at the time of the memo's preparation.

The opinions, conclusions, and any recommendations presented in this memo rely on the assumptions articulated by Aurecon within the memo. Aurecon disclaims any liability arising from the accuracy or validity of these assumptions.



Appendix A

Auckland Council Flood Model Results

AUCKLAND COUNCIL HEALTHY WATERS

RESPONSE TO REQUEST FOR FLOODING INFORMATION



Ref:	8703681283		
Requestor details	Name	Business Name	email
	Nariman Valizadeh	Aurecon	Nariman.Valizadeh@aurecon group.com

Site Address	Catchment / Model
411 Wayby Valley Road, Wayby Valley	Regionwide Rural Rapid Flood Model 2022 Unit R

INFORMATION TO APPLICANT

This Document provides current information held by Auckland Council relating to predicted flooding levels and extent within the catchment that includes the property noted above.

The information is extracted from a catchment wide modelling study. The study does not consider effects of built structures or potential blockage of piped infrastructure and should not be assumed to be a detailed representation of potential flooding impact that will occur within a particular site.

Disclaimer

Auckland Council gives no warranty as to the accuracy and completeness of any information given and accepts no liability for any error, omission or use of the information. The information provided does not preclude the need for an appropriate site-specific assessment and cannot be construed as endorsement, or approval, by Auckland Council for any development

Special information requirements Auckland Unitary Plan Chapter E36 Section E36.9.2
A hazard risk assessment must be undertaken when; subdivision, use of, or development requiring resource consent is proposed to be undertaken on land which may be subject to the 1 per cent annual exceedance probability (AEP) floodplain or overland flow paths.
A hazard risk assessment report must accompany a resource consent application for the subdivision, use of, or development referenced above. The flooding hazard risk should be assessed for all rainfall event frequencies where flooding of the site occurs.

FLOODING INFORMATION

1% AEP Flooding Information		
Overland Flow: Q_{max}	Not available	Overland flow generally flows Northwest to Southeast, note that there is no defined flow path over the property itself. Please refer to the attached figures for Flow Rate and Velocity for the 1% AEP event for the wider catchment (based on full blockage scenario).
Maximum flooding level	RL 53.35	Refer to the attached figures for a variety of Flood Levels and Flow Depths for the 1% AEP event across the wider site area (based on the flood plain level).

1% AEP Flood Level (3.8-degree CC)



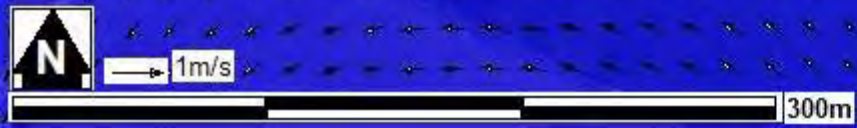
1% AEP Flood Level - Localised (3.8-degree CC)



50m

2022, LVL1 - Regional, 2016 LIDAR, AUP MPD includes CC
DS Boundary: MHWS (ED) / MHWS+1m (MPD)
Flood plains published

1% AEP Flow Rate
(3.8-degree CC)



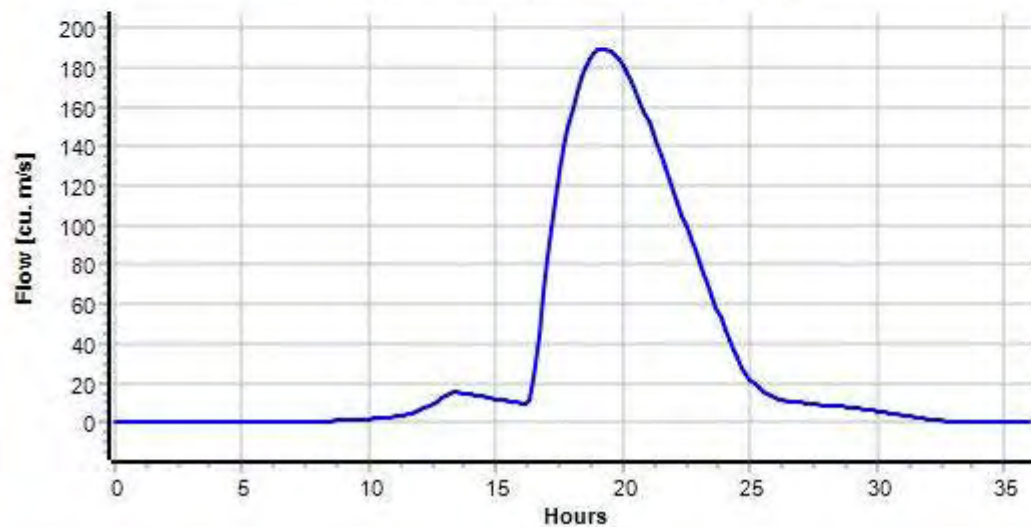


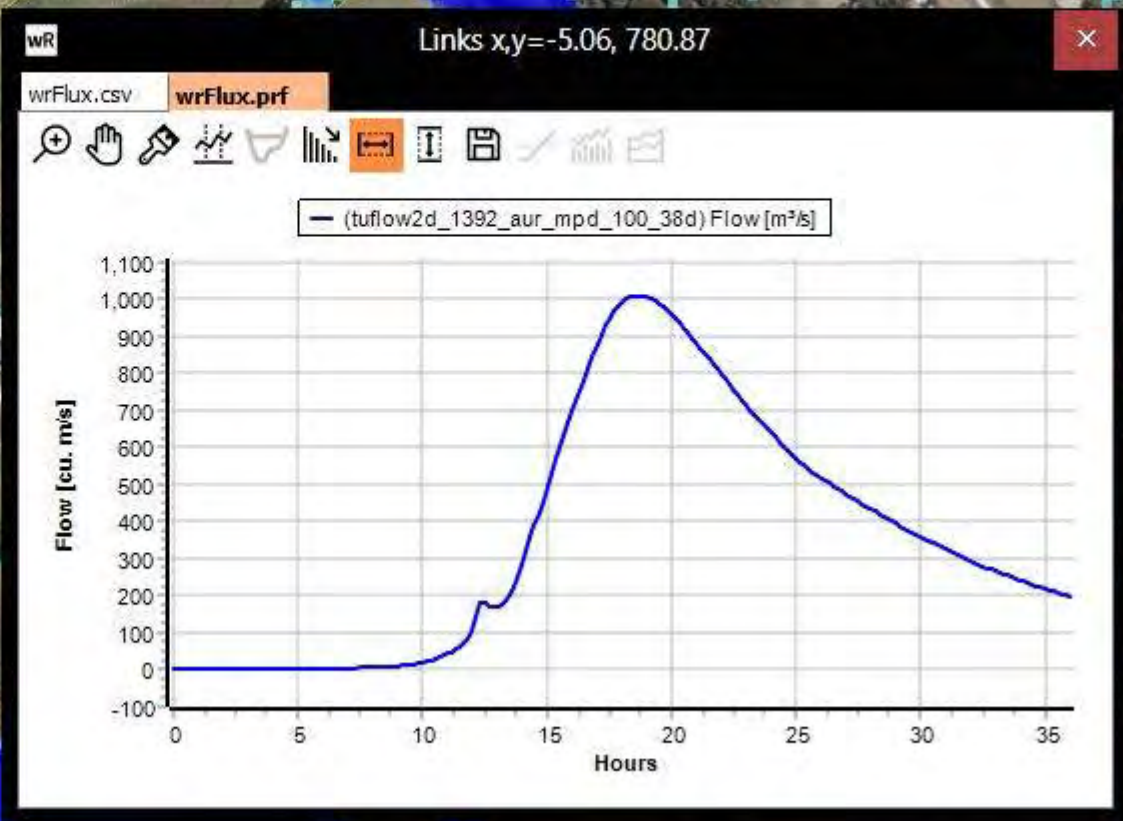
wR Links x,y=30.41, 15.54

wrFlux.csv wrFlux.prp



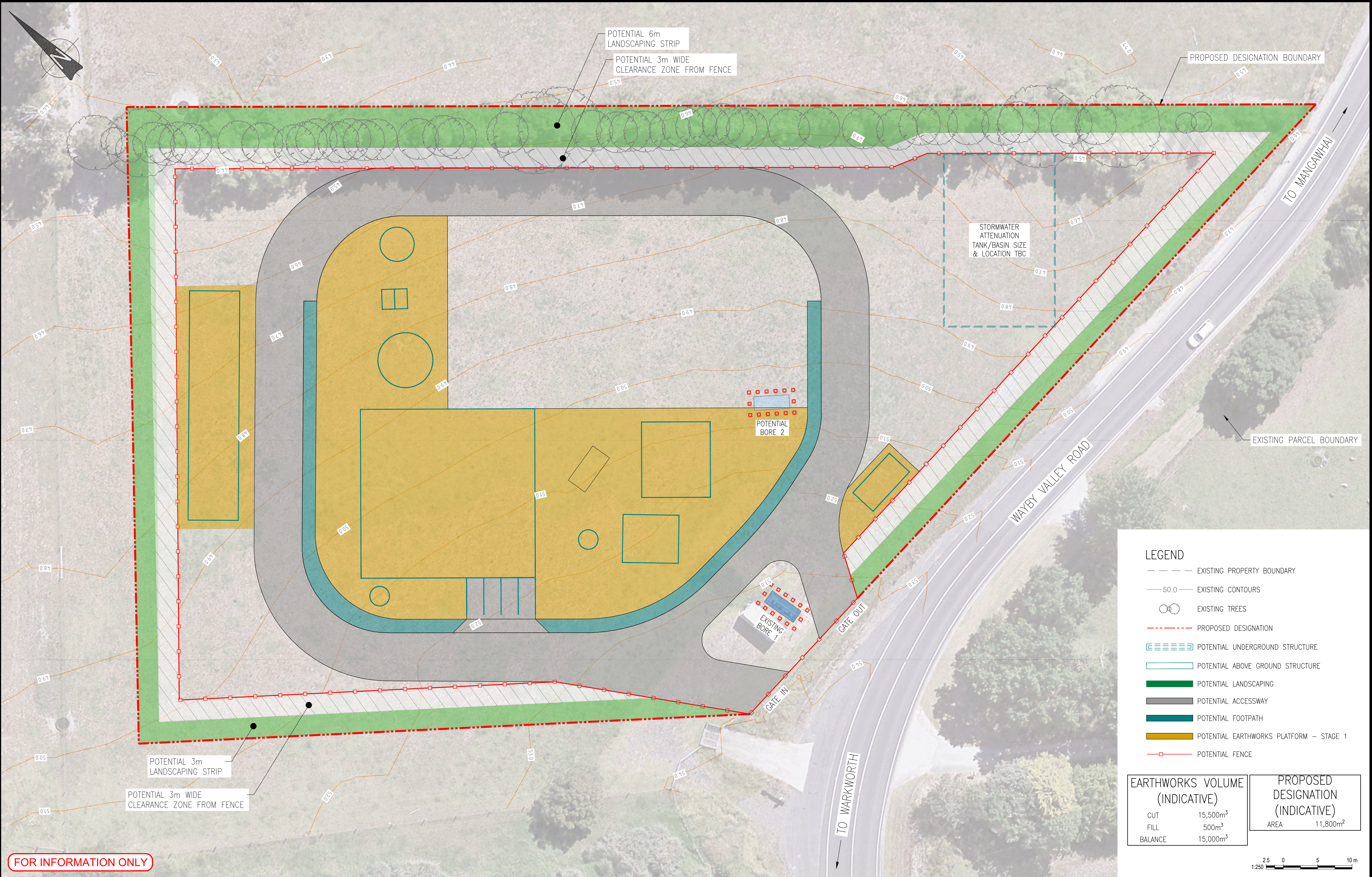
— (tuflow2d_1392_aur_mpd_100_38d) Flow [m³/s]





Appendix B

Wellsford Water Treatment Plant – Potential Site Layout



FOR INFORMATION ONLY

ISSUE	DATE	AMENDMENT	BY	APPD.	DESIGNED	M.PARK	03-25
4	17.04.25	FOR INFORMATION ONLY	TC		DES. APPROVED	T.CHAN	03-25
3	14.04.25	FOR INFORMATION ONLY	JCM		DRAWN	T. DE LEON	03-25
2	21.03.25	FOR INFORMATION ONLY	TD		DWG. APPROVED	Drawing Approver	-
1	06.02.25	ISSUED FOR DISCUSSION ONLY	TD		WSL DESIGN MGMT.	WSL Design Mgmt.	-
					WSL PROJ. LEAD	WSL Proj. Lead	-

**Watercare**

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WELLSFORD WATER TREATMENT PLANT
CIVIL SERVICES
POTENTIAL SITE LAYOUT

DRAFT

CAD FILE	SKT-LC-0001	DATE	17.04.25
ORIGINAL SCALE	A1 1:250	CONTRACT No.	-
REF. No.	521290-W00065-SKT-LC-0001		
DWG. No.	201XXXX .0YY	ISSUE	4

Appendix C

Hydrology and Peak Flow Assessment

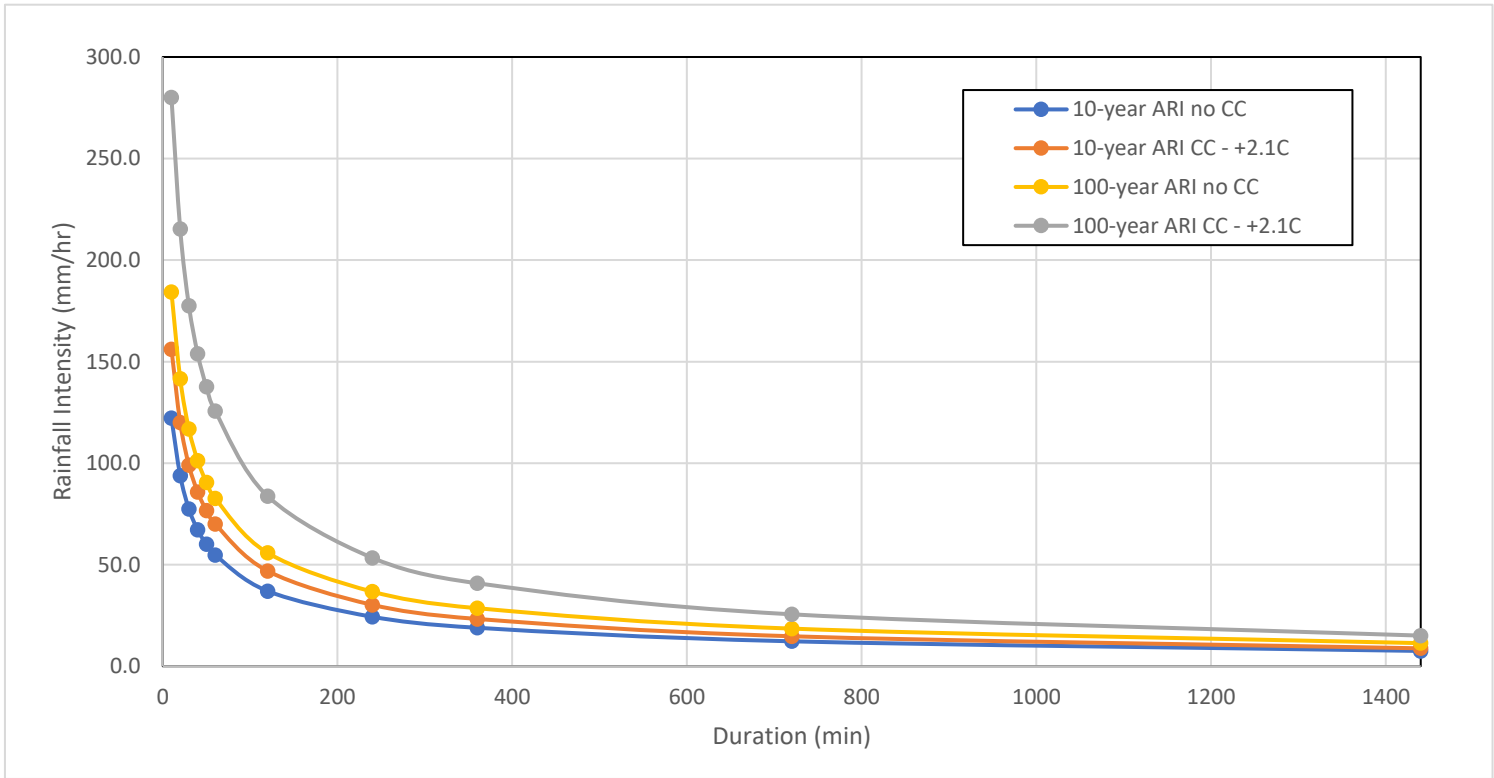
Design Rainfall

Project Summary

Project No.	P521290-065
Project Name	Wellsford WTP
Date	28/03/2025
Designed	Tomas De Leon
Reviewed by	Nariman
File Name	wellsford.xlsx
Sheet Name	Design Rainfalls

	90th percentile	95th percentile	10-year ARI	100-year ARI
24-hour Rainfall depth without climate change	30	45	181	273
Climate Change Factor (10-yr ARI - 2.1°C; 100-yr ARI - 3.8°C)			17.00%	32.70%
24-hour Rainfall depth with climate change (10-yr ARI - 2.1°C; 100-yr ARI - 3.8°C)			211.77	362.27

	Rainfall intensity (mm/hr) without Climate Change		Rainfall intensity (mm/hr) with Climate Change	
Duration (min)	Rainfall Intensity (mm/hr)		Rainfall Intensity (mm/hr)	
	10-year ARI	100-year ARI	10-year ARI	100-year ARI
10	122.2	184.3	156.1	280.1
20	93.9	141.6	120.0	215.3
30	77.4	116.8	99.0	177.5
40	67.1	101.3	85.8	153.9
50	60.0	90.6	76.7	137.6
60	54.8	82.7	70.0	125.6
120	37.0	55.8	46.9	83.8
240	24.4	36.7	30.2	53.4
360	19.0	28.6	23.3	40.9
720	12.3	18.5	14.8	25.6
1440	7.5	11.4	8.8	15.1



Area Summary

Project Summary

Project No.	P521290-065
Project Name	Wellsford WTP
Date	10/03/2025
Designed	Tomas De Leon
Reviewed by	
File Name	wellsford.xlsx
Sheet Name	SW Catchment Areas
dwg:	521290-W00000-SKT-LC-0001_Site_Dev_280325.dwg

Pre-Development Area11926.829

Post-Development Components	Post-Development Area [m2]	
	Impervious	Pervious
Road	2155.928	
Sidewalk	275.583	
Earthworks Stage 1 - A	1786.16	
Earthworks Stage 1 - B	163.379	
Earthworks Stage 1 - C	39.008	
Roofs	1159.522	
Clearance		1189.065
Landscaping		1632.587
Total	5579.58	2821.652
Grand Total	5579.58	6347.249
Total Percent	46.78%	53.22%

Hec-HMS Summary

Project Summary

Project No.	P521290-065
Project Name	Wellsford WTP
Date	10/03/2025
Designed	Tomas De Leon
Reviewed by	
File Name	wellsford.xlsx
Sheet Name	Area_Existing

Scenario	Total Area	Impervious Area (m2)	Pervious Area (m2)	Imperviousness (%)	Area (km2)		CN (Impervious Sealed Roads and Roofs)	CN (Pervious - Urban Lawns)	Ia (mm) Pervious	Longest Flow Path (km)	Slope (m/m)	Channelised Factor		Runoff factor (RF)		tc (min)		tp (min)	
					Impervious	Pervious						Impervious	Pervious	Impervious	Pervious	Impervious	Pervious	Imp.	Perv.
Pre-Development	11926.83	0.00	11926.83	0.00	0.00	0.01	98.00	74.00	5.00	0.17	0.07	0.60	0.80	0.96	0.59	10.00	10.00	6.67	6.67
Post-Development	11926.83	5579.58	6347.25	0.47	0.01	0.01	98.00	74.00	5.00	0.10	0.01	0.60	0.80	0.96	0.59	10.00	10.00	6.67	6.67

Peak Flow Results

Project Summary

Project No.	P521290-065
Project Name	Wellsford WTP
Date	10/03/2025
Designed	Tomas De Leon
Reviewed by	
File Name	wellsford.xlsx
Sheet Name	Peakflow_Results

dwg:

Existing Cover

Proposed Cover

	10-year ARI			100-year ARI			95th Perc.	
	Existing Condition (NoCC)	Proposed Condition (+CC)	Difference	Existing Condition (NoCC)	Proposed Condition (+CC)	Difference	Existing Condition (NoCC)	Proposed Condition (NoCC)
Wellsford Outlet	0.26	0.40	0.14	0.45	0.77	0.32	0.03	0.05
	increase -->			increase -->			71.4%	

Summary Results for Junction "Outlet"

Project: P521290_065_Wellsford_WTP

Simulation Run: Existing 10yr_NOCC

Junction: Outlet

Start of Run: 01Jan2000, 00:00

End of Run: 02Jan2000, 00:00

Compute Time: 10Mar2025, 15:19:54

Basin Model: Existing

Meteorologic Model: Met 10yr

Control Specifications: Control 24hr

Volume Units: ☐ MM ☒ 1000 M3

Computed Results

Peak Discharge: 0.26406 (M3/S)

Date/Time of Peak Discharge: 01Jan2000, 12:03

Volume: 1.38833 (1000 M3)

Summary Results for Junction "Outlet"

Project: P521290_065_Wellsford_WTP

Simulation Run: Proposed 10yrCC

Junction: Outlet

Start of Run: 01Jan2000, 00:00

End of Run: 02Jan2000, 00:00

Compute Time: 10Mar2025, 16:07:11

Basin Model: Proposed

Meteorologic Model: Met 10yrCC

Control Specifications: Control 24hr

Volume Units: ☐ MM ☒ 1000 M3

Computed Results

Peak Discharge: 0.40377 (M3/S)

Date/Time of Peak Discharge: 01Jan2000, 12:02

Volume: 2.06608 (1000 M3)

Summary Results for Junction "Outlet"

Project: P521290_065_Wellsford_WTP

Simulation Run: Existing 95th_NOCC

Junction: Outlet

Start of Run: 01Jan2000, 00:00

End of Run: 02Jan2000, 00:00

Compute Time: 10Mar2025, 15:39:23

Basin Model: Existing

Meteorologic Model: Met 95th

Control Specifications: Control 24hr

Volume Units: ☐ MM ☒ 1000 M3

Computed Results

Peak Discharge: 0.02666 (M3/S)

Date/Time of Peak Discharge: 01Jan2000, 12:03

Volume: 0.14856 (1000 M3)

Summary Results for Junction "Outlet"

Project: P521290_065_Wellsford_WTP

Simulation Run: Existing 100yr_NOCC

Junction: Outlet

Start of Run: 01Jan2000, 00:00

End of Run: 02Jan2000, 00:00

Compute Time: 10Mar2025, 15:21:39

Basin Model: Existing

Meteorologic Model: Met 100yr

Control Specifications: Control 24hr

Volume Units: ☐ MM ☒ 1000 M3

Computed Results

Peak Discharge: 0.45106 (M3/S)

Date/Time of Peak Discharge: 01Jan2000, 12:03

Volume: 2.38810 (1000 M3)

Summary Results for Junction "Outlet"

Project: P521290_065_Wellsford_WTP

Simulation Run: Proposed 100yrCC

Junction: Outlet

Start of Run: 01Jan2000, 00:00

End of Run: 02Jan2000, 00:00

Compute Time: 11Mar2025, 14:36:07

Basin Model: Proposed

Meteorologic Model: Met 100yrCC

Control Specifications: Control 24hr

Volume Units: ☐ MM ☒ 1000 M3

Computed Results

Peak Discharge: 0.77327 (M3/S)

Date/Time of Peak Discharge: 01Jan2000, 12:02

Volume: 3.80090 (1000 M3)

Summary Results for Junction "Outlet"

Project: P521290_065_Wellsford_WTP

Simulation Run: Porposed 95th_NOCC

Junction: Outlet

Start of Run: 01Jan2000, 00:00

End of Run: 02Jan2000, 00:00

Compute Time: 12Mar2025, 12:18:29

Basin Model: Proposed

Meteorologic Model: Met 95th

Control Specifications: Control 24hr

Volume Units: ☐ MM ☒ 1000 M3

Computed Results

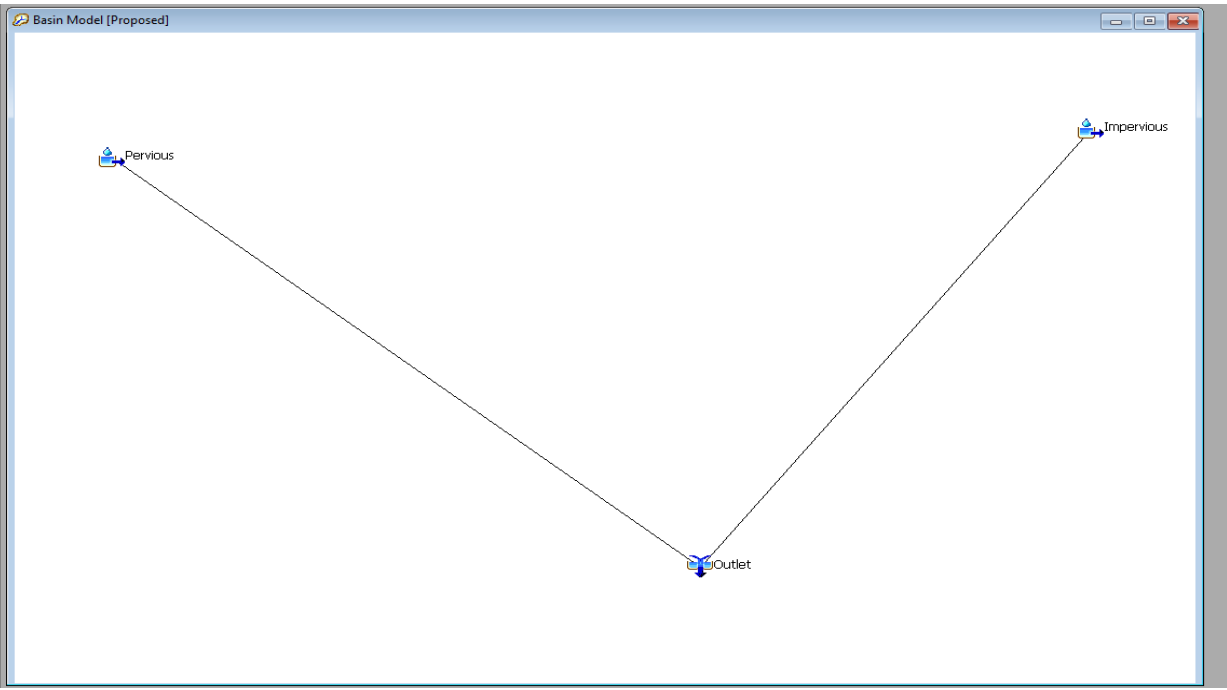
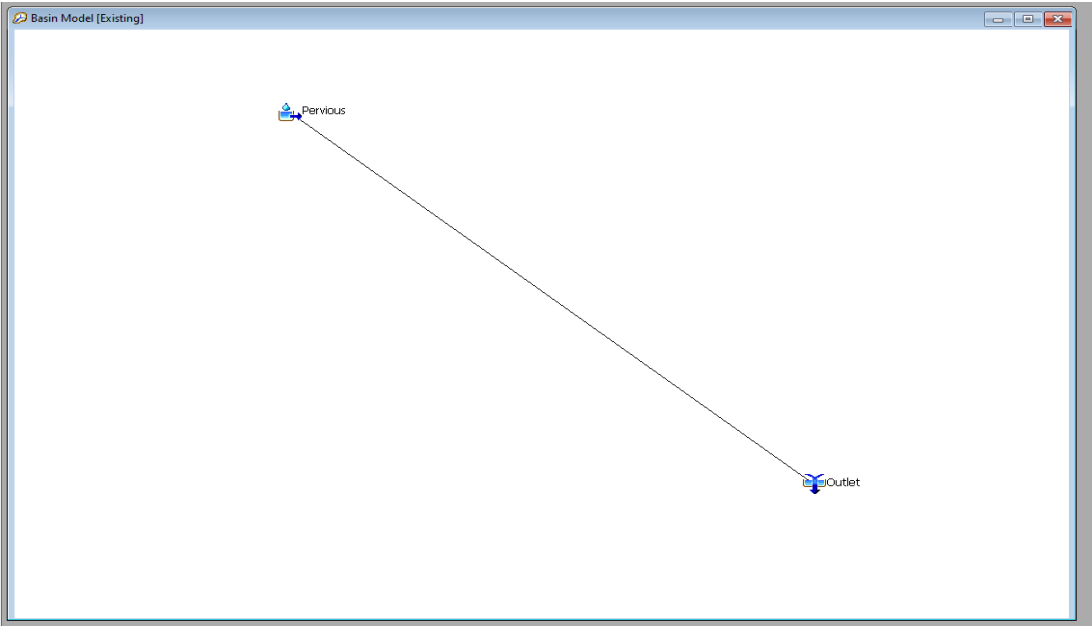
Peak Discharge: 0.05444 (M3/S)

Date/Time of Peak Discharge: 01Jan2000, 12:03

Volume: 0.30502 (1000 M3)

Design summary

Pre-development condition		
Total impervious area	0	m ²
Total pervious area	11927	m ²
% total impervious	0	%
% total pervious	100	%
Post-development condition		
Total impervious area	5579.58	m ²
Total pervious area	6347.42	m ²
% total impervious	46.78	%
% total pervious	53.22	%
Volumes		
Post-development runoff volume	225.14	m ³
Pre-development runoff volume	69.08	m ³
Hydrology mitigation volume	156.06	m ³
Retention volume		
Detention volume	27.9	m ³
	128.16	m ³





					DESIGNED	M.PARK	03-25
					DES. APPROVED	T.CHAN	03-25
4	17.04.25	FOR INFORMATION ONLY	TC		DRAWN	T. DE LEON	03-25
3	14.04.25	FOR INFORMATION ONLY	JCM		DWG. APPROVED	Drawing Approver	-
2	21.03.25	FOR INFORMATION ONLY	TD		WSL DESIGN MGMT.	WSL Design Mgmt	-
1	06.02.25	ISSUED FOR DISCUSSION ONLY	TD		WSL PROJ. LEAD	WSL Proj Lead	-
ISSUE	DATE	AMENDMENT	BY	APPD.		BY	DATE



WELLSFORD WATER TREATMENT PLANT
CIVIL SERVICES
POTENTIAL SITE LAYOUT

DRAFT

CAD FILE	SKT-LC-0001	DATE	17.04.25
ORIGINAL SCALE	A1 1:250	CONTRACT No.	—
REF. No.	521290-W00065-SKT-LC-0001		
DWG. No.	201XXXX .0YY		ISSUE 4

Watercare Services: Revised Wellsford Water Treatment Plant Proposal– Updated Transportation Assessment Report

Document no: IS529800

Revision no: 2
24 June 2025

Watercare Services Revised Water Treatment Plant Proposal at Wellsford



Watercare Services: Revised Wellsford Water Treatment Plant Proposal– Updated Transportation Assessment Report

Client name: Watercare Services
Project name: Watercare Services Revised Water Treatment Plant Proposal at Wellsford
Document no: IA312400-001 **Project manager:** Andrew Prosser
Revision no: Rev 2. **Prepared by:** Andrew Prosser
Date: 24 June 2025 **File name:** Watercare WTP Wellsford Updated TA
Doc status: Final

Document history and status

Revision	Date	Description	Author	Checked	Reviewed	Approved
1	8 May 2025	Draft Report	A. Prosser	A. Prosser	T. Bell	A. Prosser
2	24 June	Final Report	A. Prosser	A. Prosser	T. Bell	A. Prosser

Distribution of copies

Revision	Issue approved	Date issued	Issued to	Comments
1	A. Prosser	8 May 2025	Client	Draft report for feedback / comment
2	A. Prosser	24 June 2025	Client	Final Report

Jacobs New Zealand Limited

Carlaw Park
12-16 Nicholls Lane, Parnell
Auckland 1010
PO Box 9806, Newmarket
Auckland 1149
New Zealand

T +64 9 928 5500
F +64 9 928 5501
www.jacobs.com

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Important note about this report

The sole purpose of this report is to assess the potential transport-related effects (if any) of the construction and operation of a new Wellsford Water Treatment Plant (WTP) on vacant rural land at 411 Wayby Valley Road. This report is an update of a previous transportation assessment (Report IA312400-002, dated 29 April 2024) completed for the original Notice of Requirement (NOR) and proposed WTP located at the same property. Given the level of changes that have occurred to the revised WTP buildings and site arrangements, a new NOR and updated transportation assessment is required.

The traffic movements resulting from operation of the new WTP will include vehicle movements from Watercare Services Limited's (Watercare / the Client) staff conducting weekly water quality tests, transporting supplies and/or completing onsite maintenance activities. When in full operation, the WTP will generate minimal traffic demands on the surrounding transport network. As the predicted traffic demands from operation of the WTP will be very small, the focus of this report relates to the potential transport-related effects from construction of the WTP relative to the local road network, site conditions and planned vehicular access and/or egress facilities.

In preparing this updated report, Jacobs has relied upon, and presumed accurate, any information (or confirmation of the absence thereof) provided by the Client and/or from other sources. Except as otherwise stated in the report, Jacobs has not attempted to verify the accuracy or completeness of any such information.

Jacobs derived the data in this report from information sourced from the Client and/or available in the public domain at the time or times outlined in this report. The passage of time, manifestation of latent conditions or impacts of future events may require further examination of the project and subsequent data analysis, and re-evaluation of the data, findings, observations, and conclusions expressed in this report.

Jacobs has prepared this report in accordance with the usual care and thoroughness of the consulting profession, for the sole purpose described above and by reference to applicable standards, guidelines, procedures and practices at the date of issue of this report. For the reasons outlined above, however, no other warranty or guarantee, whether expressed or implied, is made as to the data, observations and findings expressed in this report, to the extent permitted by law.

This report should be read in full, and no excerpts are to be taken as being representative of the findings. No responsibility is accepted by Jacobs for the use of any part of this report in any other context.

This report has been prepared on behalf of, and for the exclusive use of, Jacobs' Client and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client.

Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this report by any third party.

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1. Introduction

1.1 Project Introduction

Watercare Services Limited (Watercare) is New Zealand's largest wastewater utility provider responsible for the planning maintenance, and operation of water services to communities throughout Auckland.

Watercare captures raw water from 28 different sources, operates 19 water treatment plants, moves it through 88 pump stations and stores it in 95 water reservoirs to ensure it meets drinking water standards. The treated water is then supplied to households and businesses through approximately 9700km of pipeline of different diameters.

Watercare has supplied wholesale water services since 1991 and is a council-controlled organisation (CCO), wholly owned by Auckland Council. Their activities and programmes are funded through user charges and borrowings. They are required by the Local Government (Auckland Council) Act 200/2010 to be minimum cost / cost-efficient services provider.

Watercare's activities are intrinsically linked to the health of people and the natural environment. Auckland's water sources must have sufficient volume and reliability to provide water for the region, and they must be protected from overuse.

Collectively, around 440 million litres of water are sourced per day, treated to the Water Services (Drinking water Standards for New Zealand) regulations 2022, and supplied by Watercare.

Watercare carry out significant work to upgrade and build infrastructure, to maintain levels of service and provide capacity for a fast-growing population. Watercare ensures Auckland and its people continue to enjoy dependable services by upgrading its assets, planning, building, and delivering new infrastructure in cost-efficient ways.

Watercare currently owns and operates the existing Wellsford Water Treatment Plant (WTP) at 362 Wayby Valley Road, Wellsford, Auckland. The existing WTP was established around 1960 and abstracts water from the Hōteio River immediately south of the site, from which water is abstracted to feed into the WTP.

The existing WTP currently serves approximately 2,100 residents in Wellsford and Te Hana and is at capacity and cannot meet the current demands at times. During the summer of 2021/22, for example, water had to be brought in via tanks to meet the community demand for drinking water. The connected population is expected to increase to approximately 4,200, which cannot be met by the existing WTP. Additionally, the existing WTP is at the end of its design life and will need to be upgraded in the future regardless.

Following an assessment of alternative sites, Watercare has identified 411 Wayby Valley Road, Wellsford, as its preferred location for a new, upgraded WTP to replace the existing WTP. The new WTP will take and treat groundwater from an existing production bore on site to meet the future projected water demand and quality in Wellsford and Te Hana. Watercare is seeking to designate (through a notice of requirement (NoR)) the full site to enable the construction of the new WTP and provide for future upgrades on site.

The NoR provides for a new and upgraded WTP that will replace the existing WTP, thereby increasing the capacity and improving the resilience of the water supply network. In doing so, these works will support the future growth and development of the Wellsford and Te Hana area.

1.2 Purpose and Scope

Watercare has engaged Jacobs to prepare an updated Traffic Assessment Report (TAR) for its revised NoR application, which seeks a designation for a new Wellsford WTP at 411 Wayby Valley Road. A previous NoR application and supporting TA report was prepared and approved in 2024.

The current Wellsford water supply is obtained from the Hōteio River. There are several problems with this source and Watercare has secured a groundwater take consent for bores at 411 Wayby Valley Road.

Watercare is also seeking the NoR to designate the site for water supply purposes. The site is 3,500m² in area and its legal description is Lot 3 DP 547258.

This updated TAR includes a refreshed review of the local transport network and its operational condition as well as an assessment of the traffic generation potential of the revised WTP both during construction and when fully operational.

The transport related effects of the proposed works have therefore been assessed and are detailed in this report. As at the time of preparing this revised TAR, its findings and recommendations have not been presented to Auckland Transport nor to Auckland Council.

2. Current Transport Environment

2.1 Site Location and Surrounds

Figures 1 and 2 show the location of the proposed WTP site relative to the wider transport network and its general proximity to SH1, Wellsford and greater Auckland.

Figure 3 provides an aerial view of the site and its immediate frontage on Wayby Valley Road as well as its proximity to adjacent homesteads and/or farming activities. As can be seen in Figure 3, properties immediately adjacent to the proposed site are pastoral farms with at least two lifestyle homesteads accessed opposite the proposed development on Wayby Valley Road.

The proposed WTP site is classified as “Rural – Rural Production Zone” in the Auckland Unitary Plan (Operative in Part) (AUP) enabling a limited number of land uses. It is located approximately 5km from Wellsford.

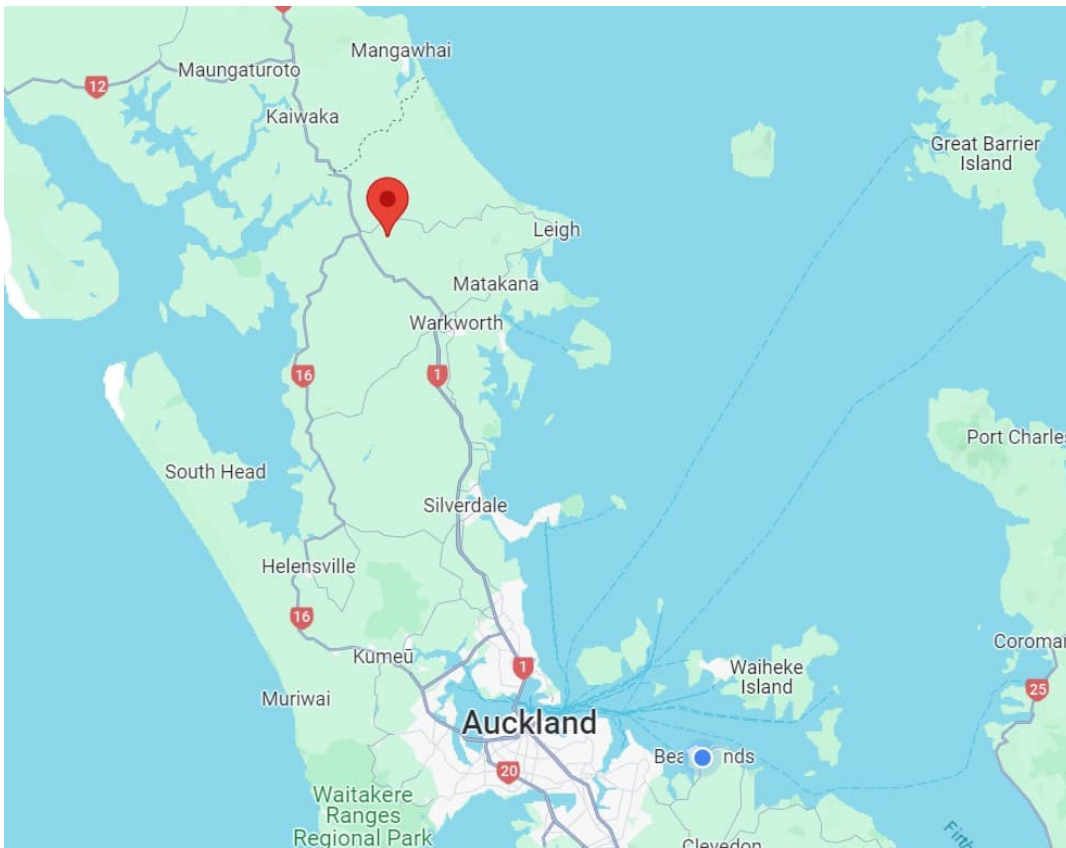


Figure 1: General Locality Plan

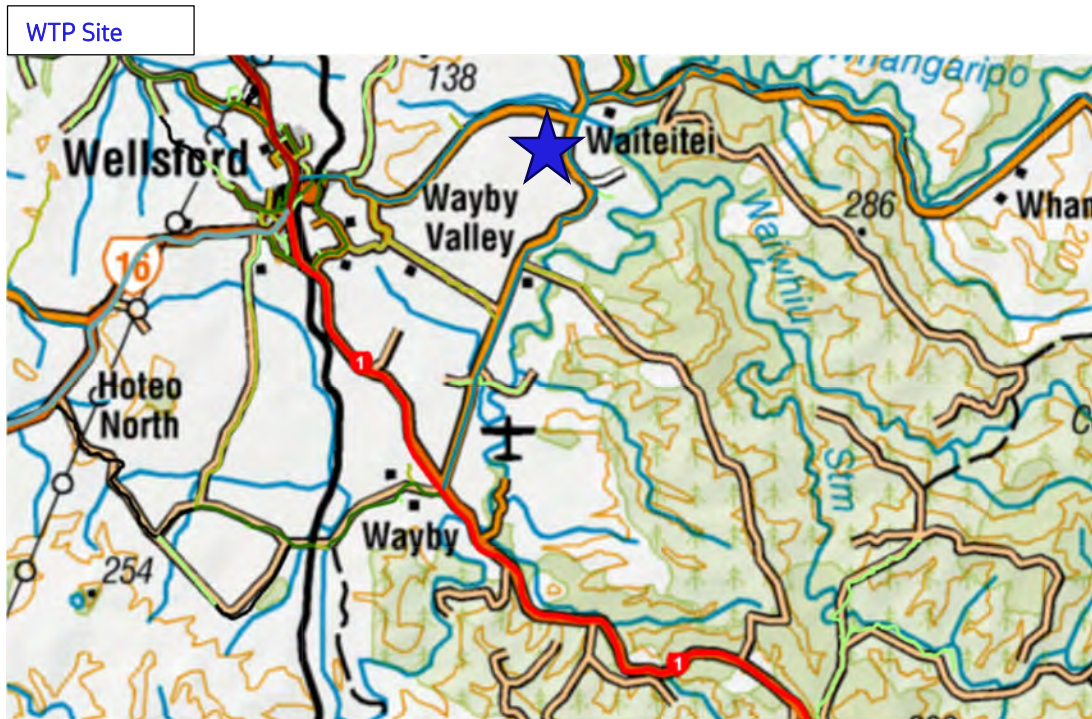


Figure 2: Road Network Connecting to the Site

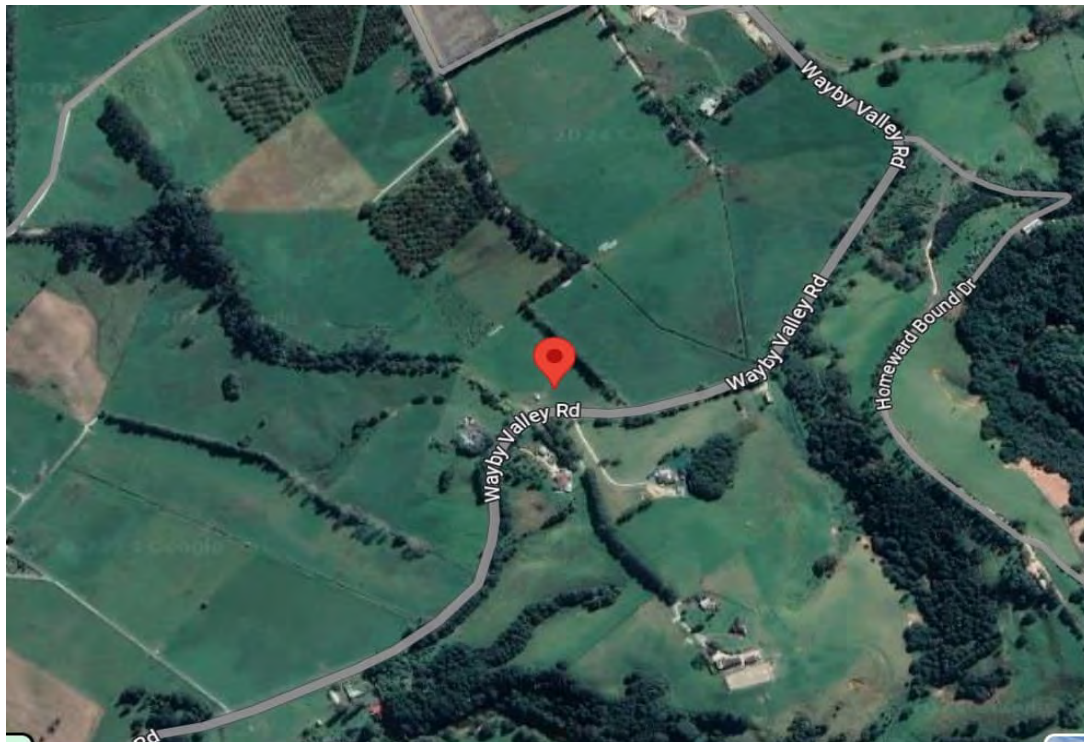


Figure 3: Aerial view of the site

Access to the proposed WTP site can be achieved either from SH1 and then directly via Wayby Valley Road from the southwest, or alternatively through Wellsford township and then via Wayby Valley Road from the northeast. Based on the two travel options as well as the carriageway features and travel restrictions within Wellsford township, access to the proposed WTP will be more direct and convenient from the southwest. Discussions with Watercare has also confirmed that this would be their preferred travel route as it also provides an easier connection with their other assets/water treatment facilities located in the greater North Auckland area.

A site inspection was completed on 8th December 2023 with photographs supplementing this updated TAR taken at that time. This inspection confirmed that State Highway 1 (SH1) would provide the principal transport route to the site, both during construction of the WTP as well as afterwards when fully operational.

As above, transport from SH1 is expected to use the more convenient southeastern route along Wayby Valley Road. It is also noted that the intersection of SH1 / Wayby Valley Road / Wayby Station Road is at a crossroads intersection, managed by Give Way signage and pavement marking controls (with SH1 traffic having priority). Dedicated right turn bays have been installed on SH1 for traffic waiting to turn into either of the side roads. A painted flush central median is also provided to provide further separation for yielding right turning traffic from oncoming SH1 traffic.

The northern section of SH1 provides a pivotal transport link between Auckland city and the Northland region. As a national designated route, SH1 is a permitted oversized / heavy haulage route and, as such, it is regularly used by construction vehicles for the transportation of heavy plant / machinery and materials. Furthermore, it has excellent carriageway features and is well delineated with pavement markings, road signage and additional road safety elements (e.g. passing lanes, roadside barriers and/or central wire protection systems). Traffic volumes using SH1 in the vicinity of Wellsford is estimated to average at around 11,300 vehicles per day¹.

Wayby Valley Road is designated as a Collector Road and has an average daily traffic volume of 1,880 with approximately 8% of these being heavy commercial vehicles. Measurements confirm that Wayby Valley Road has an average seal width of 7.2m consisting of 2 x 3.5m wide traffic lanes. The road is well signposted with centreline and edge line pavement markings as well as reflectorised marker posts and other permanent warning signs that further assist with carriageway delineation and road user safety.

2.2 Traffic Safety

NZ Transport Agency's Crash Analysis System (CAS) system has been reviewed for this updated TAR. Reported crashes in the most recent 5-year crash period (2020 – 2024 (inclusive)) have been extracted from CAS with a specific review of the data collected for SH1/Wayby Valley Road / Wayby Valley Station Road (100m radius) and along Wayby Valley Road (from SH1 to the proposed WTP site).

Figures 4 and 5 below confirm the general location and type of crashes that have been reported on the intended travel route to the site from SH1. This analysis has confirmed that there has been a total of 1 serious and 4 minor injury accidents occurring at SH1 / Wayby Valley Road / Wayby Valley Station Road intersection during the crash period. A more in-depth assessment of the reported details has confirmed the majority were from right turning movements occurring in front of oncoming traffic and poor gap selection by turning motorists.

On Wayby Valley Road there have been 10 minor injury accidents for the same crash period. Crash details have confirmed most of these involved excessive speed and loss of control on corners. It is also noted that none have occurred in the vicinity of the proposed development.

As a result of this assessment, it has been concluded that the local road safety record is consistent with statistics with other state highways and rural roads carrying similar daily traffic volumes. Furthermore, there is no evidence of high concentrations of incidents that would suggest of any localised road safety issues.

A summary of the CAS data is supplied in **Appendix A** of the report.

¹ NZTA, State Highway Traffic Monitoring, Annual Average Daily Traffic (AADT)



Figure 4: Crash Data at SH1 / Wayby Valley Rd / Wayby Valley Station Rd

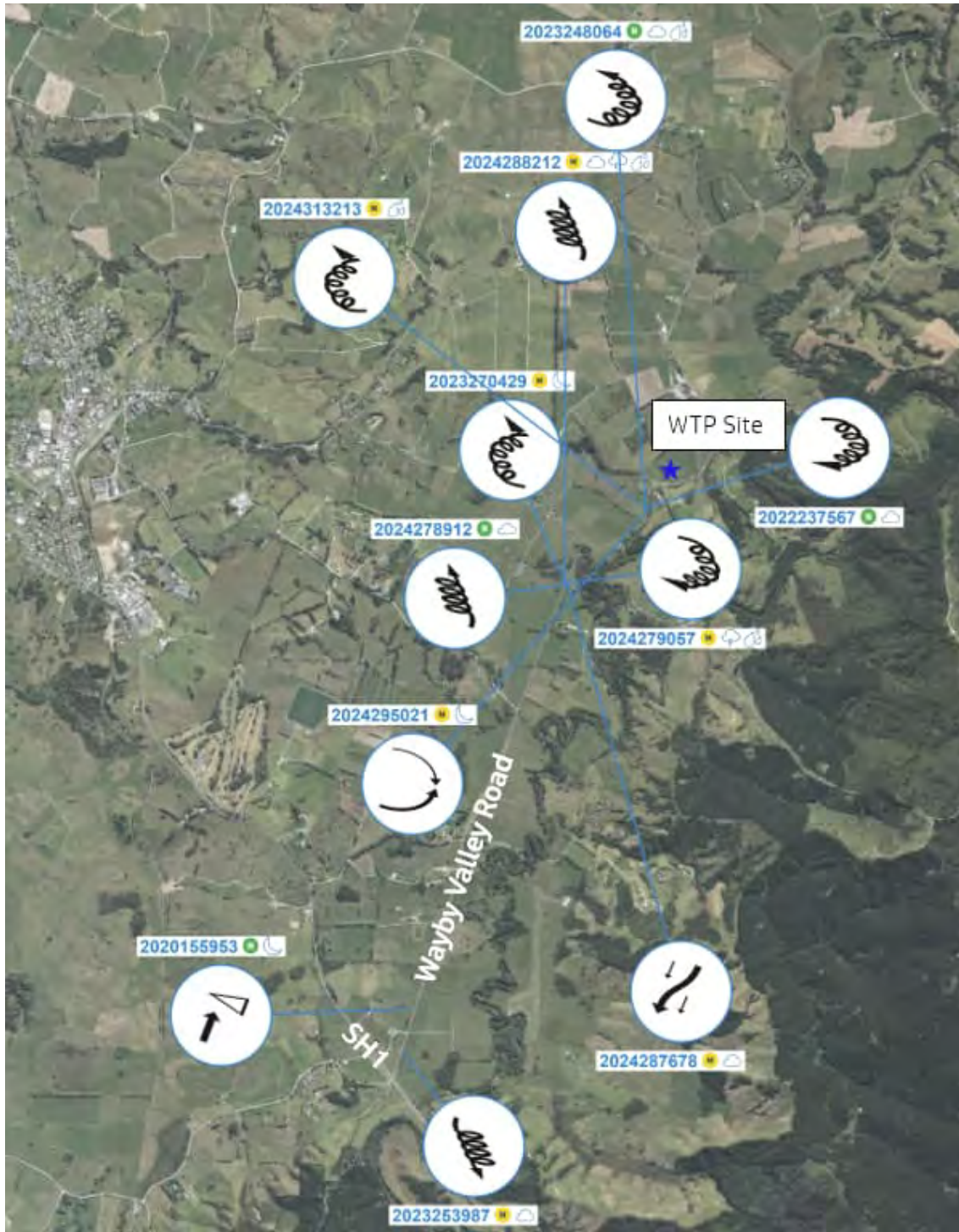


Figure 5: Crash Data on Wayby Valley Rd

3. Proposed Development

Watercare currently owns and operates the existing Wellsford WTP at 362 Wayby Valley Road, Wellsford, Auckland. The existing WTP was established around 1960 and abstracts water from the Hōteu River immediately south of the site, from which water is abstracted to feed into the WTP.

Watercare has identified that this existing facility is nearing the end of its design life, has a restricted capacity, and is currently unable to support peak customer demands. Noting also that the population of Wellsford and Te Hana is predicted to double to 4,200 in the next 20 years, Watercare requires a new WTP to ensure it can continue to provide high quality drinking water to the communities of Wellsford and Te Hana.

Following an assessment of alternative sites, Watercare has identified 411 Wayby Valley Road, Wellsford, as its preferred location for a new and upgraded WTP to replace the existing facility. The new WTP will take and treat groundwater from an existing projection bore on site to meet water demands and quality in Wellsford and Te Hana. Watercare is seeking through the revised NoR to designate the full site to enable the construction of the new WTP and provide for future upgrades on site. The planned NoR will provide for a new and upgraded WTP that will replace the existing WTP, thereby increasing the capacity and improving the resilience of the water supply network. Accordingly, and in doing so, these proposed works will support the future growth and development of the Wellsford and Te Hana communities.

Since only minimal traffic (i.e., 2 daily site visits) will be associated with the long-term operation and maintenance of the proposed WTP (and this will result in a minimal effect on the transport network), this updated TAR has purposely concentrated on the potential traffic demands and their associated effects (if any) during construction of the revised WTP proposal.

The new WTP is to be constructed on 411 Wayby Valley Road with access from a new single inwards gateway at the south-western corner of the property, facing onto Wayby Valley Road. Vehicular egress from the site will be via a separate gateway as shown in Figure 6. This illustration also shows the proposed development relative to neighbouring activities as well as the general site layout. The Plan clearly shows the position of the site entrance and exit arrangements, the intended internal directional movement of delivery vehicles and the building facilities.



Figure 6: New Potential WTP Layout

Construction of the new WTP is anticipated to take around 24 months and is likely to involve the following key works that will generate most of the construction related traffic movements during this time:

- Site establishment – transportation of heavy excavation and compaction machinery as well as materials to clear the site and for the placement and compaction of the proposed building foundations, retaining walls, stormwater controls, attenuation tank / basin, all internal hard trafficable and parking surfaces, laydown/storage areas, site accessways, and security fencing.
- Building Platforms – requiring the transportation of concrete from Warkworth to the site over a period of one to two months (involving no more than one concrete truck on site per pour.) This will be a critical element of the planned construction works and is expected to require the greatest volume of material deliveries.
- Building Construction – transportation of prefabricated building frames and steel formwork for the efficient erection of the proposed buildings. Expected to involve the delivery of building supplies sourced from either Warkworth or Auckland.
- Building fitout – transportation of materials for the completion of building plastering, electrical, plumbing and painting.
- Site completion – transportation of proposed planting strip along property boundary for amenity (to neighbours) and/or site privacy.
- Daily transportation of construction staff and sub-contractors to complete the above activities.

A preliminary estimate of the volumes of construction materials required to establish the proposed WTP has been undertaken, from which the total and average number of trucks has been estimated by Civil Engineers (refer to **Appendix B**). It is understood that these volumes have been conservatively estimated and, as such, are more likely on a worst-case basis.

It is therefore possible to establish the overall and average traffic generated by the construction of the proposed WTP, as described in the next section of this report, although day to day variations can only be established once a contractor has been appointed. Section 4 confirms the assessed volumes anticipated to be generated during construction of this proposed activity.

3.1 Proposed Site Entrance

The proposed site entrance and separate exit are positioned at the southwestern corner of the site. The proposal also includes gateway arrangements that enable a B-Train heavy commercial vehicle to enter and circulate within the site and then exit safely and efficiently. A B-Train (without a trailer) is understood to be the preferred vehicle to be used to deliver chemicals to the WTP. These vehicle movements have been tested using swept path software as illustrated in Figure 7.

As can be seen, a standard B-Train truck is able to enter the site from the southwest, circulate the WTP buildings in a circular direction and then exit the site. Watercare has also confirmed, once fully operational, the delivery of materials (e.g., chemicals) will be relatively infrequent (i.e., no more than one vehicle per month). Any such deliveries will be pre-arranged, and staff will be on site to open and close (and lock) the two gateways. As such, the B-Train drivers will not need to park on the road edge to open or close the gates.

The proposed gateways will be constructed in accordance with Auckland Transport's Traffic Design Standards (TDM), and they will therefore provide the appropriate entry and exit sealed tapers. It is also noted in this regard that there already is a wide sealed shoulder opposite the proposed gateways which will be fully utilised by the final entrance design.

The following photographs were taken at the proposed gateways confirming the intervisibility / available sightlines between motorists exiting the proposed entranceway with approaching vehicles. On site speed assessment has also confirmed that the 85th percentile passing vehicular speeds at this location are consistently at 60km/h for light vehicles and 52km/h for heavy commercial vehicles. These speeds are primarily affected by the alignment of Wayby Valley Road and the existing corner on the southwestern approach. The photographs also confirm this curve has supplementary chevrons advising approaching motorists of the curve / restricted alignment and therefore suggesting caution and a speed reduction.

Also confirmed in the photographs is the relative positions of existing farm gates and private property entranceways immediately opposite the proposed WTP. Sight observations at these other existing accessways confirm significantly restricted sightline provisions. Discussions with landowners have confirmed concerns with the available sightlines. As such, they prefer exiting their properties to travel on Wayby Valley Road to the southwest and thereby negate the limited sightlines that exist should they chose to travel in the opposite direction (and thereby need to cross the road centreline). Nevertheless, and as part of the recommended mitigation provided later in this report, any potential conflicts arising between residents and construction traffic can easily be resolved with an approved Construction Traffic Management Plan (CTMP).



Figure 7: B-Train Heavy Commercial Vehicle Swept Path



Photo 1: At proposed exit gateway facing southwest



Photo 2: At proposed exit gateway facing northeast



Photo 3: At existing private entrance opposite - facing southwest.

As depicted in Photo 1, onsite measurements have confirmed that there is at least 100m of available sightline for northeast bound approaching traffic and all exiting vehicles at the proposed entrance. Photo 2 also confirms that there is more than 250m of available sightline distance at the proposed entranceway facing in the opposite direction.

A review of RTS 6 “Guidelines for Visibility at Driveways” confirms for entranceways with less than 200vpd the recommended minimum sightline provisions should be 65m on a Collector Road with 85th percentile speeds at 60km/h. Given that there is at least 100m of available sightline provisions, it is assessed that the proposed driveway position easily achieves the minimum standards and design requirements. Notwithstanding this finding, it is however recommended that consideration is given to the installation of permanent warning signs shown concealed accessways given the difficulties currently experienced by existing property owners. In addition, during construction of the WTP it is further recommended that the appointed contractor implements temporary traffic management controls on Wayby Valley Road thereby reducing passing traffic to 30km/h and with additional truck crossing warning signs. The implementation and application of a Construction Traffic Management Plan (CTMP) is discussed in Section 6 of this report.

4. Traffic Generation

4.1 Overview

Most of the traffic generated by the proposed WTP will occur during the construction period of some 24 months. For assessment purposes it is assumed that the site and building foundation establishment would be undertaken during the first 6 to 8 weeks with building construction following during the next 15-18 months. The remaining time would be required to form and complete the internal sealed driveway, designated parking areas, redistribute topsoil, grass and landscaping.

4.2 Site establishment, earthwork and roading aggregate materials

For the purposes of this updated report, which is principally concerned with access to and from the site, the traffic effects assessment has adopted a conservative approach with no insitu materials being reused / redistributed onsite as fill. Instead, all cut material (i.e. excavated for building foundations and internal vehicle roads) would be removed as waste. Accordingly, all materials required to construct the proposed WTP will be imported and therefore transported by road to the site.

It is acknowledged that there are several quarries / sources of earthworks materials that are anticipated to be required during the construction of the proposed WTP. All these sources are assessed to be beyond 20km of the site and will require the transportation to site via SH1 (both north and south bound arrivals) and then along Wayby Valley Road. The volume of imported earthwork materials required during construction has been conservatively estimated to be in the order of 15000m³ involving around 940 truck and trailer heavy commercial vehicle deliveries (carrying approximately 16m³ each of loose material, 1875 total trips). Most of this imported material will be clean backfill (to be used for site recontouring). It has been separately estimated that another 675m³ roading aggregate (another 42 truck and trailer deliveries and 84 additional trips) will be required for the building foundations, as well as internal vehicle access parking space construction.

4.3 Concrete deliveries

Given the scale of the proposed development, concrete is not expected to be batched on site and, as such, imported ready-mixed concrete will be delivered by concrete trucks. Due also to limitations on haulage distances for ready-mixed concrete, all deliveries are expected to be sourced no further than Warkworth. Such deliveries will be required on a “just in time” basis and can be expected to generate no more than 35 deliveries (70 return trips) over the days of concrete pours. All such deliveries will have to be carefully managed and are likely to be staggered as each of the building platforms will be prepared separately.

4.4 Building framework and other deliveries

There will also be reinforcing and structural steel and sundry deliveries for the various construction activities including materials to construct a retaining wall, building roofing, external and internal walls and ceilings, water filtration and pumping machinery, fluoridation machinery, laboratory testing facilities, and bathroom and toilet facilities. All these deliveries have been estimated to be around 28 truck deliveries (56 return trips) with no more than 2 deliveries (4 trips) occurring in a single day.

4.5 Staff and Construction Personnel

A preliminary estimate suggests there could be as many as 8 construction personnel on site during most of the anticipated activities. However, this is also expected to double to 16 persons at the height of construction when the buildings are being erected and fitted out. For the purposes of this assessment an average of 12 construction staff (including sub-contractors) have been assumed. In addition, these staff are likely to travel by van or private vehicle with an average occupancy of 1.5 persons per vehicle.

4.5.1 Consumables

Other consumables expected to be delivered to site will include:

- Mobilisation of earthmoving equipment (three plant deliveries)
- Delivery of fuel and oil (four deliveries)

4.6 Summary daily delivery volumes and distribution on local network.

Based on the estimated material volumes and the size of trucks / vehicles anticipated to be used to deliver them to site, it is conservatively estimated that construction of the revised WTP would not exceed 94 vehicle movements per day (comprising up to 47 arrivals/deliveries and 47 departures) during peak construction.

As previously reported, all of these movements are expected to travel to the site along SH1 and then Wayby Valley Road from the southeast. Accordingly, all site arrivals will require to turn left to enter the site from Wayby Valley Road and turn right when exiting to complete a return journey along the same route.

4.7 Transport route capacity

As previously reported, SH1 has an average estimated traffic volume of 11,300vpd. The predicted peak construction volume of 94 vpd will be insignificant along SH1 and, furthermore it will be far less than normal seasonal variations and/or changes that typically occur during school and public holiday periods. As such, this assessment has concluded that there will be no detrimental effects arising on SH1 consequently during the construction of the WTP nor later during its operation.

Similarly, the predicted 94vpd construction volumes will also be easily accommodated on Wayby Valley Road as well as at its intersection with SH1. Notwithstanding this assessment, and as stated earlier in this report, due to the range of vehicles delivering materials on site and the proximity of other private driveways near the planned accessway, it is recommended that all construction activities are controlled / managed by an approved CTMP.

5. District Plan Provisions

This assessment has considered the transport related matters associated with the proposed WTP alongside the general transportation provisions of the AUP that describes the objectives, policies in relation to transportation matters. Those that are relevant in this instance include:

The following objectives and policies apply to the Rural – Rural Production Zone.

H19.3.2 Objective

- (1) A range of rural production, rural industries, and rural commercial activities take place in the zone.
- (2) The productive capability of the land is maintained and protected from inappropriate subdivision, use and development.

H19.3.3 Policies

- (1) Provide a range of existing and new rural production, rural industry, and rural commercial activities and recognise their role in determining the zone's rural character and amenity values.
- (2) Provide for forestry activities including:
 - (a) Planting and management of new and existing forests in recognition of their production values, land stability, and carbon sequestration functions, and multiple use for active recreation.
 - (b) Woodlots and farm scale forestry, and
 - (c) Planting of indigenous species and amenity exotic species for long term production purposed and the eventual harvesting of these species.
- (3) Enable the establishment of new greenhouses and the expansion of existing greenhouses in specific locations where there are advantages for operational efficiencies, transport accessibility, and the provision of energy such as natural gas supplies and services and manage the amenity expectations of other activities in these areas.
- (4) Provide for intensive farming while managing the adverse effects and require compliance with good industry practice.
- (5) Require intensive farming of new species including terrestrial freshwater and marine species, not currently farmed in Rural - Rural Production Zone to:
 - (a) Be designated and operated to prevent the escape of any species of animal or plant that could have an adverse effect on the environment, and
- (6) Not include any mustelid species.

In this case, the land use itself generates little traffic once commissioned and operational. Traffic movements associated with construction of the WTP are not expected to be large in the context of the traffic volumes on the transport network currently. All site access and egress by vehicles will be appropriately managed during construction by an approved CTMP. Accordingly, property access to neighbouring residents/rural paddocks can easily be achieved and road safety on Wayby Valley Road will not be compromised because of this revised proposal.

This updated assessment has confirmed that the effects of the new NoR are minor and limited to the construction phase of the WTP. As such, they will only be temporary.

6. Construction Traffic Management Framework

To manage the potential transport related effects from construction of the new WTP, it is recommended that a CTMP is prepared prior to construction commencing.

The following describes the nature of a CTMP and develops a framework for the development of a CTMP by the appointed contractor that is tailor-made for this specific development. A CTMP is a key component for the management of traffic effects from a construction project of this nature. It is prepared with the involvement of the contractor(s) in consultation with Auckland Transport, Council, and stakeholders (Watercare and residents) prior to construction and submitted to the Council for approval before physical works can begin.

It is expected that copies of the approved CTMP will be distributed to stakeholders prior to construction commencing. A CTMP is a living document and is updated as required to incorporate such things as changes in the project schedule as construction progresses. Updates are required to be sent to all holders of the CTMP.

The CTMP will provide these stakeholders with a clear understanding of the confirmed construction programme, traffic volumes to be expected during each stage, any significant improvements to be undertaken on the route, and the management measures being implemented.

The CTMP Framework will address:

- Construction programme and traffic volumes expected during each phase of works.
- Driver protocols.
- Oversized loads (if any).
- Management of traffic from neighbouring properties adjacent to the construction site
- Traffic management measures to be implemented (including sharing of vehicles by trades persons, restricting oversize/large deliveries to occur during off-peak traffic periods); and
- Monitoring and communication arrangements (including contact details of contractor).

Specific details of the expected structure of content of the CTMP are described as follows:

6.1 Construction Programme and Traffic Volumes

The first part of the CTMP will present the details of sources and delivery routes for key materials such as aggregate, concrete, reinforced steel, building gip and exterior panels and will include how much traffic will use sections of the transport route as well as approximate times. It will provide the detailed schedule of the various work stages as the construction process proceeds. From this, the various parties will be able understand the type and frequency of vehicles to expect, and any delays that may arise.

6.2 Driver Protocols

In addition to the driving standards imposed by law, all drivers involved in the project will be subject to additional protocols. These will at least include reducing speed on the approach to the site in accordance with temporary speed limits and supplementary warning signs implemented also by the CTMP.

6.3 Traffic Management of Local Property Access

With the increase in trucks during construction it will be necessary to develop protocols with the local landowners to minimise any transport related effects on farming and property access.

6.4 Monitoring

The CTMP will provide a detailed schedule of the various elements of monitoring of the public road. This will include:

- Traffic generation levels.
- Safety and effectiveness of temporary traffic management controls; and
- Extent of any delays caused during deliveries of plant / machinery or materials.

6.5 Communication Protocols

Communication protocols will be important to the success of the CTMP. This includes providing information to neighbours, stakeholders, receiving responses back, and communication with vehicle drivers associated with the project – both staff and contractors.

Specific contact arrangements will be made with adjoining occupants and/or landowners to contact the project team in a timely manner, as needed. Information, including planned farming activities and the like will then be communicated with the traffic management team (within the appointed contractors organisation) and/or project drivers enabling them to anticipate the occurrence and actively manage the roadway and/or schedule their journeys as appropriate.

Finally, the CTMP will record a list of people and organisations that the CTMP will be distributed to. All amendments and updates to the CTMP will then be forwarded to those named on the list.

7. Assessment of Effects

As described earlier in this updated report, the revised WTP proposal will generate little more than 2 vehicle movements per day as part of its normal operations. This small volume will have a little effect on the surrounding transport network. The transport related effects during construction of the WTP will be minimal and can be appropriately managed through implementation of a CTMP.

As has been identified, the key transport routes (and their intersections) have been assessed to have more than enough spare capacity to accommodate the anticipated volumes of construction related traffic throughout the construction period. Furthermore, there are no current road safety trends nor safety related concerns that would be further exacerbated by a temporary increase of construction vehicles using the identified transport haulage route.

Although the construction generated traffic volumes will be modest (peaking at around 80 vehicle movements per day) this assessment has recommended the implementation of an approved CTMP. This CTMP will minimise travel by requiring shared vehicles for the various building trades requiring daily access, it will restrict any oversized/large deliveries to occur outside of peak hour traffic periods; manage vehicular speeds in the vicinity of the site; and will provide communication protocols with the project's drivers and neighbours.

In summary, from SH1 through to the proposed entranceway at 411 Wayby Valley Road, the underlying traffic volumes on the local road network are all well within the capacity of SH1 and Wayby Valley Road. Furthermore, the anticipated increase in traffic during construction can be safely and conveniently accommodated on the roads.

8. Conclusion

As has been described in the preceding report, there will be a temporary increase in traffic resulting from construction of the proposed WTP. Beyond the construction phase, the traffic effects will be negligible and not noticeable within the day-to-day fluctuations that already occur on the local network.

This updated assessment has confirmed that the construction traffic will need to be managed by way of a CTMP that will be specifically prepared under the direction of a Chartered Professional Engineer by a person with the necessary Site Traffic Management Specialist (STMS) qualifications and experience for that purpose.

With the implementation of these recommended provisions, all the associated traffic effects associated with the establishment and operation of the proposed WTP can be effectively mitigated. Accordingly with the application of active traffic management controls, designed in conjunction with the appointed contractor, stakeholders and Road Controlling Authority, the transport effects arising from this proposal will be less than minor and easily accommodated on the local network.



Project: **WELLSFORD WATER TREATMENT PLANT**

Prepared for: **Watercare Services Ltd**
73 Remuera Road
Remuera
Auckland 1050

Attention: **Paul Futter**

Report No.: **Rp 001 r01 20241294**

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APPENDIX B WTP INDICATIVE SITE LAYOUT

APPENDIX C APPROVED BUILDING PLATFORM AT 437 WAYBY VALLEY ROAD

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APPENDIX E CALCULATED WTP NOISE CONTOUR ENVELOPE

1.0 INTRODUCTION, REPORT SUMMARY AND CONCLUSIONS

1.1 Introduction

Watercare Services Limited (Watercare) is New Zealand's largest wastewater utility provider responsible for the planning, maintenance, and operation of water services to communities throughout Auckland.

Watercare captures raw water from 28 different sources, operates 19 water treatment plants, moves it through 88 pump stations and stores it in 95 water reservoirs to ensure it meets drinking water standards. The treated water is then supplied to households and businesses through approximately 9,700km of pipeline of different diameters.

Watercare has supplied wholesale water services since 1991 and is a council-controlled organisation (CCO), wholly owned by Auckland Council. Their activities and programmes are funded through user charges and borrowings. They are required by the Local Government (Auckland Council) Act 2009 to be minimum-cost, cost-efficient services provider.

Watercare's activities are intrinsically linked to the health of people and the natural environment. Auckland's water sources must have sufficient volume and reliability to provide water for the region, and they must be protected from overuse.

Collectively, around 440 million litres of water is sourced per day, treated to the Water Services (Drinking Water Standards for New Zealand) Regulations 2022 (DWSNZ), and supplied by Watercare.

Watercare carry out significant work to upgrade and build infrastructure to maintain levels of service and provide capacity for a fast-growing population. Watercare ensures Auckland and its people continue to enjoy dependable services by upgrading its assets, planning, building, and delivering new infrastructure in cost-efficient ways.

Watercare currently owns and operates the existing Wellsford Water Treatment Plant (WTP) at 362 Wayby Valley Road, Wellsford. The existing WTP was established around 1960 and extracts water from the Hōteio River immediately south of the site, from which water is abstracted to feed into the WTP.

The existing WTP currently serves approximately 2,100 residents in Wellsford and Te Hana and is at capacity and cannot meet the current peak demands at times. During the summer of 2021/22, for example, water had to be brought in via tanks to meet the community demand for drinking water. The connected population is expected to increase to approximately 4,200, which cannot be met by the existing WTP. Additionally, the existing WTP is at the end of its design life and will need to be upgraded in the future regardless.

Following an assessment of alternative sites, Watercare has identified 411 Wayby Valley Road, Wellsford, as its preferred location for a new, upgraded WTP to replace the existing WTP. The new WTP will take and treat groundwater from an existing production bore on site in order to meet water demand and quality in Wellsford and Te Hana. Watercare is seeking to designate (through a notice of requirement) the full site to enable the construction of the new WTP and provide for future upgrades on site.

The Notice of Requirement (NoR) provides for a new and upgraded WTP that will replace the existing WTP, thereby increasing the capacity and improving the resilience of the water supply network. In doing so, these works will support the future growth and development of the Wellsford and Te Hana area.

1.2 Report summary and conclusions

Watercare has engaged Marshall Day Acoustics to prepare an Acoustic Impact Assessment for its Notice of Requirement (NoR) application, which seeks to designate a new WTP at 411 Wayby Valley Road, Wellsford (the project).

This assessment is an update to our previous assessment for the NoR lodged in May 2024. Watercare has subsequently purchased an additional 8,000m² of land and revised the site layout.

The primary issues we address in this report are:

- operational noise compliance / effects; and
- noise and vibration from the construction of the WTP, and the management of potential adverse effects arising from this.

We anticipate that operational vibration will be imperceptible, and therefore of no appreciable significance, as explained below.

We visited the site on 2 April 2024. We carried out attended noise measurements adjacent to the site to quantify the existing acoustic environment in the vicinity of the closest dwellings. The results informed our assessment of operational noise effects.

We have calculated the operational noise envelope for the WTP based on a total noise budget of 95 dB L_{WA}. A noise budget allocates a percentage of the total noise emitted from the site (for compliance) to separate processes.

Where the WTP is designed, constructed, and operated to comply with this noise budget the site will comply with the relevant Auckland Unitary Plan operative in part (AUP:OP) limits at all times.

The WTP may be audible at times at some receivers during the night. The effects are considered to be reasonable given the overall level of (compliant) noise, the fact that it is steady-state and because receivers will typically be inside their homes in this period. No unreasonable adverse effects will occur.

In terms of construction noise and vibration, we calculate that typical daytime construction noise and vibration will readily comply with the relevant limits provided in the AUP:OP. We anticipate there will be no adverse noise or vibration effects where construction works occur during normal construction hours (7:30am to 6pm, Monday to Saturday).

If early morning concrete pours are required, a Construction Noise Management Plan (CNMP) should be prepared to provide mitigation and management measures, including the possibility of relocating affected receivers. We consider that night-time noise effects can be acceptably managed.

A glossary of acoustic terminology used in this report is contained in Appendix A.

The report includes recommended designation conditions.

2.0 PROJECT SITE AND WTP DESCRIPTION

2.1 Site description

The project is located at 411 Wayby Valley Road, Wellsford. The site has an area of ~11,500m², including an additional ~8,000m² of land that was purchased subsequent to the previous NoR application. The site is surrounded by rural properties, with some containing dwellings, and the site's southern boundary adjoins Wayby Valley Road.

Figure 1 shows the site and surrounding receivers.

Figure 1: Site location and surroundings



2.2 Identified potentially noise sensitive receivers

Table 1 lists the receivers we have identified as potentially noise and/or vibration sensitive¹. The table lists each receiver, the zoning / primary use, and minimum distance from the site to the notional boundary of the dwelling (or building platform). If compliance is shown at the identified receivers, then compliance can be inferred for all other, more distant, receivers not included in the assessment. Figure 1 shows the location of the identified receivers.

Appendix B includes an indicative layout plan of the site. Appendix C includes an aerial showing the approved building platform at 437 Wayby Valley Road in relation to the site.

Table 1: Receiver table

Receiver no.	Address/location	Zoning / Usage	Min. distance from site to notional boundary (m)
R1	399 Wayby Valley Road	Rural ¹ / Dwelling	55
R2	400 Wayby Valley Road	Rural / Dwelling	66
R3	412 Wayby Valley Road	Rural / Dwelling	107
R4	437 Wayby Valley Road	Rural / Dwelling	150

¹ AUP:OP Chapter J – Definitions defines activities sensitive to noise as: Any dwelling, visitor accommodation, boarding house, marae, papakāinga, integrated residential development, retirement village, supported residential care, care centres, lecture theatres in tertiary education facilities, classrooms in education facilities and healthcare facilities with an overnight stay facility.

Notes to table:

(1) Rural refers to Rural Production Zone in the AUP:OP

3.0 ATTENDED NOISE MEASUREMENT RESULTS

We performed attended noise measurements at three positions surrounding the site to quantify the existing noise environment. The summarised results form the basis of the operational noise effects assessment.

The existing night-time background noise measured up to 21 dB L_{A90} . The existing night-time ambient noise ranged between 50 and 56 dB L_{Aeq} . The existing acoustic environment is described generally as being a quiet rural environment, influenced by occasional traffic on Wayby Valley Road.

3.1 Existing ambient noise measurements

We performed an attended noise survey on 2 April 2024 at the site between 10.30pm – 11.30pm to measure the existing ambient noise environment. Figure 2 overleaf shows the measurement locations, and the measurement results are listed in Table 2. Our measurements were undertaken for the previous NoR application, and we expect the noise environment is unchanged. The survey was undertaken during the night-time period when ambient noise is lowest, given that the WTP is expected to operate at all hours.

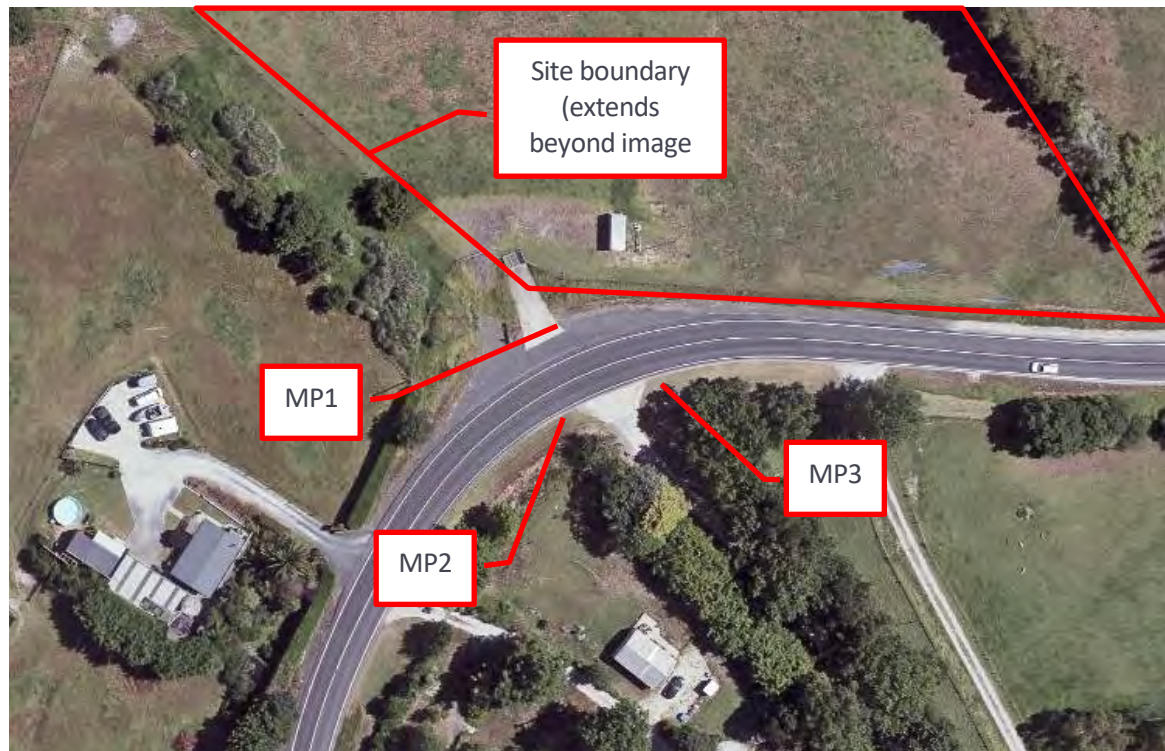
Cricket noise was filtered out where required.

Based on observations whilst on site during the night-time, the existing acoustic environment is typical of a quiet rural setting. Traffic on Wayby Valley Road is low during the night-time period and dominates the ambient environment when present.

Table 2: Wellsford attended noise measurement results

Measurement position	Measured noise levels (dB)			Noise sources and comments
	L_{AFmax}	L_{Aeq}	L_{A90}	
MP1	81	55	21	All measurements: primary source is occasional cars passing
MP2	83	56	21	
MP3	78	50	<20	

Figure 2: Wellsford attended noise measurement positions



4.0 ACOUSTIC PERFORMANCE STANDARDS

We have reviewed the underlying zone limits contained in the AUP:OP. For operational and construction noise we recommend the designation adopts the limits contained in Standard E25.6.3 and Standard E25.6.27 respectively. For construction vibration we recommend the designation adopts the limits contained in Standard E25.6.30.

No operational vibration effects are anticipated, so operational vibration performance standards are not proposed.

4.1 Auckland Unitary Plan (Operative in Part)

4.1.1 AUP:OP zone overview

The site and surrounding receivers are zoned Rural – Rural Production Zone under the AUP.

4.1.2 AUP:OP operational noise performance standard

The relevant receiver zone limits are summarised in Table 3.

Table 3: AUP:OP operational noise performance standard

Zone	Standard	Daytime ¹	All other times
Rural – Rural Production Zone	E25.6.3(1)	55 dB L _{Aeq}	45 dB L _{Aeq} 75 dB L _{Afmax}

Notes to table:

(1) Daytime is 7am – 10pm Monday to Saturday and 9am – 6pm Sundays.

The full suite of limits as they appear in the AUP:OP are contained in Appendix D.

In accordance with Standard E25.6.1(1), noise arising from activities must be measured and assessed in accordance with NZS 6801:2008 “Acoustics – Measurement of environmental sound” and NZS 6802:2008 “Acoustics – Environmental noise”.

4.1.3 AUP:OP operational vibration performance standards

Standard E25.6.30(2) stipulates that vibration levels for stationary vibration sources and any attached equipment must not exceed the limits in AUP:OP Table E25.6.30.2 when measured in any occupied room of any building on another site. In summary, the limits are 0.20 mm/s between 7am and 10pm and 0.14 mm/s between 10pm and 7am.

4.1.4 AUP:OP construction noise performance standard

Standard E25.6.1(3) of the AUP:OP states that noise from any construction work activity must be measured and assessed in accordance with the requirements of NZS 6803:1999 “Acoustics – Construction Noise”.

Standard E25.6.27(1) sets noise limits for typical duration construction². Given the construction period is anticipated to exceed 20 weeks, Standard E25.6.27(4) will be relevant, and therefore the construction noise limits set out in Table E25.6.27(1) would be decreased by 5 decibels for the entire construction duration.

In summary, the guideline noise limits applying to typical construction hours (7.30am to 6pm) are 70 dB L_{Aeq} and 85 dB L_{AFmax} assessed at 1m from the façade of occupied buildings.

4.1.5 AUP:OP construction vibration performance standards

The relevant AUP:OP construction vibration rules are set out in Standard E25.6.30. Standard E25.6.30(1)(a) refers to the German Standard DIN 4150-3:1999 “Structural vibration – Part 3: Effects of vibration on structures” (DIN 4150) for the prevention of cosmetic damage to buildings.

AUP:OP Standard E25.6.30(1)(b) sets out the amenity limits for construction vibration.

The following subsections discuss the relevant rules.

Cosmetic damage to buildings

DIN 4150 relates to the avoidance of *cosmetic* building damage, such as cracking in paint or plasterwork. Cosmetic building damage effects are deemed ‘minor damage’ in DIN 4150 and can generally be easily repaired. The cosmetic building damage thresholds are much lower than those that will result in structural damage. DIN 4150 states: “Experience has shown that if these values are complied with, damage that reduces the serviceability of the building will not occur”.

The vibration limits in Table 1 and Table 3 of DIN 4150 are presented in Tables 4 and 5 overleaf.

² Typical duration construction is defined in Clause 7.2.1(b) of NZS 6803:1999 as “construction work at any one location for more than 14 calendar days but less than 20 weeks”.

Table 4: Guideline values for vibration velocity to be used when evaluating the effects of short-term vibration on structures (Table 1 DIN 4150)

Line	Type of structure	Guideline values for velocity, v_i , in mm/s			
		Vibration at the foundation at a frequency of			Vibration at horizontal plane of highest floor, at all frequencies
		1 - 10 Hz	10 - 50 Hz	50 - 100 Hz ¹	
1	Buildings used for commercial purposes, industrial buildings, and buildings of similar design	20	20 to 40	40 to 50	40
2	Dwellings and buildings of similar design and/or occupancy	5	5 to 15	15 to 20	15
3	Structures that, because of their particular sensitivity to vibration, cannot be classified under lines 1 and 2 and are of great intrinsic value (e.g. listed buildings under preservation order)	3	3 to 8	8 to 10	8

Notes:

- (1) At frequencies above 100 Hz, the values given in this column may be used as minimum values.

Table 5: Guideline values for vibration velocity to be used when evaluating the effects of long-term vibration on structures (Table 3 DIN 4150)

Line	Type of structure	Guideline values for velocity, v_i , in mm/s of vibration in horizontal plane of highest floor, at all frequencies
1	Buildings used for commercial purposes, industrial buildings, and buildings of similar design	10
2	Dwellings and buildings of similar design and/or	5
3	Structures that, because of their particular sensitivity to vibration, cannot be classified under lines 1 and 2 and are of great intrinsic value (e.g. listed buildings under preservation order)	2.5

Construction vibration amenity

AUP:OP Table E25.6.30.1 sets out vibration limits for occupied buildings and is reproduced in Table 6 below.

Table 6: Vibration Limits in (Occupied) Buildings

Receiver	Period	PPV (Peak Particle Velocity) Limit
Occupied Activity sensitive to vibration	Night-time 2200 to 0700 hrs	0.3 mm/s
	Daytime 0700 to 2200 hrs	2 mm/s
Other occupied buildings	At all times	2 mm/s

Works generating vibration are permitted to exceed the limits in Table E25.6.30.1 (refer to Table 6) if:

- The works do not exceed 5mm/s PPV; and
- The works occur for three days or less; and
- The works occur between 0700 to 1800 hrs; and
- Occupants located within 50m of the works generating vibration are advised in advance.

4.2 Proposed operational and construction performance standards

We recommend the designation adopts the following AUP:OP performance standards:

- Standard E25.6.3(1) for operational noise;
- Standard E25.6.27(1) for construction noise (including the 5dB reduction from Standard E25.6.27(4); and
- Standard E25.6.30(1)(a) and (b) for construction vibration.

Operational vibration performance standards are not proposed to be included as no operational vibration effects are anticipated.

5.0 OPERATIONAL NOISE ASSESSMENT

Our assessment confirms that WTP operational noise can be designed to comply with the relevant AUP:OP limits. The WTP may be audible at times at some receivers during the night. The effects are considered to be reasonable given the overall level of (compliant) noise, the fact that it is steady-state and because receivers will typically be inside their homes in this period. No unreasonable adverse effects will occur.

5.1 Calculated operational noise levels

Using the modelling methodology detailed in Section 5.3, we have calculated the WTP's noise envelope. The results are summarised overleaf in Table 7 and shown graphically as noise contours in Appendix E. The modelling confirms that:

- Designing the WTP to an initial noise budget of 95 dB L_{WA} will result in up to 40 dB L_{Aeq} at dwellings
- Including an allowance for future projects, a total noise budget of 99 dB L_{WA} will comply with 45 dB L_{Aeq} at night

Table 7: Calculated operational noise levels

Rec. no.	Address	Project Noise Limits [Daytime / Any other time]	Predicted noise level (Initial) (dB L _{Aeq})	Predicted noise level (Future) (dB L _{Aeq})	Complies?
R1	399 Wayby Valley Road	55 / 45	39	43	Yes
R2	400 Wayby Valley Road	55 / 45	40	44	Yes
R3	412 Wayby Valley Road	55 / 45	35	39	Yes
R4	437 Wayby Valley Road	55 / 45	34	38	Yes

5.2 Assessment of operational noise effects

Comparing the calculated noise levels in Table 7 to the existing noise environment (refer to Section 3.1) we note the following:

- Operational noise (up to 40 dB L_{Aeq}) will likely be above the existing night-time ambient noise when vehicle noise is not present, and
- Operational noise (up to 40 dB L_{Aeq}) is above the existing night-time background noise (~21 dB L_{A90}). Site noise at night may be audible at some receivers some of the time.

WTP noise inside dwellings with windows ajar for ventilation³ will be no more than 25 dB L_{Aeq} and may be faintly audible. With windows closed, WTP noise will likely be inaudible. On this basis we consider that no unreasonable adverse night-time effects will occur.

We consider the noise effects in the daytime period to be negligible.

5.3 Operational noise modelling methodology

We have calculated operational sound levels in accordance with the algorithms detailed in ISO 9613-2:1996⁴ and implemented in SoundPLAN® environmental noise modelling software. ISO 9613 considers a range of frequency dependent attenuation factors including atmospheric absorption, ground and barrier effects, directivity, as well as spherical spreading.

The ISO 9613 standard adopts the conservative approach of assuming that wind is always blowing from the noise source towards all receivers. The calculations also hold for average propagation under a well-developed moderate ground-based temperature inversion, such as what commonly occurs on clear, calm nights.

Specific equipment has not been selected at this stage of the project; therefore we have adopted a ‘noise budget’ approach in calculating the WTP’s noise envelope. A noise budget typically allocates a percentage of the total noise that an activity can generate (to comply with the relevant noise limits) to individual items of plant, or to a group or particular process e.g., plant room pumps, inlet works etc.

Table 8 provides the indicative sound power level and the maximum allowable sound pressure level at the closest notional boundary position. The sound power levels are intended as a guide for design purposes only. However, it is essential that the maximum allowable sound pressure level at the closest notional boundary position is not exceeded.

³ We have assumed 15 decibels is the maximum attenuation that can be achieved with a partially opened window.

⁴ ISO 9613-2:1996 “Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation”

We have developed the budget such that operational WTP noise for the configuration shown in Appendix B will not exceed 40 dB L_{Aeq} when measured at the notional boundary of the closest receivers. Including an allowance for future projects on the same site, the total noise budget has been designed to comply with 45 dB L_{Aeq} at night. This mirrors the Rural Production Zone night-time limit in AUP:OP Standard E25.6.3(1).

Table 8: Project noise budget

Budget item description	Sound power level (dB L_{WA}) (for guidance)	Maximum allowable sound pressure level	
		(dB $L_{Aeq(15min)}$) @10m (for guidance)	(dB $L_{Aeq(15min)}$) @100m setback (critical)
Filtration room	-	-	-
Backwash tank pumps	-	-	-
Machine room	-	-	-
MCC room	-	-	-
Combined:	88	60	40
Future allowance	91	63	43
Total:	93	65	45

Notes to table:

- (1) Values in table are rounded.
- (2) Sound power levels are derived from the overall sound pressure level assessed at the critical receiver distance i.e., 100m. This is the minimum distance between the main site building and R2 (400 Wayby Valley Road). This is not the closest receiver, however, there is some screening via terrain at R1 (399 Wayby Valley Road) and we consider R2 the worst-case scenario.

6.0 OPERATIONAL VIBRATION ASSESSMENT

We anticipate that the operation of the WTP will generate minimal levels of vibration at the closest dwellings. No adverse vibration effects will occur.

British Standard BS 5228-2:2009 “Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration” provides general guidance on the effects of different vibration levels⁵. It states that a vibration level of 0.3 mm/s PPV is the threshold of perception in residential environments⁶. Comparing BS 5228 guidance to the AUP:OP night-time limit of 0.2 mm/s PPV, we note that the AUP:OP limit is lower than the threshold of perception.

We anticipate that, given the setback distance of the closest receiver is 55 m, operational vibration will be less than the threshold of perception and will comply with the relevant AUP:OP limits. We also note that receivers will be subject to vibration from traffic movements on Wayby Valley Road, and in our experience is expected to be higher than vibration from the operation of the WTP.

⁵ MDA notes that BS 5228 relates to construction. However, the guidance relating to threshold and perception applies to any vibration source.

⁶ BS 5228-2:2009 Annex B Table B.1

7.0 CONSTRUCTION NOISE ASSESSMENT

Construction noise will readily comply with the relevant limits during typical work hours. No adverse effects are anticipated. If early morning concrete pours are required, effects can be acceptably managed via a CNMP.

7.1 Calculated typical construction noise levels

We understand the construction works associated with the project will consist of:

- Site enabling works and bulk earthworks
- Construction of retaining walls
- Excavation and installation of an underground sewage tank
- Installation of WTP infrastructure
- Site landscaping and remediation

We anticipate the plant and activities shown in Table 9 will be used during construction. Table 9 includes the per unit sound power level, calculated level at the closest receivers, and the minimum distance required to comply with the daytime construction noise limit of 70 dB L_{Aeq} (refer to Section 4.1.4).

Construction works will start at 7am with daily prestart and safety briefings. Construction involving machinery and power tools will not commence before 7:30am.

Noise from construction activities is calculated to readily comply with the relevant daytime noise limits. In our opinion, if compliance with the construction noise limit is achieved, then construction noise effects will be adequately controlled.

Table 9: Calculated construction noise levels at the closest receivers

Activity	Equipment	Sound Power (dB L_{WA})	Façade Noise Level (dB L_{Aeq})			Limit Setback (m)
			R1 ³	R2 ⁴	R3 ⁵	70 dB L_{Aeq}
Site enabling works	30T excavator	103	58	57	53	25
	Truck and trailer	105	60	59	55	30
Strip topsoil and bulk excavation to form building platform	30T excavator	103	58	57	53	25
	5-axle dump truck	106	61	60	56	33
Foundations	Concrete truck and pump	103	58	57	53	25
	30T excavator	103	58	57	53	25
	Truck	97	52	51	47	13
	Generator (150 kVA)	93	48	47	43	8
Erect precast concrete wall panels, steel framing, roof structures, pipes etc.	20T mobile crane	98	53	52	48	14
	Grinder (hand tools)	108	63	62	58	40
	Concrete truck and pump	103	58	57	53	25
	Generator (150 kVA)	93	48	47	43	8
	Pump (150mm dia.)	93	48	47	43	8

Activity	Equipment	Sound Power (dB L _{WA})	Façade Noise Level (dB L _{Aeq})			Limit Setback (m) 70 dB L _{Aeq}
			R1 ³	R2 ⁴	R3 ⁵	
	Compressor	93	48	47	43	8
	Truck idling	91	46	45	41	6
Site landscaping and access roads	7T excavator	102	57	56	52	22
	30T excavator	103	58	57	53	25
	3-axle dump trucks	106	61	60	56	33
	5T static/vibratory roller	103	58	57	53	22
	Bitumen truck	103	58	57	53	25

Notes to table:

- (1) Appendix A provides an explanation of technical terms
- (2) In accordance with Section C.2 of NZS 6803: 1999 inclusive of 3 dB facade reflection
- (3) R1 represents façade of 399 Wayby Valley Road located 73 m from the edge of site
- (4) R2 represents façade of 400 Wayby Valley Road located 85 m from the edge of site
- (5) R3 represents façade of 412 Wayby Valley Road located 124 m from the edge of site
- (6) The maximum noise level limit (85 dB L_{AFmax}) will be readily complied with at all receivers

7.2 Early morning concrete pours

There is a possibility of early morning concrete pours associated with the project. The size of the project and resulting concrete pours are such that it may be necessary to start work as early as 5am⁷. This is so the concrete supplier can fulfil the batch order and to allow for trowelling/final finishing to occur early in the curing process.

We have calculated construction noise associated with early morning pours and assessed the levels against the night-time noise limits of 45 dB L_{Aeq} / 75 dB L_{AFmax} for rural receivers. The results are shown in

⁷ The pours will be staged to comply with the project's traffic management plan

Table 10.

The results confirm that combined noise from early morning concrete pours will not comply with the guideline night-time noise limits in NZS 6803:1999 at the assessed receivers. The exceedances will result in appreciable short-term effects which will require mitigation and management using a CNMP.

We recommend that all concrete pours are scheduled to occur during daytime hours only, when they would readily comply with the daytime noise limit. If early morning concrete pours are required, mitigation and management via a CNMP will be required, including the possibility of relocating the receivers while the concrete pours are occurring.

Table 10: Calculated concrete pour noise levels

Activity	Equipment	Sound Power	Façade Noise Level (dB LAeq)			Limit Setback (m)
		(dB LWA)	R1 ³	R2 ⁴	R3 ⁵	45dB LAeq
Foundations	Concrete pump	106	-	-	-	-
	Truck idling	91	-	-	-	-
	Generator (150kVA)	93	-	-	-	-
Combined Noise		106	61	60	56	331

Notes to table:

- (1) Appendix A provides an explanation of technical terms
- (2) In accordance with Section C.2 of NZS 6803: 1999 inclusive of 3 dB facade reflection
- (3) R1 represents façade of 399 Wayby Valley Road located 73 m from the edge of site
- (4) R2 represents façade of 400 Wayby Valley Road located 85 m from the edge of site
- (5) R3 represents façade of 412 Wayby Valley Road located 124 m from the edge of site
- (6) The maximum noise level limit (85 dB LA_{Fmax}) will be readily complied with at all receivers

7.3 Construction noise prediction methodology

The contractor will develop a detailed construction programme prior to the commencement of construction activities. We have assumed an indicative construction methodology for our calculations in its absence.

We have assumed that typical construction techniques will be employed on this project. Initial earthworks will be required, followed by the creation of haul routes for construction traffic.

We have calculated construction noise in general accordance with the method detailed in Annex D⁸ of NZS 6803:1999. The method considers the sound power level, periods of operation, distance from source to receiver and screening of each source, as well as façade reflection and the degree of soft ground attenuation.

8.0 CONSTRUCTION VIBRATION ASSESSMENT

Construction of the pump station will readily comply with the relevant vibration limits at the closest dwellings. No vibration effects will occur.

8.1 Construction vibration high-level screening assessment

We have undertaken a high-level vibration screening assessment for construction activities. Using the identified high-vibration sources we have calculated the vibration level received at the closest dwelling (399 Wayby Valley Road).

⁸ Annex D refers to BS 5228-1:1997 (now superseded by BS 5228-1:2009)

Table 11 lists the activity, the identified highest-vibration source associated with that activity, and the closest source-to-receiver distance. The vibration screening assessment indicates ready compliance with the relevant guideline limits.

Table 11: Screening summary table

Activity	Source	Min. rec. distance (m)	Vibration level (mm/s PPV)	Potential to exceed AUP:OP Standards, warranting further assessment?
Compaction	5T vibratory roller	55	0.7	No. Complies with E25.6.30(1)(a&b)

9.0 CONDITIONS OF DESIGNATION

We recommend the following proposed designation conditions:

Operational Noise

- Noise from the operation of the water treatment plant shall meet the following noise limits at the notional boundary of rural zone receivers existing as at [insert date of consent]:

Receiving Zone	Daytime (7am – 10pm Mon – Sat, 9am – 6pm Sunday)	Night-time (All other times)	Assessment Position
Rural – Rural Production Zone	55 dB L_{Aeq}	45 dB L_{Aeq} 75 dB L_{AFmax}	Notional boundary of receiver

Operational noise levels are to be measured in accordance with New Zealand Standard NZS 6801:2008 *Acoustics – Measurement of environmental sound* and assessed in accordance with New Zealand Standard NZS 6802:2008 *Acoustics – Environmental Noise*.

- The water treatment plant shall be designed, constructed and operated to meet the operational noise limits in condition (1).

Construction Noise

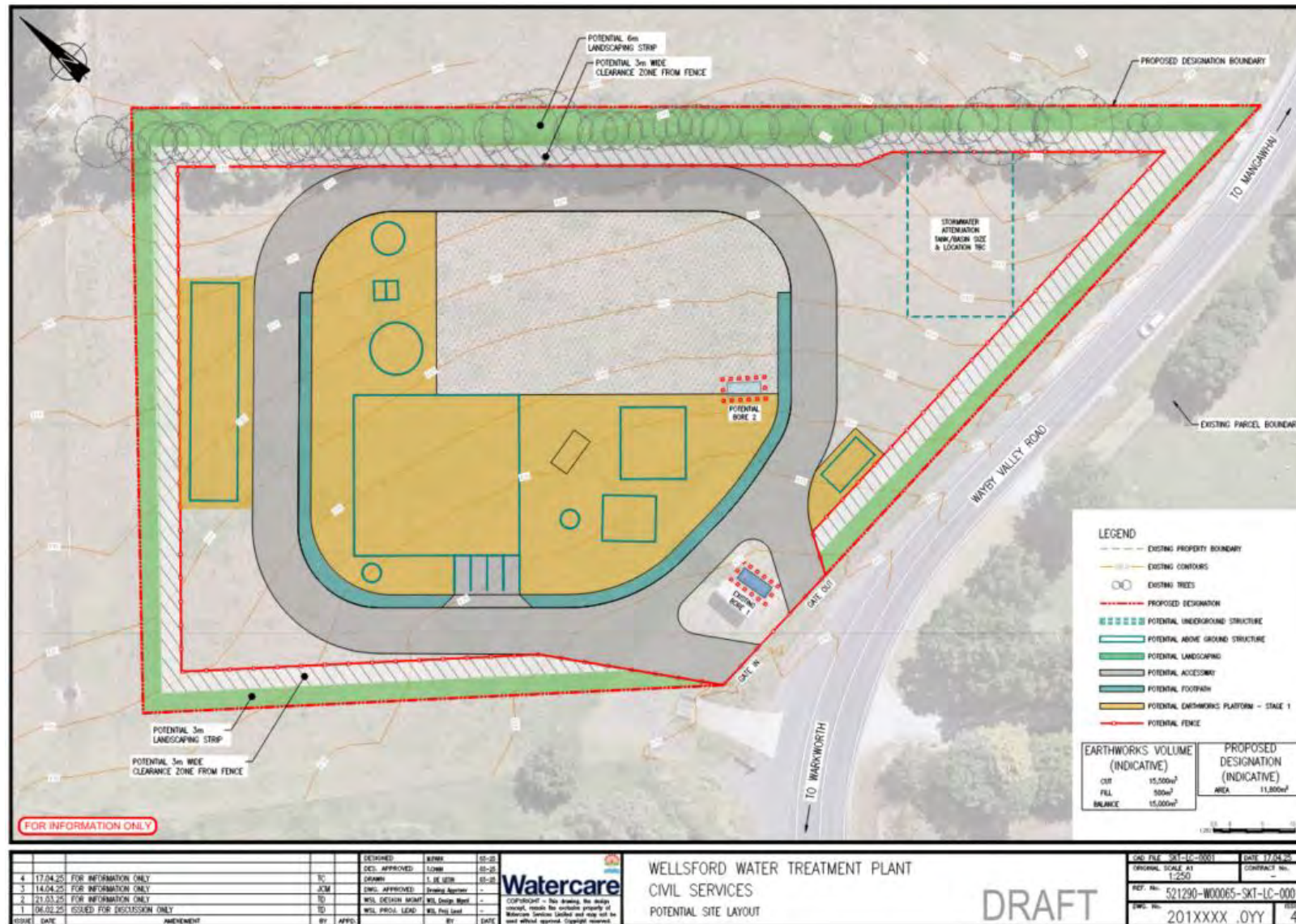
- Construction noise shall be measured and assessed in accordance with the provisions of New Zealand Standard NZS 6803:1999 “Acoustics - Construction Noise” and comply with the limits in the following table.

Time	Weekdays (dBA)		Saturdays (dBA)		Sundays and Public Holidays (dBA)	
	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
0630 - 0730	55	75	45	75	45	75
0730 – 1800	70	85	70	85	55	85
1800 – 2000	65	80	45	75	45	75
2000 - 0630	45	75	45	75	45	75

APPENDIX A GLOSSARY OF TERMINOLOGY

A-weighting	<p>A set of frequency-dependent sound level adjustments that are used to better represent how humans hear sounds. Humans are less sensitive to low and very high frequency sounds.</p> <p>Sound levels using an “A” frequency weighting are expressed as dB A. Alternative ways of expressing A-weighted decibels are dBA or dB(A).</p>
Background sound	<p>The sound that is continuously present in a room or outdoor location. Often expressed as the A-weighted sound level exceeded for 90 % of a given time period i.e., L_{A90}.</p>
dB	<p>Decibel. The unit of sound level.</p>
L_{Aeq}	<p>The equivalent continuous A-weighted sound level. Commonly referred to as the average sound level and is measured in dB.</p>
L_{AFmax}	<p>The A-weighted maximum sound level. The highest sound level which occurs during the measurement period. Usually measured with a fast time-weighting i.e. L_{AFmax}</p>
L_w	<p>Sound Power Level. The calculated level of total sound power radiated by a sound source. Usually A-weighted i.e. L_{WA}.</p>
PPV	<p>Peak Particle Velocity. The measure of the vibration amplitude, zero to maximum. Used for building structural damage assessment.</p>
Total sound (Ambient sound)	<p>The totally encompassing sound in a given situation at a given time, from all sources near and far, including the specific sound. This definition is from NZS 6802:2008.</p>
Specific sound	<p>A component of total sound that can be identified as associated with a specific source. Specific sound is the ‘sound of interest’ in an assessment.</p> <p>This definition is from NZS 6802:2008.</p>
Vibration	<p>When an object vibrates, it moves rapidly up and down or from side to side. The magnitude of the sensation when feeling a vibrating object is related to the vibration velocity.</p> <p>Vibration can occur in any direction. When vibration velocities are described, it can be either the total vibration velocity, which includes all directions, or it can be separated into the vertical direction (up and down vibration), the horizontal transverse direction (side to side) and the horizontal longitudinal direction (front to back).</p>

APPENDIX B WTP INDICATIVE SITE LAYOUT



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APPENDIX C APPROVED BUILDING PLATFORM AT 437 WAYBY VALLEY ROAD

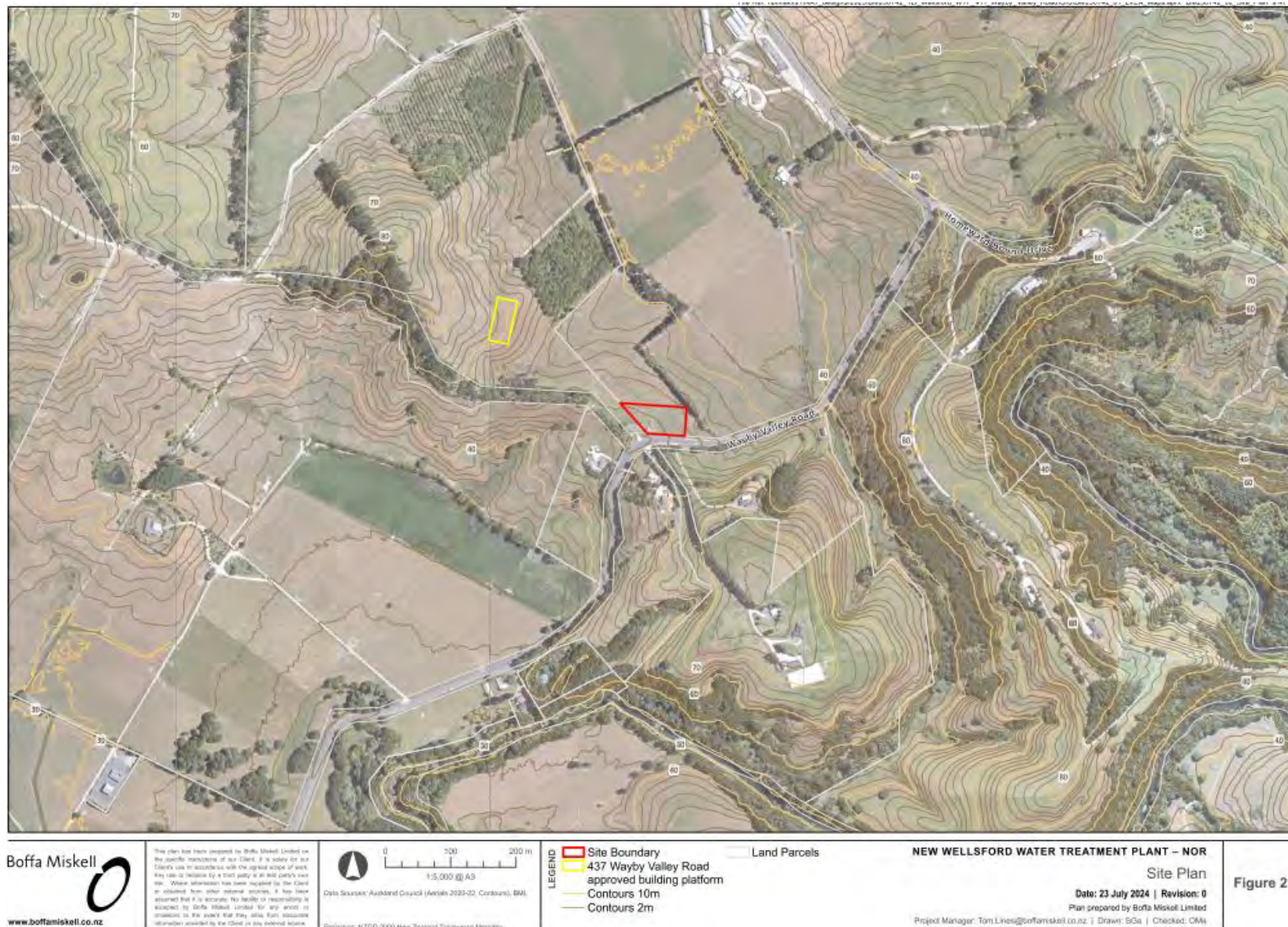


Figure 2

APPENDIX D AUP:OP NOISE PERFORMANCE STANDARDS

Operational Noise

E25.6. Standards

All activities must comply with the following relevant permitted activity standards.

E25.6.1. General standards

- (1) Noise levels arising from activities must be measured and assessed in accordance with the New Zealand Standard NZS 6801:2008 Measurement of environmental sound and the New Zealand Standard NZS 6802:2008 Acoustics - Environmental noise except where more specific requirements apply.
- (2) The application of an adjustment for noise containing special audible characteristics in terms of Appendix B4 Special Audible Characteristics in New Zealand Standard NZS 6802:2008 Acoustics – Environmental noise may apply to the A weighted level for any measurement but an adjustment must not be applied to any level measured in the 63Hz and 125Hz octave bands.
- (3) The noise from any construction work activity must be measured and assessed in accordance with the requirements of New Zealand Standard NZS6803:1999 Acoustics – Construction noise. Construction work is defined in New Zealand Standard NZS6803:1999 Acoustics – Construction noise.
- (4) The noise limits of the Plan do not apply to emergency service sirens and callout sirens during emergency situations.
- (5) Where more than one standard applies that requires insulation of a noise-sensitive space from an external noise source, the standards must be applied cumulatively.
- (6) Where standards are provided for specific activities, the zone interface standards and the zone standards do not apply to that activity.

E25.6.3. Noise levels in rural and future urban zones

- (1) The noise (rating) level from any activity in the Rural – Mixed Rural Zone, Rural – Rural Production Zone, Rural – Rural Coastal Zone or the Future Urban Zone measured within the notional boundary on any site in any rural zone must not exceed the limits in Table E25.6.3.1 Noise levels in the Rural – Mixed Rural Zone, Rural – Rural Production Zone, Rural – Rural Coastal Zone or the Future Urban Zone below:

Table E25.6.3.1 Noise levels in the Rural – Mixed Rural Zone, Rural – Rural Production Zone, Rural – Rural Coastal Zone or the Future Urban Zone

Time	Noise level
Monday to Saturday 7am-10pm	55dB L_{Aeq}
Sunday 9am-6pm	
All other times	45dB L_{Aeq} 75dB L_{AFmax}

Operational Vibration

Standard E25.6.30(2)

- (2) Permanently installed stationary vibrating, reciprocating and rotating machinery and all piping, ducting and other equipment attached to such machinery must be installed and maintained so that any resulting vibration does not exceed the limits of Table E25.6.30.2 Vibration levels for stationary machinery when measured in any occupied room of any building on another site or in any occupied unit under different ownership from the source of the vibration. Vibration must be measured in accordance with ISO 2631-2:2003 Mechanical vibration and shock – Evaluation of human exposure to whole-body vibration – Part 2: Vibration in buildings (1Hz to 80Hz):

Table E25.6.30.2 Vibration levels for stationary machinery

Affected occupied building or area	Time of day	Maximum vibration level in root mean square velocity (mm/s) between 8 and 80Hz
Noise sensitive spaces	7am-10pm	0.20
Bedrooms and sleeping areas only within activities sensitive to noise	10pm-7am	0.14

Construction Noise⁹

E25.6.27. Construction noise levels in all zones except the Business – City Centre Zone and the Business – Metropolitan Centre Zone

- (1) Noise from construction activities in all zones except the Business – City Centre Zone and the Business – Metropolitan Centre Zone must not exceed the levels in Table E25.6.27.1 Construction noise levels for activities sensitive to noise in all zones except the Business – City Centre Zone and the Business – Metropolitan Centre Zone when measured 1m from the façade of any building that contains an activity sensitive to noise that is occupied during the works.

Table E25.6.27.1 Construction noise levels for activities sensitive to noise in all zones except the Business – City Centre Zone and the Business – Metropolitan Centre Zone

Time of week	Time Period	Maximum noise level (dBA)	
		L _{eq}	L _{max}
Weekdays	6:30am - 7:30am	60	75
	7:30am - 6:00pm	75	90
	6:00pm - 8:00pm	70	85
	8:00pm - 6:30am	45	75
Saturdays	6:30am - 7:30am	45	75
	7:30am - 6:00pm	75	90
	6:00pm - 8:00pm	45	75
	8:00pm - 6:30am	45	75
Sundays and public holidays	6:30am - 7:30am	45	75
	7:30am - 6:00pm	55	85
	6:00pm - 8:00pm	45	75
	8:00pm - 6:30am	45	75

⁹ As the anticipated length of the construction period exceeds 20 weeks, Standard E25.6.7(4) would apply to the project, resulting in the construction noise limits set out in Table E25.6.27.1 decreasing by 5 dB.

Construction Vibration

E25.6.30. Vibration

- (1) Construction and demolition activities must be controlled to ensure any resulting vibration does not exceed:
 - (a) the limits set out in German Industrial Standard DIN 4150-3 (1999):
Structural vibration – Part 3 Effects of vibration on structures when measured in accordance with that Standard on any structure not on the same site; and
 - (b) the limits in Table E25.6.30.1 Vibration limits in buildings in any axis when measured in the corner of the floor of the storey of interest for multi-storey

buildings, or within 500mm of ground level at the foundation of a single storey building.

Table E25.6.30.1 Vibration limits in buildings

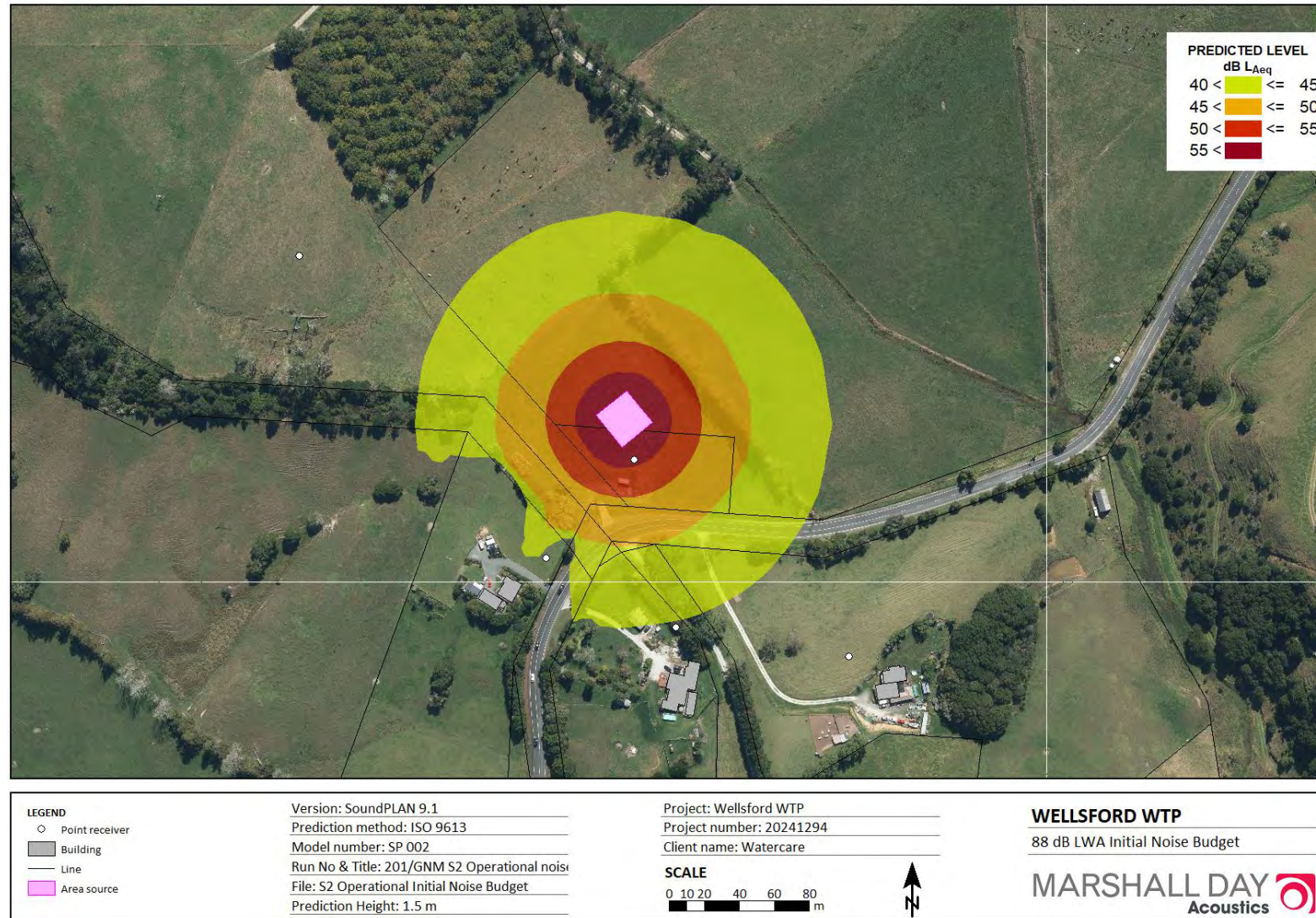
Receiver	Period	Peak Particle Velocity Limit millimetres/second
Occupied activity sensitive to noise	Night-time 10pm to 7am	0.3 mm/s
	Daytime 7am to 10pm	2 mm/s
Other occupied buildings	At all times	2 mm/s

Works generating vibration for three days or less between the hours of 7am to 6pm may exceed the limits in Table E25.6.30.1 Vibration limits in buildings above, but must comply with a limit of 5mm/s peak particle velocity in any axis when measured in the corner of the floor of the storey of interest for multi-storey buildings, or within 500mm of ground level at the foundation of a single storey building, where:

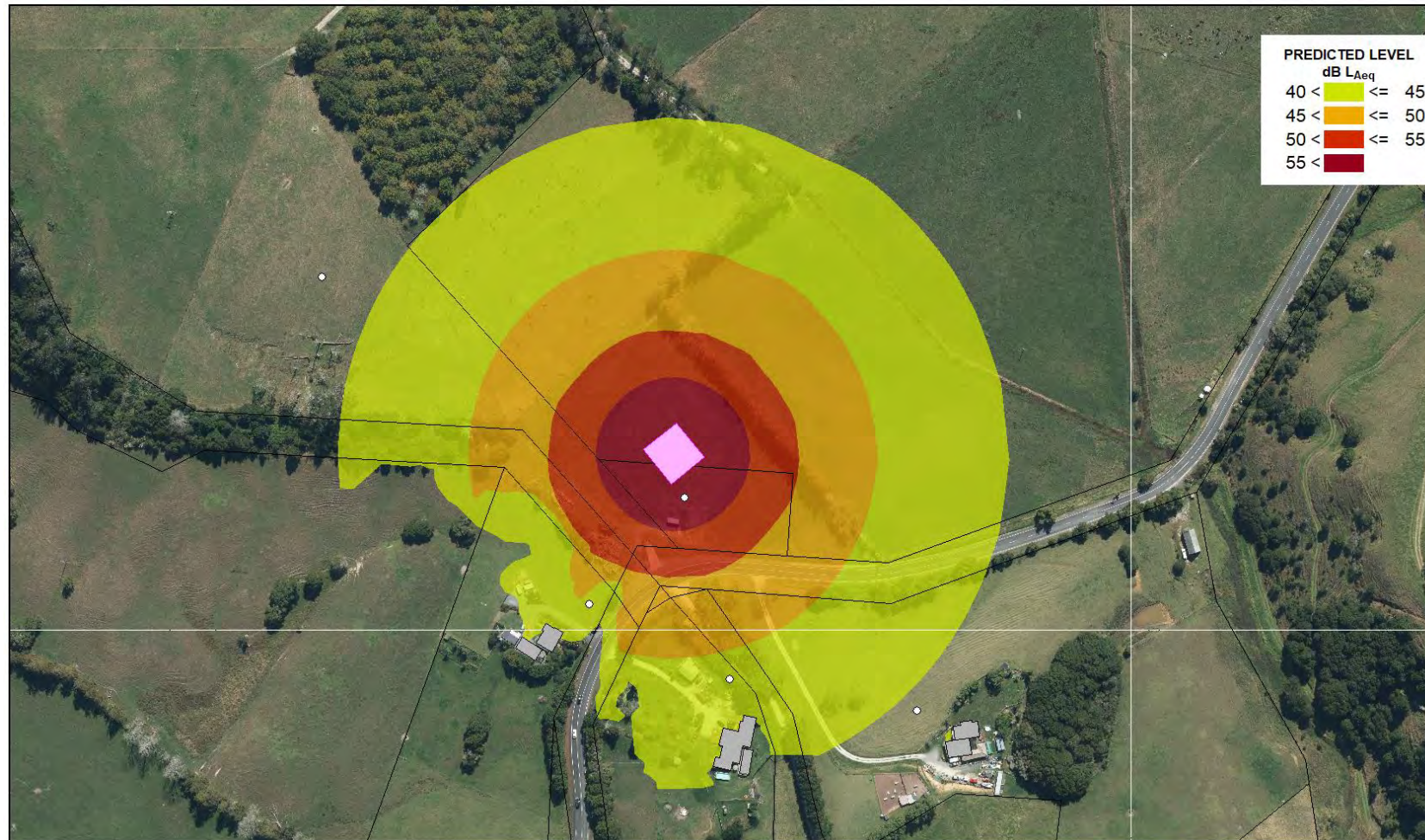
- (i) all occupied buildings within 50m of the extent of the works generating vibration are advised in writing no less than three days prior to the vibration-generating works commencing; and
- (ii) the written advice must include details of the location of the works, the duration of the works, a phone number for complaints and the name of the site manager.

APPENDIX E CALCULATED WTP NOISE CONTOUR ENVELOPE

Initial proposed scenario (88 dB L_{WA})



Future noise budget allowance (up to 93 dB L_{WA})



LEGEND Point receiver Building Line Area source	Version: SoundPLAN 9.1	Project: Wellsford WTP	WELLSFORD WTP 93 dB L _{WA} Future Noise Budget MARSHALL DAY Acoustics
	Prediction method: ISO 9613	Project number: 20241294	
	Model number: SP 002	Client name: Watercare	
	Run No & Title: 202/GNM S2a Future Operatic		
	File: S2a Future Noise Budget		
	Prediction Height: 1.5 m	SCALE 0 10 20 40 60 80 m	

NEW WELLSFORD WATER TREATMENT PLANT - NOR

GRAPHIC SUPPLEMENT

MAY 2025



New Wellsford Water Treatment Plant - NoR



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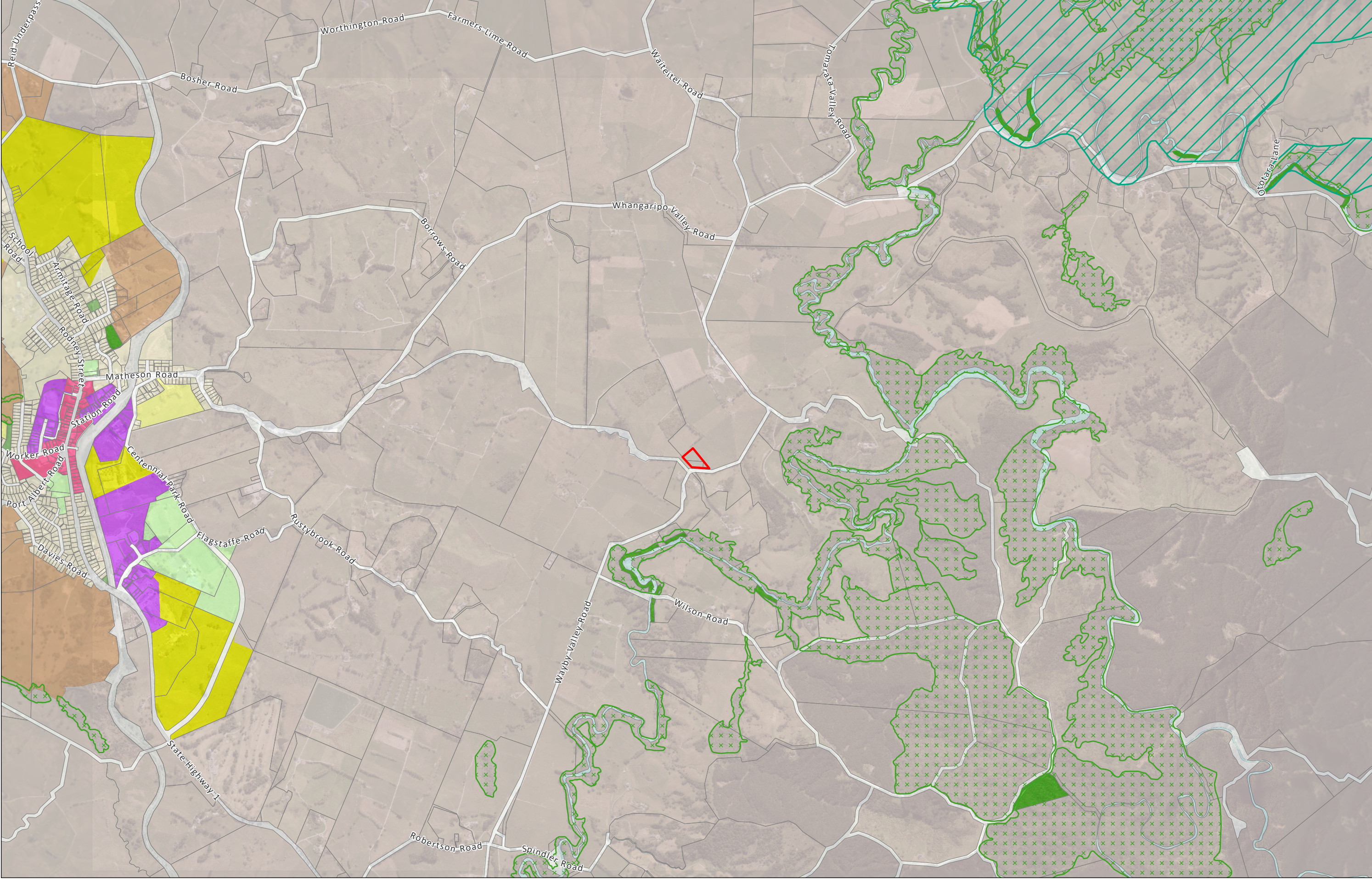
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- FIGURE 2: Site Plan
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- FIGURE 4: Viewpoint Location Plan
- FIGURE 5: Zone of Theoretical Visibility (9m) - Ground-Level
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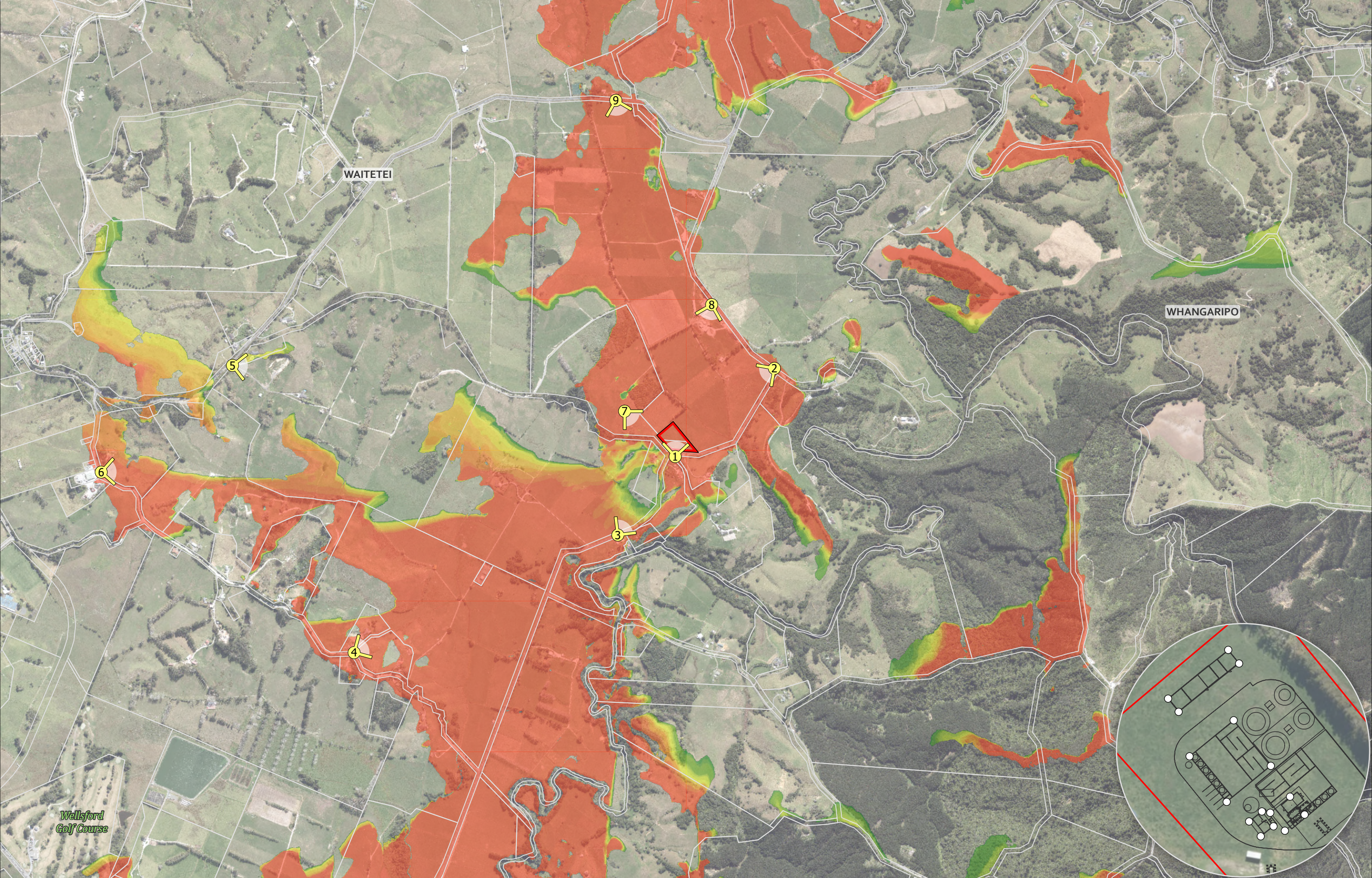
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Approximate site location



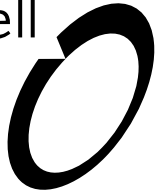


Approximate site location









New Wellsford Water Treatment Plant - NoR

Landscape and Visual Effects Assessment

Prepared for Watercare Services Limited

30 May 2025







Boffa Miskell is proudly a
Toitū net carbonzero certified consultancy

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Prepared by:	Oliver May Associate Principal CMLI Registered Landscape Architect Boffa Miskell Limited	
Reviewed by:	Tom Lines Senior Principal NZILA Registered Landscape Architect Boffa Miskell Limited	
Status: [DRAFT]	Revision / version: [3]	Issue date: 30 May 2025

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Executive Summary

Watercare Services Limited ('Watercare'), are proposing to designate land to enable the construction of a new Water Treatment Plant ('WTP') at 411 Wayby Valley Road ('the site'). This assessment assesses the potential landscape and visual effects ('LVA') as a result of the proposed works. This LVA has been prepared to accompany the Notice of Requirement ('NoR') to designate the site..

The construction of the proposed WTP will require both above ground and below ground works and proposes buildings/structures that will range from 5m to 9m relative to the finished ground level. The construction period is anticipated to be approximately 24 months.

The surrounding landscape is rural in nature and heavily influenced by the rolling topography and the backdrop of the steep hill country between the Pakiri Foothills and the Dome Forest to the east. The surrounding rural landscape comprises open pastoral fields, separated by linear bands of vegetation and post and wire fencing. The site is located on a relative high point within the localised rolling hill landscape, which is advantageous for the function of the WTP and supply of water to the local area.

There are no sensitive landscape or ecological features within the site or its immediate context.

Viewing audiences are located to the north, south, east and west of the site and are primarily limited to the medium and short distance. Longer distance views are restricted by intervening steep landform and mature vegetation along field boundaries and the roadside. Viewing audiences broadly comprise people in rural residences and road users. Existing vegetation along the north, east and west of the site, combined with undulating topography, limit views into the site. However, views from Wayby Valley Road to the south of the site are open in nature creating an unrestricted, albeit short distance, view into the site. There is the potential to establish a dwelling within the lot at 437 Wayby Valley road within 160m of the site, given this is subject to an approved subdivision consent, this future dwelling could have an uninterrupted southwestern facing outlook over the site.

A Landscape Mitigation Planting Plan (LMPP) and specific recommendations are proposed to manage adverse landscape and visual effects related to the proposed WTP. The LMPP proposes a double staggered row of New Zealand Lacebark (*Hoheria populnea*) and Akeake (*Dodonaea viscosa*) indigenous trees along the northern, southern and western boundaries of the site and retains the cedar trees along the eastern boundary, to provide screening and softening of the views into the site.

The assessment also recommends that the above ground structures and buildings on the site are designed to have aesthetics and features which complement the rural landscape and rural structures. This will be achieved by:

- using natural materials and finishes that reflect the character of rural development and structures;
- where possible, designing buildings with steel roofs in a dark/neutral/recessive colour;

- using neutral / low reflectivity finishes to the proposed structures to reduce glare and potential visual contrast with the surrounding rural landscape; and
- replacing bright yellow or red standard non safety elements of the structures with neutral or recessive colours.

It is considered in this assessment that the proposed works will result in:

- The characteristics and values of the rural landscape experiencing adverse effects to a **Low** (*"less than minor"*) level during construction, due to the area of earthworks and the removal of pastoral vegetation. During operation it is anticipated that adverse effects will be **Very Low** (*"less than minor"*) once the LMPP vegetation has grown to approximately 6m in height (which is estimated to take approximately 6 years).
- Visual effects on established viewing audiences will vary based on the proximity of the viewing audience to the site and the direction of the view.
- Visual effects on surrounding dwellings:
 - During the construction period, where views of the site are available, the majority of residential dwellings are anticipated to experience **Very Low** adverse (*"less than minor"*) visual effects. The greatest effects on existing audiences will be experienced during the construction period will be from the dwelling at 412 Wayby Valley Road and at the entrances to the access roads at 406 and 412 Wayby Valley Road. Visual effects on the potential future dwelling at 437 Wayby Valley Road during construction are anticipated to be up to **Moderate** adverse (*"more than minor"*) but predominantly **Low Moderate** adverse (*"less than minor"*), if there are no other mitigating factors. It is recognised that these adverse effects would be temporary in nature if a dwelling is present and there will be no adverse effects if a dwelling is not present.
 - Once the proposed perimeter planting has grown to approximately 6m in height (after approximately 6 years) it is considered that adverse effects will be **Very Low** (*"less than minor"*). The operation's visual effects on the potential future dwelling at 437 Wayby Valley Road are anticipated to be up to **Low-Moderate** adverse (*"minor"*) initially and reduce to **Low** adverse (*"less than minor"*) after the proposed mitigation planting reaches a height of 6 meters (after approximately 6 years).
- Visual effects on road users:
 - During the construction period, visual effects will range from **neutral** to **Very Low** adverse (*"less than minor"*) for road users, while a short section of the road will peak at **Low** adverse (*"less than minor"*).
 - During operation it is anticipated that the majority of road users will experience visual effects which are considered to be **neutral**. Viewing audiences along short sections of the road will experience **Very Low** adverse (*"less than minor"*) visual effects, which will

eventually reduce to neutral as the LMPP vegetation screens filter views.

- In considering the AUP (OiP), overall, it is considered the Project acknowledges the specific character of the site and through mitigation will appropriately maintain the landscape and amenity values of the site and local context.

The assessment concludes that the short-term adverse landscape and visual effects during construction can be managed and the long term effects can be mitigated by the LMPP and recommendations in this report for existing established audiences. It is anticipated that adverse visual effects on the potential future dwelling at 437 Wayby Valley Road could be **Moderate** during construction, and **Low-Moderate to Low** during operation, after the establishment of mitigation planting. It is acknowledged that these adverse effects on the potential future dwelling are a “worst case scenario” and the adverse visual effects may be lower depending on the design of the proposed dwelling and habitable area. During operation it is anticipated that adverse effects will be 437 Wayby Valley Road will be **Low-Moderate** adverse (“minor”) until the proposed mitigation planting has reached a height of approximately 6m (approximately 6 years after planting) when effects will reduce to **Low** adverse (*“less than minor”*). It is noted that adverse effects will not occur until a dwelling is established and habitable.

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1.0 Introduction

1.1 Background

Watercare is New Zealand's largest wastewater utility provider responsible for the planning maintenance, and operation of water services to communities throughout Auckland.

Watercare captures raw water from 28 different sources, operates 19 water treatment plants, moves it through 88 pump station and stores it in 95 water reservoirs to ensure it meets drinking water standards. The treated water is then supplied to households and businesses through approximately 9700km of pipeline of different diameters.

Watercare has supplied wholesale water services since 1991 and is a council-controlled organisation (CCO), wholly owned by Auckland Council. Watercare's activities and programmes are funded through user charges and borrowings. Watercare is required under the Local Government (Auckland Council) Act 2009 to manage its operations efficiently with a view to keeping overall costs of water supply and wastewater services to its customers (collectively) at minimum levels.

Watercare's activities are intrinsically linked to the health of people and the natural environment. Auckland's water sources must have sufficient volume and reliability to provide water for the region, and they must be protected from overuse.

Collectively, around 440 million litres of water sourced per day, treated to the Water Services (Drinking water Standards for New Zealand) regulations 2022, and is supplied by Watercare.

Watercare carries out significant work to upgrade and build infrastructure, to maintain levels of service and provide capacity for a fast-growing population. Watercare ensures Auckland and its people continue to enjoy dependable services by upgrading its assets, planning, building, and delivering new infrastructure in cost-efficient ways.

Watercare currently owns and operates the existing Wellsford WTP at 362 Wayby Valley Road, Wellsford, Auckland. The existing WTP was established around 1960 and abstracts water from the Hōteu River immediately south of the site at 362 Wayby Valley Road, from which water is abstracted to feed into the WTP.

The existing WTP currently serves approximately 2,100 residents in Wellsford and Te Hana and is at capacity and cannot meet the current peak demands at times. The connected population is expected to increase to approximately 4,200, which cannot be met by the existing WTP. Additionally, the existing WTP is at the end of its design life.

Following an assessment of alternative sites, Watercare has identified 411 Wayby Valley Road, and part of 254 Whangaripo Valley Road, Wellsford, as its preferred location for a new, upgraded WTP to replace the existing WTP. The new WTP will take and treat groundwater from an existing production bore on site in order to meet the future Projected water demand and quality in Wellsford and Te Hana. Watercare is seeking to designate (through a Notice of

Requirement (NoR)) the full site to enable the construction of the new WTP and provide for future upgrades on site.

The NoR provides for a new and upgraded WTP that will replace the existing WTP, thereby increasing the capacity and improving the resilience of the water supply network. In doing so, these works will support the future growth and development of the Wellsford and Te Hana area.

1.1.1 Project

Watercare proposes to lodge a NoR to designate the site for water supply purposes, including abstraction, treatment and storage of water at the New Wellsford WTP ("**Project**"). Designating the existing WTP will result in positive benefits ensuring the safe operation, maintenance, and future development of the site in an appropriate manner, thus protecting the potable drinking water supply for the growing Wellsford and Te Hana communities. Watercare's objectives and reasons for this Project are set out in the NoR application.

To allow for future expansion of the WTP site that may be required in the future a building envelope for any above-ground structure is proposed in the NoR and set out as follows:

- No above ground structures within 3m of the road frontage or eastern boundary of the site.
- No structures >5m high relative to finished ground level within 15m of the road frontage or within 5m of the western boundary of the site.
- No structures >9m high relative to finished ground level for the remainder of the site.
- Maximum height of any retaining walls is to be 3m at any point.
- A 1.8m and 2.2m high fence between will surround the proposed structures and will sit inside the mitigation boundary planting surrounding the site.
- Implement a Landscape Mitigation Planting Plan (LMPP) to integrate and screen the WTP
- Final Contours will be confirmed in the outline plan of works (OPW).

A potential layout drawing for the proposed WTP is used for illustration purposes in this report (refer Figure 1 below).

1.2 Scope of the report

Boffa Miskell Limited (BML) was engaged by Watercare in October 2023 to undertake a Landscape and Visual Effects Assessment (LVA) to accompany its NoR, which seeks to designate the site at 411 Wayby Valley Road and part of 254 Whangaripo Valley Road, Wellsford (otherwise referred to as "the site" in this report) for a new Wellsford WTP. The site is zoned Rural – Rural Production Zone within the Auckland Unitary Plan (Operative in Part) (AUP). The following LVA assesses the landscape and visual effects of the Project on the immediate and surrounding environment.

2.0 Project Overview

An NoR prepared by Aurecon New Zealand Ltd (and associated drawings in the Appendix of that report) sets out the Project in greater detail. The construction of the proposed WTP will require:

- earthworks and retaining structures;
- erection of water treatment tanks;
- erection of a process and administration building and chemical storage building;
- construction of a stormwater attenuation tank;
- installation of two backwash waste tanks and a sludge holding tank;
- construction of a second bore (in the future);
- temporary lighting;
- construction of a driveway parking area; and
- planting of indigenous trees along the southern and eastern boundaries of the site (see Section 7.0 Mitigation Strategy of this report).

It is anticipated that the construction period of the Project will be approximately 24 months, carried out in stages:

- Mitigation planting along the northern and western Site boundaries.
- Enabling works – Site establishment, utility relocations, installation of erosion and sediment controls (First 3.
- Main construction works – Accessways, platforms, retaining walls, pump station structures, pipelines, utilities, drainage and security fences.
- Commissioning and testing – System integration and testing site reinstatement and demobilization.

The most visually disruptive and overt construction activities are anticipated to take place during the early stages of the project when large construction machinery will be used.



Figure 1: Option 1 Water Treatment Plant concept design

2.1 Assessment Process

This assessment follows the concepts and principles outlined in *Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines*.¹ A full method is outlined in **Appendix 1** of this report. In summary, this assessment provides ratings based upon a combination of quantitative information (where available) and qualitative professional judgements by the authors. The ratings are based upon a seven-point scale which includes very low, low, low-moderate, moderate, moderate-high, high and very high ratings. These ratings are used within this assessment to describe the level (and significance) of the potential landscape and visual amenity effects that would result from the Project (during the construction and during the operation of the WTP).

A desktop study was completed to inform the assessment. This included a review of the relevant information relating to the landscape and visual aspects of the Project. This information included:

- the statutory context of the Project area and surrounding context;
- base map data (such as contours and aerial photography); and
- Project drawings.

Following this desktop study, a joint site visit with Watercare was undertaken to ground truth findings and gain further understanding of the receiving environment. The author and peer reviewer of this assessment have also separately undertaken site visits on 7 December 2023 and 30 January 2024 (respectively), in fine weather conditions. Following an initial proposed

¹ *'Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines'*, Tuia Pito Ora New Zealand Institute of Landscape Architects, July 2022.

design, Watercare has revised the proposal following feedback from Auckland Council. An additional visit to the site and the 437 Wayby Valley Road proposed building platform was undertaken on 31 January 2025 by the assessment author, in fine to overcast weather conditions. The site visits included visiting the wider area to understand the physical and sensory impact the Project would have on the site and the broader landscape, and to identify potential viewing audiences.

3.0 Relevant Statutory Context

There are a number of planning instruments relevant to the assessment of the landscape and visual effects of this Project, including:

- Resource Management Act 1991 (RMA) – notably Section 6 matters (natural character and Outstanding Natural Landscapes); and
- Auckland Unitary Plan (Operative in Part) (AUP (OiP)).

3.1 Resource Management Act 1991

The Project is within a working rural landscape adjacent to natural features. The potentially relevant sections identified under the RMA and addressed in this report relate to the following:

Section 6(a) – *the preservation of natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate, subdivision, use, and development*

Section 6(b) – *the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development*

Section 6(c) – *the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna*

Section 7(c) – *the maintenance and enhancement of amenity values*

Section 7(f) – *maintenance and enhancement of the quality of the environment*

3.1.1 Natural Character (Section 6(a))

Section 6(a) of the RMA requires the preservation of the natural character of the coastal environment, wetlands and lakes and rivers and their margins.

The site is not within the coastal environment or within or along any margins of any waterbodies or wetlands and therefore Section 6(a) does not apply.

3.1.2 Outstanding Natural Features and Landscapes (Section 6(b))

Section 6(b) of the RMA requires 'the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development' as a matter of national importance.

There are no Outstanding Nature Features or Outstanding Natural Landscapes identified by the AUP(OiP) within the site or its immediate vicinity and therefore Section 6(b) is not relevant in relation to this assessment. The nearest Outstanding Natural Landscape (ONL) is the Pakiri Foothills², located 2.5km to northeast of the site and the Dome Forest ONL located 4.9km to the south of the site. The closest Outstanding Natural Feature (ONF) is the Hōteu River incised meanders located approximately 4.8km to the south of the site.

3.1.3 Significant Indigenous Vegetation and Significant Habitats of Indigenous Fauna (Section 6(c) of the RMA) and National Policy Statement on Indigenous Biodiversity

Section 6(c) of the RMA requires 'the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna' as a matter of national importance. Moreover, the National Policy Statement on Indigenous Biodiversity (NPS-IB,) which applies to indigenous biodiversity in the terrestrial environment, came into force in August 2023.

The site comprises pastoral grassland, there are no identified significant natural areas within or around the immediate vicinity of the site, with the most proximate being approximately 350m to the south. Therefore Section 6(c) and the NPS-IB are not relevant to this assessment.

3.1.4 Amenity Values (Sections 7(c) and 7(f))

Section 7 identifies a range of matters that shall be had particular regard to in achieving the purpose of the RMA. These include the maintenance and enhancement of amenity values (Section 7(c)) and the maintenance and enhancement of the quality of the environment (Section 7(f)), which are particularly relevant to our assessment of this Project.

Section 2 of the RMA defines the 'environment' to include:

- (a) ecosystems and their constituent parts, including people and communities;
- (b) all natural and physical resources;
- (c) amenity values; and
- (d) the social, economic, aesthetic and cultural conditions which affect the matters stated in paragraphs (a) to (c) or which are affected by those matters.³

The RMA defines "amenity values" as the *"natural and physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and*

² Auckland Unitary Plan OiP, Schedule 7 Outstanding Natural Landscapes Overlay Schedule [accessed online] 2 February 2024 - <https://unitaryplan.aucklandcouncil.govt.nz/Images/Auckland%20Unitary%20Plan%20Operative/Chapter%20L%20Schedules/Schedule%207%20Outstanding%20Natural%20Landscapes%20Overlay%20Schedule.pdf>

³ Resource Management Act, Part 1, Section 2(1).

cultural and recreational attributes".⁴ These aspects are considered in this report in relation to potential effects on views and visual amenity.

3.2 Auckland Unitary Plan (Operative in Part)

The site is located in the Auckland Region and subject to the AUP(OiP). The site is within the Rural–Rural Production Zone (RPZ).

3.2.1 Zoning

Rural Production Zone (RPZ)

This RPZ provides for a range of land use and development activities including rural production activities, rural industries, rural services and non-residential activities described in the zone description (H19.3.1) of the AUP(OiP). To the north of Auckland, the RPZ is characterised by:

- A high number of large rural properties;
- Low intensity settlement, significant natural areas and natural resources; and
- Less human modification than other surrounding zones in the north.

Land use and development within the RPZ is varied and includes a range of existing and new rural production, rural industry and rural commercial activities and recognises their role in determining the zone's rural character and amenity values. Forestry activities found within the zone include:

- Planting and management of new and existing forests;
- Woodlots and farm scale forestry; and
- Planting and eventual harvesting of indigenous and amenity exotic species for long-term production purposes.

Within rural zones the AUP(OiP) (H19.10.2) permits residential dwellings up to 9m in height, other buildings have a permitted height up to 15m.

The objectives and policies which apply to all Rural zones are set out at H19.2 of the AUP(OiP), and relevantly include:

- 1) *Rural areas are where people work, live and recreate and where a range of activities and services are enabled to support these functions.*
- 3) *Elite soil is protected, and prime soil is managed, for potential rural production.*

The key general rural zone Objectives are set out in H19.2.2 of the AUP(OiP) and include:

- 1) *Manage the effects of rural activities to achieve a character, scale, intensity and location that is in keeping with rural character, amenity and biodiversity values, including recognising the following characteristics:*
 - a. *a predominantly working rural environment;*

⁴ Resource Management Act 1991, Section 2(1).

- b. *fewer buildings of an urban scale, nature and design, other than dwellings and their accessory buildings and buildings accessory to farming; and*
- c. *a general absence of infrastructure which is of an urban type and scale.*

The key Objectives for the RPZ are set out in Section H19.3.2 of the AUP(OiP) and include:

- 1) *A range of rural production, rural industries, and rural commercial activities take place in the zone.*
- 2) *The productive capability of the land is maintained and protected from inappropriate subdivision, use and development.*

Relevant policies for the general rural zones are set out in the Section H19.2.2 of the AUP(OiP) and include the following:

- (4) *Enable and maintain the productive potential of land that is not elite or prime soil but which has productive potential for rural production purposes, and avoid its use for other activities including rural lifestyle living except where these are provided for or enabled by Policy H19.2.2(5).*
- (5) *Enable a range of rural production activities and a limited range of other activities in rural areas by:*
 - b. *avoiding or restricting rural subdivision for activities not associated with rural production in areas other than those subdivision provided for in E39 Subdivision – Rural;*
 - c. *managing the effects of activities in rural areas so that:*
 - i. *essential infrastructure can be funded, coordinated and provided in a timely, integrated, efficient and appropriate manner;*
 - d. *acknowledging that, in some circumstances, the effective operation, maintenance, upgrading and development of infrastructure may place constraints on productive land and other rural activities*

Relevant Policies identified in the RPZ are set out in Section H19.3.3 of the AUP(OiP) and include the following:

- (1) *Provide for a range of existing and new rural production, rural industry and rural commercial activities and recognise their role in determining the zone's rural character and amenity values.*

4.0 Existing Environment

4.1 Landscape Context

The site is located approximately 3km to the east of the centre of the Wellsford township (refer to Figure 2 below). Wellsford is bisected by State Highway 1 (SH1) and is the northernmost settlement in the Auckland Region and is a gateway to the Northland Region. The town

supports the surrounding rural industries, which are primarily dairy but also include sheep farming. These rural industries are supported in part by the rail (North Auckland Line, NAL) and road transportation network (SH1). New areas of Future Urban Zoned land are located to the north and south of the main town which are anticipated to result in approximately 800 new homes.

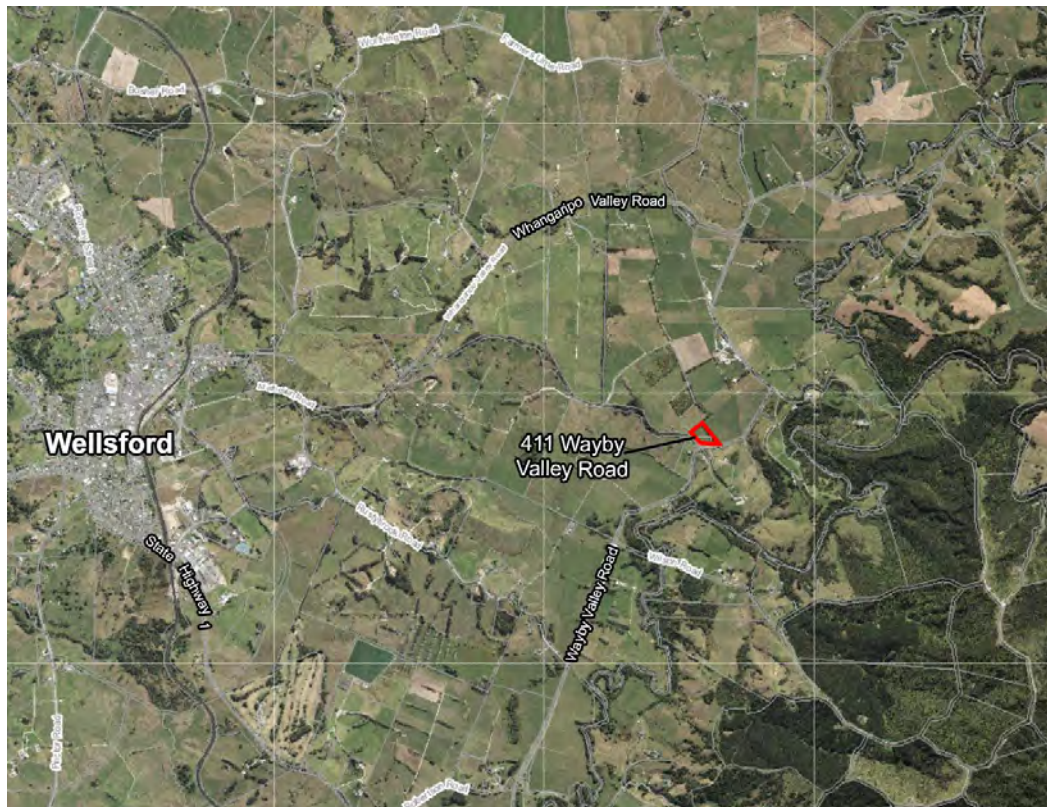


Figure 2: Site location (in red) within the wider landscape context

The Auckland Regional Policy Statement Review: Landscape (May 2019) evaluates and defines the Auckland region into “Landscape Types” and “Landscape Management Areas” (LMAs). The site is within the Hōteio Limestone Hillcountry (H2), which is within the “Hillcountry” Landscape Type.

The landscape is characterised by a sequence of undulating valleys, which also feature a network of drainage sub-catchments, permanent and intermittent streams. These valleys include the Wayby Station Road valley system in the west and the more open and spreading Wayby Valley to the east. These two valleys are separated by a low north south running hill ridge which is followed by SH1 from the Tamahunga Uplands through to Wellsford. Further to the east the Wayby valley is tighter and more confined than the Whangaripo and Waiteitei Stream Valleys.

Pre-settlement, the vegetation is understood to have been predominantly kauri and/taraire-kohekohe-tawa forest with limited areas of Kahikatea-pukatea-tawa forest in some of the elevated valley areas. The current landscape is dominated by pastoral grassland punctuated by scattered patterns of indigenous vegetation, isolated trees and shelterbelts of exotic trees along field boundaries. Larger areas of indigenous vegetation are located on the steeper more elevated terrain to the west including parts of the Kikitango to the Mount Harriet ridge complex.

Large blocks of production forestry are primarily located to the south-east of the LMA in the Tamahunga Uplands. A limited number of smaller forestry blocks are located to the west.

The larger settlement areas of Te Hana and Wellsford are influenced by the patterns of infrastructure, particularly SH1. Wellsford is positioned in a relatively elevated area to the north of the Wayby Valley on the Wharehine to Wellsford ridge complex. The pattern of the town's development is influenced by the gentle ridges that characterise this location with the main commercial areas of the town to the east of a principal north south ridge saddle with linear patterns of residential development.

Natural heritage features located within the surrounding landscape (see Figure 3 below) are summarised below:

- Pakiri Foothills (Area 25) ONL², located 2.5km to northeast of the site.
- Dome Forest (Area 32) ONL², located 4.9km to the south of the site.
- Hōteio River incised meanders Outstanding Natural Feature (ONF) 4.8km to the south of the site.
- A series of terrestrial Significant Ecological Areas⁵ (SEAs) within the northern extents of the Dome Forest hill country.

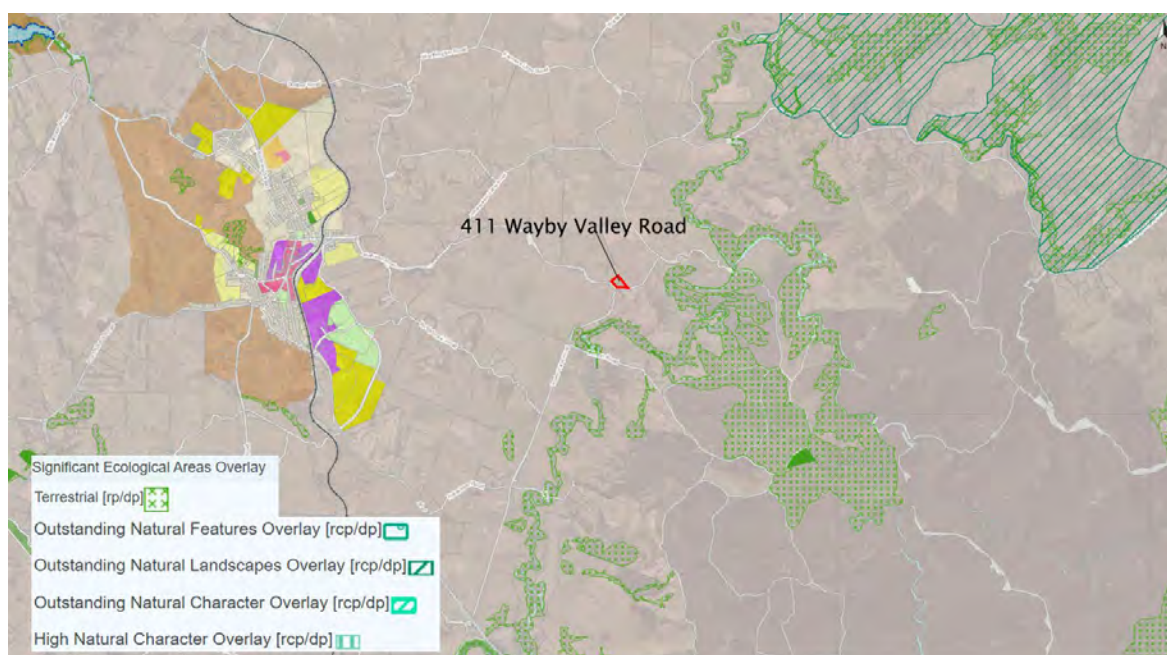


Figure 3: Site location (in red) within the wider landscape context and key AUP (OiP) zones and overlays.

There are no Outstanding Natural Character Areas (ONCs) or High Natural Character Areas (HNCs) within the surrounding landscape context. Areas of vegetation within the wider landscape identified as SEAs are subject to a Schedule 5 Management Area. The closest SEA is approximately 350m from the boundary of the site.

⁵ Auckland Unitary Plan OiP, Schedule 3 Significant Ecological Areas – Terrestrial Schedule [accessed online] 2 February 2024 - SEA_T_307, SEA_T_308, SEA_T_309, SEA_T_764, SEA_T_765, SEA_T_907, SEA_T_908 and SEA_T_6389
<https://unitaryplan.aucklandcouncil.govt.nz/Images/Auckland%20Unitary%20Plan%20Operative/Chapter%20L%20Schedules/Schedule%203%20Significant%20Ecological%20Areas%20-%20Terrestrial%20Schedule.pdf>

4.2 Site Description

The site has a total area of approximately 1.18ha and is located to the north of Wayby Valley Road, which links SH1 to Whangaripo Valley Road. The site has a topography which slopes down in a northeasterly direction from approximately 54RL to 44RL. The site is located close to a ridgeline and localised high point on a northeast facing slope (refer Figure 4 below).



Figure 4: Contour map of the site (outlined in red) and the immediate surrounding land and ridgeline (dashed line in blue).

The site currently contains a shipping container and a bore located towards the centre (refer to Photo 1 below), the remaining balance of the site is open pastoral grassland used for grazing.



Photo 1: View south east across the site from the western site boundary, the bore and shipping container are positioned in the centre of the site and surrounded by temporary construction fencing.

The underlying landform of the site is clearly visible and reflects the rolling topography of the surrounding landscape. The southern site boundary along Wayby Valley Road is delineated by a concrete post and five-wire fence (see Photo 2 below). The northern, western and eastern site boundaries are open with no physical barrier or delineation.



Photo 2: Concrete post and five-wire fence along the southern site boundary next to Wayby Valley Road.

The adjacent lot (LOT 2 DP 517895) to the north and east of the site comprises pastoral fields, bisected by a line of exotic evergreen cedar trees, within the eastern boundary of the site (See Photo 3 below). The linear bands of trees exotic trees are a common feature in the landscape and break up the landscape pattern of open rolling fields.



Photo 3: Line of evergreen cedar trees along the field boundary of LOT 2 DP 517895, along the eastern boundary of the site.

The western site boundary borders a 12.1m wide grassed access to 437 Wayby Valley Road (Lot 1 DP 517895). The western boundary of 437 Wayby Valley Road is defined by a timber post and four-wire fence and borders a paper road which runs along a ridgeline. Planting within the paper road along the ridgeline comprises indigenous and exotic tree species and Pampas Grass (*Cortaderia selloana*). The rising landform combined with the vegetation provides visual and physical separation from the residential lot to the west at 399 Wayby Valley Road (Refer Photo 4 below).



Photo 4: View towards the western site boundary from within the site.

To the south of the site beyond Wayby Valley Road, the topography rises steeply to a north facing slope. Open views from Wayby Valley Road into the site are available because there is no screening vegetation long the southern site boundary (See Photo 5 below).



Photo 5: Concrete post and five-wire fence along the southern site boundary next to Wayby Valley Road.

The northern boundary of the site is set back approximately 8.7m from an existing timber post and five-wire fence which defines one of the paddocks containing cattle (see Photo 6 below). There is no screening vegetation along the existing boundary which allows for open views

between the northern border of the site and the consented building platform at 437 Wayby Valley to the north.



Photo 6: Timber post and five-wire fence off-set from the proposed site boundary.

5.0 Visual Catchment and Viewing Audiences

To determine the visual catchment and viewing audience of the Project, a desktop study was undertaken of the aerial photography including land use, landform (contours) and vegetation patterns baseline data. The information gathered was then used to inform investigations on site.

Using the information gathered, the nature and qualities of potential viewing audiences of the site were identified, and representative viewpoints were obtained (where possible) to assist in determining the likely level and nature of change as a result of the Project. Representative photographs of views from private residences have been taken from the nearest available public locations.

The site is located adjacent to Wayby Valley Road on the northwestern side of the landform. Views of the site are potentially available from the lower side of the landform to the north looking up towards the site to the south and from elevated positions looking over the falling landscape towards the site (see Photo 7 below).



Photo 7: View south from low lying land on Wayby Valley Road to the north of the site, the site is located behind the row of shelterbelt trees.

The existing vegetation within the eastern boundary of the site, as detailed in the description above, provides an effective visual screen to views into the site from the east, south and northeast. A combination of the topographical characteristics of the landscape and the existing off-site vegetation restricts the visual catchment of the site. As a result, it is anticipated that the proposed WTP will be visible from the short to medium distance and from elevated vantage points to the southwest and northeast.

Based on the above analysis, a simplified Zone of Theoretical Visibility (ZTV) and visits to site, viewing audiences have been determined and categorised into the following geographical groups.

Following the initial assessment a series of detailed ZTV maps were produced to simulate the potential visibility of the proposal. Two ZTV maps have been created which simulate the potential visibility of 9m high buildings in ground-level (topography only) and existing surface-level (topography, existing buildings and vegetation) scenarios. It is noted that the proposed ZTV modelling does not include any anticipated screening of the proposed structures as a result of the proposed mitigation planting. As such it is understood that the ZTVs are a “worst case scenario” for each baseline model. These maps are provided in Figure 5 and Figure 6 in Appendix 2 Graphic Supplement.

Viewing Audience Group 1 to the North of the site

- The residential property located at 487 Wayby Valley Road⁶, the potential future residential viewing audience located on the undeveloped building platform at 437 Wayby Valley Road⁷, travellers along Whangaripo Valley Road, and road users travelling south on Wayby Valley Road between Whangaripo Valley Road and Homeward Bound Drive.

Viewing Audience Group 2 to the South of the site

⁶ Including the residential dwelling accessed from 240 Whangaripo Valley Road.

⁷ Resource consent: CCT90069727 SUB60035869A

- Residential properties located at 399, 400, 406 and 412 Wayby Valley Road and road users travelling north on Wayby Valley Road.

Viewing Audience Group 3 to the East of the site

- Road users on Wayby Valley Road south of Homeward Bound Drive and residential properties accessed from Homeward Bound Drive.

Viewing Audience Group 4 to the West of the site

- Residential properties at 31, 89, 109, 119, 141, 177 and 199 Rustybrook Road and 38, 64, 66 and 96 Whangaripo Valley Road. Road users on Rustybrook Road and Whangaripo Valley Road.

A map of the viewpoints representing Group 1 to 4 are presented in **Figure 4, Appendix 2**. Photographs of these viewpoints are also provided in the Graphic Supplement **Appendix 2**.

Table 1: Representative Publicly Accessible Viewpoints

VP No.	Viewing Audience Group No.	Location(s)	Direction of View to the site
7, 8, 9	Group 1	Whangaripo Valley Road and Wayby Valley Road	South
1, 3	Group 2	Rustybrook Road and Wayby Valley Road	North
2	Group 3	The corner of Wayby Valley Road and Homeward Bound Drive	West
4, 5, 6	Group 4	Rustybrook Road and Whangaripo Valley Road	East

In addition to the above, a Watercare representative visited properties at 400 and 412 Wayby Valley Road as part of the consultation process with neighbouring landowners. During these visits photographs were taken from locations both inside the dwellings and outside of the living areas. These photos are provided as Photo 8 and Photo 9 below. Whilst, the author of this assessment did not visit the properties, it is considered the site visit (in which the properties could be visually surveyed) in combination with the range of photographs provided are sufficient in order to understand the potential visual effects on these viewing audiences as a result of the Project.

6.0 Assessment of Effects

Landscape and visual effects result from natural or induced changes in the components, character or quality of the landscape. Usually these are the result of landform or vegetation modification or the introduction of new structures, facilities or activities. All these impacts are assessed to determine their effects on character and quality, amenity as well as on public and

private views. This assessment has been undertaken with the assumption that the recommendations outlined in **Section 7.0** are implemented.

This assessment of potential effects is based on a combination of the landscape's sensitivity and visibility together with the nature and scale of the Project.

Particular effects considered relate to the following:

- Landscape / rural character effects;
- Visual amenity effects from public and private locations; and
- Effects in relation to statutory provisions.

The principal elements of the Project that will give rise to landscape and visual effects are the:

- introduction of new WTP and buildings;
- treated water, sludge and stormwater tanks;
- removal of pasture;
- earthworks and the introduction of retaining structures; and;
- temporary construction activities.

A change in a landscape does not necessarily constitute an adverse landscape or visual effect. Landscapes are dynamic and constantly changing over time in both subtle and more dramatic transformational ways. These changes are both natural and human induced. What is important in managing landscape change is that substantial and / or inappropriate adverse effects are avoided or sufficiently mitigated to ameliorate the effects of the change in land use.

6.1 Landscape Effects

6.1.1 Effects on Landscape Characteristics and Values

Landscape character is derived from the distinct and recognisable pattern of elements that occur consistently in a particular landscape. It reflects particular combinations of geology, landform, soils, vegetation, land use and features of human settlement. It creates the unique sense of place defining different areas of the landscape.

The Project includes an alteration of the landform across the entirety of the site. The proposed earthworks will create a new flat ground level and will utilise retaining walls up to 3m above the existing ground to support the building platform and internal road. Although retaining walls are not a common feature within the local landscape context they will be well contained within the context of the site (including mitigation planting) and will not be conspicuous or overt features in the landscape. The proposed earthworks and retaining walls will permanently alter the landform of the site, however the landform is not considered to be a highly valued or unique feature in the landscape.

The site is predominantly covered in pastoral grassland, the only other vegetation is the existing line of Japanese Cedar underplanted with agapanthus along the eastern boundary of the site. The proposed WTP will permanently remove the pasture from the site. Although this vegetation has a very low value, it is recognised that overall it contributes to the rural landscape character. It is proposed that the existing screening Japanese Cedar trees and underplanting along the eastern boundary will be retained.

The Project will also introduce new WTP building(s) and storage tanks into the landscape. Buildings and structures within this landscape context, whilst dispersed, are not uncommon. The rural landscape has the capacity to accommodate a range of different buildings and structures to support rural production, management and maintenance activities. The proposed height, materials and scale of the WTP buildings and structures will be designed to complement and integrate with the character of the landscape and to not appear prominent or dominant.

During the construction period of the Project, it is anticipated that the above-described changes to the landscape will result in **Low** adverse (“less than minor”) landscape effects. Immediately following the construction period, the level of effects is expected to remain the same (i.e. low adverse effects), despite retaining the vegetation along the eastern boundary and introduction of new tree planting along the northern, western and southern boundaries. However, once the proposed mitigation planting is established and gains screening and filtering qualities, the site is anticipated to be effectively integrated into the existing landscape character. Once the planting has grown to approximately 6m in height (after approximately 6 years) it is considered that landscape effects will reduce to **Very Low** adverse (“less than minor”).

6.1.2 Visual Effects

Visual effects are effects on landscape values as experienced in views by an audience. The nature of a view depends on how it is perceived and the extent to which it is valued. It includes how the landscape in the view is understood, interpreted and the elements and features associated with the view.

The viewpoints in the viewing audience groups identified in **Table 1** have been assessed in regard to their individual audience (residential/occupational/recreational etc.) the composition of their view and the nature and degree of visual effect in relation to the Project.

The following assessment refers to viewpoint photographs in **Appendix 2: Graphic Supplement**, which have been provided to assist with understanding the Project and the changes to viewpoints in relation to the surrounding context.

Viewing Audience Group 1 to the North of the site

Figures References:

- *Figure 4, Appendix 2: Graphic Supplement*

Viewing Audiences

- **Residential properties located at 487 Wayby Valley Road, the dwelling accessed from 240 Whangaripo Valley Road, the potential future audience located on the undeveloped building platform at 437 Wayby Valley Road, travellers along Whangaripo Valley Road and road users travelling south on Wayby Valley Road between Whangaripo Valley Road and Homeward Bound Drive.**

Extent and Nature of Views

The dwelling accessed from 240 Whangaripo Valley Road⁸ is located approximately 1.4km to the north of the site at an elevation of RL63m. The dwelling has a northwest to southeast

⁸ Located within LOT 2 DP 517895, 487 Wayby Valley Road, this property is referred to as 240 Whangaripo Valley Road

orientation, which does not directly overlook the site. However, it is anticipated that oblique views of the site may be visible from within the dwelling and the immediate area surrounding the dwelling. The elevated position of the dwelling is anticipated to provide panoramic views across the rolling rural landscape, broken up in part by linear bands of trees along field and lot boundaries. Views of the site from the dwelling are anticipated to be long distance in nature and part of a wider panoramic view. The views from Whangaripo Road are well contained by a combination of intervening landforms and established linear bands of vegetation along field boundaries and the roadside. Glimpsed views towards the site are available from a small number of vantage points where there are breaks in the roadside vegetation.

The dwelling at 487 Wayby Valley Road is located approximately 420m to the northeast of the site at approximately RL46. The dwelling appears to have a northeast to southwest orientation with the rear of the property facing towards the site. Views of the site from this property are anticipated to be well contained due to the rising topography to the west of the dwelling and existing tall vegetation to the east and west of the dwelling. Views towards the site are anticipated to be screened or heavily filtered by vegetation to the immediate southwest of the dwelling and the exotic cedar trees within the eastern boundary of the site.

The lot at 437 Wayby Valley Road has subdivision consent⁹ to establish a single dwelling within a 2025m² building platform to the northwest of the site on a southwestern facing slope. The review and assessment of views from the potential future dwelling are based in part on a visit to the property and consultation with the landowner in February 2025. The positioning and orientation of the building platform is anticipated to have a southwestern facing primary outlook to align with existing landform and slope. It is understood that, to date, an application for a building consent has not been sought for the property.

It is anticipated that the potential future dwelling would sit at a slightly elevated position at approximately RL60 approximately 230m from the site, although it is recognised that no earthworks details in relation to the platform are able to be reviewed. Assuming there are no amenity planting or intervening structures around the dwelling, open views from a potential future dwelling could be available toward the southwest with oblique views over the site. This represents an “worst case scenario” regarding the potential future outlook.

Short to middle distance views from a potential future dwelling are anticipated to comprise open grass paddocks bordered by tall trees, with traffic along Wayby Valley Road being intermittently visible between existing vegetation. The backdrop of the view could comprise the steep hill country between the Pakiri Foothills and the Dome Forest interspersed with rural residential properties on the opposing slopes.

Views from road users along Wayby Valley Road to the north of the site are heavily filtered by the intervening vegetation along the west/south of the road. Glimpsed views towards the site may be briefly available through roadside vegetation. However, the views are further inhibited by intervening vegetation within land between the road and the site.

Proposed Views

⁹ Granted 26th February 2021 (SUB60035869)

During the construction phase of the works, construction machinery will be most visible for the residential audiences at 240 Whangaripo Valley Road and 487 Wayby Valley Road. It is anticipated that only glimpsed views of the site (and the construction machinery) will be available for road users travelling south on Wayby Valley Road. Similarly, it is anticipated that there will be no views of the site from Whangaripo Valley Road, although glimpsed views of tall construction machinery may be available over intervening landform.

The views available of the construction activities at the site from the dwelling at 240 Whangaripo Valley Road are anticipated to be wide panoramic views. At this distance, the proposed earthworks, plant and materials will be a relatively small feature within the context of the wider view and the backdrop of the steep hill country between the Pakiri Foothills and the Dome Forest. The construction activity will be a new temporary element within the view, this will be for a duration of approximately up to 18 months of enabling and main construction works. However, it is noted that the construction activity will be similar in appearance to the construction of any other rural structure or building in the rural environment. With the above in mind, visual effects from the dwelling at 240 Whangaripo Valley Road and the immediate surrounding area during the construction period are assessed as **Very Low** adverse ("*less than minor*").

Views of the site from the residential property at 487 Wayby Valley Road are anticipated to remain partially contained by the mature vegetation along the property's western boundary and the existing tall cedar trees along the site's eastern boundary. During the construction phase it is anticipated that views of tall construction machinery may be visible over the intervening vegetation. It is however also anticipated that there will be limited visibility of construction activity from this dwelling, due to the presence of existing vegetation, and any views of construction activity are anticipated to be short lived and glimpsed. As a result, visual effects from the dwelling and the immediate surrounding area are anticipated to be **Very Low** adverse ("*less than minor*").

In considering potential effects on a future dwelling at 437 Wayby Valley Road, during construction, potential views of the proposal could include a construction plant including machinery, material storage and the earthworks footprint. The temporary construction activity would be a new element in the view however, the earthworks and construction activities relating to large buildings and structures are features of rural landscapes. It is proposed that mitigation planting along the northern and western boundary will be planted prior to the commencement of the construction works. However initially these trees will provide very little screening of the proposed construction works. Notwithstanding this, the relative distance from the works (approximately 160m from the potential dwelling), combined with unimpeded views and the potential that these views could be a focus of the primary outlook from the dwelling, effects may be up to **Moderate** adverse ("*more than minor*") during the peaks of activity during the construction period and **Low Moderate** ("*minor*") for the majority for the remaining construction period. It is noted that these anticipated adverse effects are only applicable if a dwelling is present on the site during the construction phase of works, which will be temporary in nature.

Visual effects on road users who are transient and anticipated to have glimpsed and fleeting views of the construction works are anticipated to be **Very Low** adverse ("*less than minor*"), at worst.

During the operational phase of works, the new WTP will be discernible from the surrounding landscape, however the proposed structures will be no higher than 9m above ground level and site below intervening landform and vegetation. As a result, the proposed structures will not be a prominent feature in the landscape. It is anticipated that the proposed mitigation planting on the northern boundary of the site will provide screening and softening of the site. Additionally, as proposed mitigation planting along the southern and eastern boundaries of the site establishes

it will provide a backdrop to the WTP that will soften and break up the form of the buildings further reducing its prominence within views.

During operation, provided that the amenity vegetation to the west of the property at 487 Wayby Valley Road is retained, it is anticipated that visual effects will be **neutral** for residents inside the property as the proposal will not be prominent feature or discordant within the rural view. There is the potential for the top of the roof structure(s) of buildings to be visible over the top of intervening screening vegetation and mitigation screen planting within the eastern site boundary. If intervening screening vegetation between the site and this audience is removed, it is anticipated that **Very Low** adverse effects (*"less than minor"*) will be experienced initially. However, over time as the mitigation planting establishes the planting, combined with the architectural facades will diffuse the structure and form of the WTP. It is anticipated that after the planting has established the level of effects will be between **neutral** and **Very Low** adverse (*"less than minor"*).

During operation, views from a dwelling established at 437 Wayby Valley Road could potentially have open middle distance elevated views of the site. The proposed buildings in the site could sit to the right of the centre of the view at an oblique angle to the dwelling over falling landform. The proposed WTP will be a new structure/ collection of structures in the middle distance of the view and be seen against the rising landform and vegetation to the south. Proposed planting along the northern boundary of the site will provide screening and softening of the proposed WTP. Due to the proposed early planting of boundary planting along the northern and western boundaries, it is anticipated that the interim period between the completed construction of the WTP and mitigation planting reaching 6m in height will be reduced. In turn this will reduce the length of time before the mitigation planting provides a sufficient screen.

The access to the site WTP will be from the south. Activity within the forecourt/parking area to the west of the site would be visually screened by the proposed building and vegetation, when it has established to approximately 6m in height, after approximately 6 years. The northern façade, which is broadly orientated towards the dwelling, will be designed to incorporate architectural qualities and articulation that reflect rural character and rural production buildings found in the rural landscape (for example a Resene Iron sand longrun steel fascia or timber cladding). Any proposed retaining walls will be internal to the site and WTP will be designed to be use natural materials and/or have a dark or neutral finish to appear recessive in the landscape and this visual outlook, however it is anticipated that any retaining walls will sit low in the landscape and be screened by boundary planting.

Although the proposed WTP will be a new structure / collection of structures in the view, the structures will be designed to have the appearance of character of a rural building and within the heights parameters allowed within the RPZ. It is anticipated that prior to the mitigation planting along the site boundary, visual effects could be up to **Low-Moderate** adverse (*minor*). However, it is noted that these effects are reliant on an habitable dwelling being established at 437 Wayby Valley Road. After the planting of mitigation planting around the boundary of the site, in particular along the northern site boundary, adverse visual effects for this audience will reduce. After vegetation is established to a height of approximately 6m it is anticipated that adverse visual effects will be **Low** adverse (*"less than minor"*).

During operation of the new WTP and after the removal of construction machinery, it is anticipated that the visibility of the site within the view will be diminished. Although views of the WTP will be available from the dwelling at 240 Whangaripo Valley Road. The view will be experienced from a long distance within the context of a panoramic view with intervening landform and vegetation between the dwelling and the site. In this context the WTP will appear as a small structure in the view and appear similar in scale and form to other buildings found in

the rural environment. Based on this it is anticipated that visual effects on the dwelling at 240 Whangaripo Valley Road will be **neutral** during operation.

6.1.2.1 Viewing Audience Group 2 to the South of the site

Figures References:

- *Figure 4 Appendix 2: Graphic Supplement*
- *Viewpoint 2*

Viewing Audiences

- **Residential properties located at 399, 400, 406 and 412 Wayby Valley Road and road users travelling north on Wayby Valley Road towards the site.**

Extent and Nature of Views

These audiences are characterised by their position to the south of the southern boundary of the site.

The residential property at 399 Wayby Valley Road is approximately 70m to the southwest of the site and the dwelling sits at approximately 50RL. The dwelling is orientated to have the primary outlook to the west. Between the dwelling and the site the landform rises to a ridgeline at approximately 55RL before lowering again at the site boundary. This ridgeline sits within a 20m wider paper road and is vegetated with a mixture of native and exotic trees and shrubs. The combined ridgeline and vegetation effectively screen the site from the dwelling at 399 Wayby Valley Road.

The residential property at 400 Wayby Valley Road is located approximately 100m to the south of the site and the dwelling sits at 60RL. The dwelling has an east west orientation, however a deck and outside living area for the property offers views north towards the site (see Photo 8 below). An ancillary building is located to the north of the main dwelling closer to the site. The view from the main dwelling is partially contained by tall mature vegetation along the eastern boundary of the property, which restricts the views to the western portion of the site. It is anticipated that long distance views over rolling rural fields are available from the dwelling. Glimpsed views of traffic on Wayby Valley Road can be seen from the dwelling, which traverses the view to the site.



Photo 8: View north from the new deck at 400 Wayby Valley Road (source, Watercare)

Based on the topography and existing vegetation, it is anticipated that direct views of the site will not be available from the dwelling at 406 Wayby Valley Road or the area immediately around the building. The site is highly visible from the entrance to the property on Wayby Valley Road. However, views from the access road are effectively screened from the majority of its length due to the intervening vegetation either side of the access road. The residential property at 412 Wayby Valley Road sits at approximately 70RL (18m above the site), the dwelling has a north facing orientation with a north facing deck which overlooks the site (see Photo 9) in the short to middle distance. The position of the dwelling above the site allows for long distance views of distant views of the rolling pastoral hill country. Traffic on Wayby Valley Road traverses the view in front of the site. Short distance open views are also available from the property entrance on Wayby Valley Road.



Photo 9: View northwest from the deck at 412 Wayby Valley Road (source, Watercare)

The views of the site from road users travelling north along Wayby Valley Road are characterised by intermittent clusters of vegetation either side of the road and rising steep topography to east. Direct views of the site are not available until approximately 120m to the south, due to the rising ridgeline and vegetation to the south of the site (See Photo 9 below). At the approach to the southwestern corner of the site, open short distance views are available across the site. However, these views will be brief in nature and experienced by drivers in the process of navigating a winding section of road.



Photo 10: View from road users travelling north on Wayby Valley Road, the onsite container can be seen over the top of the rising landform.

Proposed Views

During the construction phase of works it is anticipated that views of the site from the dwelling at 399 Wayby Valley Road will remain primarily contained by the ridgeline and vegetation as described above. It is anticipated that tall construction machinery will be visible over intervening landform and vegetation. This construction activity will be visible for the period of time when cranes or other tall construction equipment are required on site. Adverse visual effects experienced when construction activity is visible will be **Very Low** (*“less than minor”*). When tall construction machinery is not on site there will be no adverse visual effects experienced.

During construction it is anticipated that elevated views into the site will be available from the dwelling at 400 Wayby Valley and the area immediately surrounding the dwelling. Intervening vegetation is expected to obscure the majority of the site when viewed from the dwelling, however the site entrance, western boundary and northwestern corner of the site are anticipated to be visible from the dwelling. The ancillary building and deck area have similarly limited views to the main dwelling. The visible western portion of the site is anticipated to require the least extent of earthworks and presence of construction machinery. The frequency of vehicular movements into the site will noticeably increase during construction. However, within the context of the existing traffic along Wayby Valley Road, the additional construction traffic will be minimal. Due to the limited visibility of the site, it is anticipated that adverse visual effects will range between **Low** (*“less than minor”*) to **Very Low** (*“less than minor”*).

It is considered that there will be no views of the site during the construction or operation of the WTP from the dwelling at 406 Wayby Valley Road. Short distance open views of the construction works from the access roads for 406 and 412 Wayby Valley Road, will have a clear view of the construction works opposite from the entrances. At the entrances to the access roads it is anticipated that adverse visual effects will be **Low** (*“less than minor”*) during the construction phase of the Project. However, it is recognised that at the boundary of the site these views will be transitory temporary and fleeting in nature, unlike views experienced from either dwelling at 406 and 412 Wayby Valley Road. Once construction is completed, it is

anticipated that the proposed planting along the removal of construction activity and machinery will reduce the level of effect immediately to the operational level.

During construction it is anticipated that the elevated views into the site will be available from the dwelling at 412 Wayby Valley and the immediate surrounding area. Although the direct views of construction activity will be partly broken up by vegetation in the foreground and middle distance, it is anticipated that all stages of the construction phase will be visible. The highest level of visual effects is anticipated to be experienced during the earthworks phase of the construction works. Although the construction works will introduce a new activity into the view, these works will be temporary and have qualities similar to rural development expected within the zone. During the construction phase it is anticipated that the adverse level of effects will be **Low** (*"less than minor"*).

Views from Wayby Valley Road of the construction activity will primarily be experienced for a length of approximately 200m along Wayby Valley Road. Short distance open views of construction machinery, stored materials and site amenities will be available. These views will be similar to the views experienced from the entrances to the 406 and 412 Wayby Valley Road access roads. For this short section of the road, it is anticipated that **Low** adverse effects (*"less than minor"*) will be experienced during the construction phase of the Project. However, as mentioned above these views will be brief and in the context of a longer winding section of road. There is the potential for long distance views of the top of tall construction machinery to be experienced during the construction phase of works. Views from the majority of the road to the south of the site are anticipated to experience no adverse effects to **Very Low** adverse effects (*"less than minor"*), where glimpsed views of taller construction machinery are experienced.

During the first 3-5 years of operation the proposed WTP will only be partially screened by the proposed landscape mitigation planting along the southern, eastern and western boundaries. However, after the trees have reached a height of approximately 6m (after approximately 6 years), this vegetation will soften views of the WTP from audiences at a similar height to the site.

During the operational phase of works it is anticipated that views from the property at 400 Wayby Valley Road will be limited to the western portion of the site. Although the break in the proposed mitigation planting along the southern boundary, proximate to the site entrance, provides no screening of the WTP, only a fraction of the plant will be visible from the southern boundary. Although the WTP will be a new feature within the view, a combination of the proposed mitigation planting along the western boundary, limited visibility of the building form, qualities and scale of the WTP will be in keeping with the type and character of development in a rural landscape. The appearance of buildings within the view will be further mitigated by the use of a recessive/neutral colour palette, low reflectivity/recessive finishes and architectural materials that will be in keeping with the rural landscape. It is anticipated that visual effects experienced from this property will be **Very Low** adverse (*"less than minor"*).

During operation, it is anticipated that there will be no direct views of the site from the residential dwelling at 406 Wayby Valley Road. As a result, there will be no adverse visual effects experienced. It is anticipated that the WTP will not be visible from the residential audience at 399 Wayby Valley Road. This will be further reinforced by mitigation planting along the western site boundary and the limitation of the height of the proposed structures to 9m above the existing ground level. Even in a worst case scenario, where all intervening vegetation between the site and dwelling is removed, it is anticipated that this audience will experience visual effects no worse than **Very Low** adverse (*"less than minor"*).

During operation it is anticipated that the elevated views afforded from dwelling at 412 Wayby Valley Road will maintain long distance panoramic views of the rolling hill country but also

experience secondary views over the WTP in the short to middle distance. Although, there is some existing intervening vegetation present between the dwelling and the site, at the start of the operational phase of works, the WTP will be a notable structure when viewed from this dwelling. It is anticipated that adverse visual effects will range from **Very Low** (“less than minor”) to **Low** (“less than minor”). As the proposed landscape mitigation planting along the southern boundary establishes and provides screening and filtering qualities, the level of visual effects experienced is expected to decrease. The additional mitigation planting along the southern, western and northern boundary of the site will further integrate the site into the view. Once the planting has grown to approximately 6m in height (after approximately 6 years) it is considered that any residual effects will be **Very Low** adverse (“less than minor”).

During operation, road users are anticipated to experience glimpsed views of the site when adjacent to the site. When vegetation reaches a height of approximately 4m (after approximately 4 years) the visibility of the WTP will be further reduced. It is anticipated that road users will not be able to view the WTP from the middle and long distance. As a result, views from road users will be **Very Low** adverse (“less than minor”) and reduce to **neutral** over time.

6.1.2.2 Viewing Audience Group 3 to the East of the site

Figures References:

- *Figure 4 Appendix 2: Graphic Supplement*
- *Viewpoint 1 and 3*

Viewing Audiences

- **Road users on Wayby Valley Road south of Homeward Bound Drive and residential properties accessed from Homeward Bound Drive (including residential properties accessed from Homeward Bound Drive).**

Extent and Nature of Views

Two residential properties are currently accessed from 22A and 26 Homeward Bound Drive. The access roads to these two properties are steep, narrow, elevated, and in places bordered by tall dense vegetation either side of the access road. The dwellings of these two residential properties are visually separated by intervening ridgelines and dense existing vegetation (see Photo 11 below). It is anticipated that neither dwelling has direct views of the site. Glimpsed views of the site may be available from the access road for the dwelling at 22A, which sits at approximately 80RL which would look over the site. It was not possible to confirm the visibility from the private access road from publicly accessible land. This is due to the relevant portion of the access road being approximately 280m from the closest publicly accessible vantage point.



Photo 11: View west from Homeward Bound Road, at the intersection with the access road to the 22A property.

For road users on Wayby Valley Road, views towards the site are available over steeply falling ground on the approach to the intersection with Homeward Bound Drive. From this vantage point, direct views of the site are restricted by the linear band of cedar trees along the eastern boundary of the site. Only glimpsed views of the site are available through the band of cedar trees. To the south of the Homeward Bound Drive on the approach to the site, intermittent clusters exotic and native trees along the road side further disrupt views towards the site. Views towards the site remain effectively screened until the audiences have passed the tree line.

Proposed Views

During construction, it is anticipated that road users will experience glimpsed views of construction activity and construction machinery through small gaps in the screening vegetation and tall construction machinery over the top of the existing vegetation. Although the construction activity will be a new element within the view, the construction activity will not be dissimilar to activities required to establish a dwelling or building for rural industry. As a result, visual effects from the road are anticipated to be **Very Low** adverse (*“less than minor”*).

It is anticipated that there will be no views of construction activity from the dwellings located 22A and 26 Homeward Bound Drive. Although there is the potential for glimpsed views of the site to be experienced for brief moments along the access road to the dwelling at 22A. With the consideration of the above it is anticipated that there will be no adverse visual effects from the dwellings and any adverse effects experienced from the access road will range from no effects to **Very Low** (*“less than minor”*).

During the operational phase of the Project, it is anticipated that the majority of the proposed WTP will be primarily screened for road users on Wayby Valley Road by the cedar trees to the east of the site. The upper portions of the proposed WTP buildings may be visible over the top

of the cedar trees along the eastern boundary of the site. The proposed landscape mitigation planting along the northern boundaries of the site will provide very little additional mitigation shortly after planting. However, it is anticipated that after approximately 6 years this vegetation will assist in breaking up the form and structure of the proposed buildings. Adverse visual effects experienced during operation are anticipated to initially be **Very Low** (“less than minor”), however these are expected to reduce to **neutral** as mitigation planting grows and provides visual screening.

6.1.2.3 Viewing Audience Group 4 to the West of the site

Figures References:

- *Figure 4 Appendix 2: Graphic Supplement*
- *Viewpoint 4, 5 and 6*

Viewing Audiences

- **Residential properties at 31, 89, 109, 119, 141, 177 and 199 Rustybrook Road and 38, 64, 66 and 96 Whangaripo Valley Road. Road users on Rustybrook Road and Whangaripo Valley Road.**

Extent and Nature of View

These viewing audiences are defined by their location to the west of the site along the elevated ridgeline between 65RL and 95RL. Views from road users on Rustybrook Road and Whangaripo Valley Road are primarily enclosed by vegetation along the roadside verge and lot boundaries, and the intervening landform. Where available, views are long distance panoramic in nature, comprising the pastoral valley lowlands in the short to middle distance to rolling hills in the far distance. The backdrop of these views is defined by the distant steep hill country between the Pakiri Foothills and the Dome Forest to the east. Audiences to the east of the situated valley floor or low in the landscape are anticipated to not have views of the site.

Road users and residential audiences on Rustybrook Road with long distance views to the east experience open views across the pastoral grassland of the Hōteo River valley floor, in the middle to long distance. These field boundaries are delineated by post and wire fencing and intermittent lengths of linear tree planting. Direct views of the site are inhibited by the vegetated ridgeline and paper road to the south of the site's boundary.

Long distance views to the east from road users and residential properties on Whangaripo Valley Road are uncommon due to rising undulating landform and thick bands of vegetation screening views. Similar to the views from Rustybrook Road, direct views of the site are screened by the vegetated ridgeline and the paper road to the south of the site's boundary.

Proposed Views

During the construction phase it is anticipated that the majority of the construction activity will not be visible from this audience group, due to intervening vegetation. There is the potential for tall construction machinery to be visible from over the top of screening vegetation. However, as a result of the long distance (1.6km – 2.4km) between these audiences and the site, any construction machinery visible will be very small feature within the context of an expansive

panoramic view. With the above in mind, it is considered that during construction visual effects will be **neutral**.

During operation, it is anticipated that the primary elements of the WTP will not be visible from these audiences. Based on the ZTV analysis the construction of the proposed structures in the site to the maximum height of 9m above ground level, it is anticipated that the top of roof forms may be visible from some audiences within this group. Although there may be some visibility of the top of buildings from this group, from these long distances the WTP will not be a notable feature in views. The scale and form of the building roofs will appear similar to other rural structures commonly found in this rural landscape and will be further screened and softened by mitigation planting proposed along the western and northern boundaries of the site. During operation it is anticipated that visual effects will be **neutral** for this audience group.

6.2 Effects in relation to Statutory Provisions

6.2.1 RMA – Section 6

In relation to the preservation of natural character values with respect to the wetlands, streams and coastal marine area and their margins, the Project will avoid direct impacts on these features as there are none in the vicinity of the site.

The site is broadly characterised by the undulating landform and rural land use. As discussed earlier in the assessment, there are no outstanding landscapes that will be impacted by the proposed WTP.

6.2.2 RMA – Section 7

Section 7(c) – the maintenance and enhancement of amenity values

Section 7(f) – maintenance and enhancement of the quality of the environment

The amenity values of the site are in part derived from its rural land use and topographical form. As discussed earlier within the assessment, there are no other natural features within the site (substantial vegetation, streams, wetlands, etc).

The Project will, by its very nature, impact on the amenity values and the quality of the environment. However, it is considered that this will be limited to impacts on the topography of the site. The topography of the site is recognised as contributing to the amenity of the site, however, the relative size of the site is a modest feature within the context of the wider rural landscape. As such the topography does not hold high qualities in relation to the physical resources and people's appreciation of aesthetic coherence. It is considered that the nature of the proposed activity and resultant landscape condition will mean that the proposed WTP will result in **Very Low** adverse effects (*“less than minor”*) on the environment and associated amenity values. With the successful implementation of the LMPP (further information provided in the 7.0 Mitigation Strategy in this report) it is considered that these effects will be **neutral**.

6.2.3 Auckland Unitary Plan (Operative in Part)

The proposed WTP is entirely within the Rural – Rural Production zone under the AUP(OiP). Many of the adjoining sites to the south and west are well contained and buffered from the site, and the visibility of the proposed WTP will be well contained and sufficiently visually screened or

filtered. Although the footprint of the of the main buildings will be typically larger than rural residential dwellings, the proposed building footprint will be similar to other rural production and ancillary buildings associated with a working rural landscape. Similarly, the materials and architectural form of the proposed building will reflect the character and look of existing large buildings that are accessories to farming associated with this working rural landscape.

The proposed earthworks are extensive within the context of the site area but will be small within the context of the broader landscape. The materiality/finishes of the proposed retaining walls combined with the proposed mitigation planting will integrate the proposed earthworks into the landscape.

Based on the above, it is considered that the rural characteristics and amenity values of the site will subtly change from the anticipated characteristics and qualities associated with the underlying zoning.

7.0 Mitigation Strategy

The proposed WTP will be subject to a detailed design phase prior to construction and will need to implement and comply with any proposed designation conditions.

A range of interventions and control measures to help to mitigate the landscape and visual effects of the Project on the surrounding environment have been considered. This report recommends that such measures are undertaken as part of the Project. The landscape and visual effects have been assessed within the assumption that these measures are implemented as part of the Project, while recognising that some mitigations such as planting will take several years to reach their full potential. Full details of the proposed planting mitigation plan are presented in Appendix 3: Landscape Mitigation Planting Plan.

There are two types of mitigation measures that have been used for the Project:

- Intrinsic measures - comprise part of the development design through an iterative process
- Additional mitigation measures – that are designed to specifically address any remaining (residual) negative (adverse) effects of the final development.

The LMPP has three key objectives to reduce adverse effects as a result of the Project. These objectives will be achieved by implementing supporting actions to reduce or remove adverse effects on the landscape character, visual environment and natural character.

1) Reduce the visibility of the WTP from the surrounding landscape

The WTP will be most widely visible from elevated residential audiences accessed from Wayby Valley Road to the south of the site and from road users on Wayby Valley Road. A proposed LMPP provides vegetation to break up the bulk and scale of the structures and, where possible, screen the Project from view. The potential future dwelling at 437 Wayby Valley Road is anticipated as potentially experiencing highest level of adverse visual effects during construction and operation (if there is no landscape mitigation planting).

The proposed mitigation planting will comprise a linear belt of indigenous trees on inside of the northern, western and southern boundaries of the site and retained matures cedar trees

along the eastern site boundary to provide screening of buildings and tanks from all aspects. It is proposed that the mitigation planting along the northern and western site boundaries will be planted in the 2025 late planting season (August to September). This early planting will allow the proposed planting the longest amount of time for trees to grow prior to the construction of the WTP and reduce the amount of time for the planting to provide effective visual mitigation (in approximately 6 years). Planting along the southern boundary is intended to take place during or after the main construction phase.

Planting will consist of an approximately 3m wide band of Lacebark (*Hoheria populnea*) and Akeake (*Dodonaea viscosa*) indigenous trees on the northern and southern boundaries of the site and a Lacebark and Wharariki (*Phormium colensoi*). These fast-growing trees and shrubs will provide little screening in the early years of the Project. However, it is expected that the planting will provide dense screening at the ground level and will filter views from elevated audiences within 6 years of planting. When the planting has established to a height of 6m (estimated to be achieved in approximately 6 years), the dense vegetation will screen views at the ground level and will filter views from elevated audiences. Although, indigenous species are proposed currently, it may be determined during the detailed development that exotic species are more appropriate to maintain the boundaries of the site and manage landscape effects.

The proposed indigenous mitigation will be maintained to have a naturalised form on the outward facing edges of the site to reflect the style form of shelterbelts and planting found within the surrounding character area. If exotic species are specified these should be managed and maintained to reflect the form and character of shelterbelts and boundary planting within the rural landscape.

2) Reduce impacts related to proposed lighting

The proposed WTP will not be continuously lit, however security lighting will be required when the WTP needs to be accessed after daylight hours. Potential landscape and visual effects related to lighting of the Project are considered in three parts- skyglow, glare and light spill effects. Mitigation measures to reduce effects related to lighting will:

- limit the duration that lighting is used by using timers
- use directional cones to limit and focus the light downwards and reduce effects related to light spill, glare and sky glow
- use LED bulbs where possible to focus the light to a narrow area and reduce the amount of light spill.

3) Design proposed buildings with rural architectural aesthetics to integrate with the surrounding landscape character

The proposed WTP buildings and structures will be visible from the wider landscape, although the views will be predominantly at a long distance or partially screened. To ensure that the proposed buildings and structures fit with the surrounding rural landscape, the materiality and form of these buildings and structures will be designed with rural aesthetics and features, including:

- using natural materials and finishes that reflect the character of rural development and structures;
- where possible design buildings with steel roofs in a dark/neutral/recessive colour, where possible;

- using neutral / low reflectivity finishes to the proposed structures to reduce glare and contrast with the surrounding rural landscape;
- replacing bright yellow or red standard non safety elements of the structures to neutral or recessive colours;
- materials used for the retaining structures will be timber, timber clad or be finished with a dark or neutral colour that will appear recessive in the rural landscape; and
- fencing surrounding the WTP will use utilise approved Watercare fencing using materials and finishes that are recessive in colour and use materials that are in keeping with the rural landscape. The security boundary fencing is located on the inside of the mitigation boundary planting, which will eventually screen the fencing within approximately 3 years of planting.

8.0 Recommendations

In order to manage the adverse effects related to the Project to ensure that the effects on the wider landscape character and visual audiences are managed appropriately the following mitigation measures and design control measures are proposed.

Mitigation and Design Control Measures

- The proposed Landscape Mitigation Planting Plan in Appendix 3 of this assessment is developed and refined during the detailed design of the Project.
- The LMPP is planted as soon as possible after the public works are consented and prior to the construction of the proposed WTP.
- Implement WTP design control measures identified in the 7.0 Mitigation Strategy section of this report
- The “high-security” boundary fencing will be specified to be of a recessive colour and have qualities that are in keeping with the rural aesthetic. The security boundary fencing is located on the inside of the mitigation boundary planting, which will eventually screen the fencing within approximately 3 years of planting.

9.0 Conclusions

The proposed WTP will introduce buildings, structures and land use into the established rural landscape. The visual catchment of the Project is generally limited due to the low number of viewing audiences and existing screening vegetation and intervening landform around the site. Whilst the site is within proximity to existing residential properties, and the road network the potential adverse effects on these audiences can be managed by implementing the LMPP in Appendix 3.

During construction it is considered landscape effects will be **Low** adverse (*“less than minor”*). During operation, once the proposed perimeter planting has grown to approximately 6m in height (after approximately 6 years) it is considered effects will be **Very Low** adverse (*“less than minor”*).

In considering visual effects, these will range from **Very Low** adverse (*“less than minor”*) to **Low** adverse (*“less than minor”*) during the construction period from residential dwellings and public roads. The greatest effects will be from the dwelling at 412 Wayby Valley Road, at the entrances to the access roads at 406 and 412 Wayby Valley Road and the short stretch of Wayby Valley Road adjacent to the site. However, it is recognised that views from the road and access road (and therefore effects) will be transitory and fleeting in nature. From within the residential dwellings at 412 and 400 Wayby Valley Road, where the majority of time is spent by residents, adverse visual effects will be **Very Low to Low** (*“less than minor”*).

The potential adverse effects on a future dwelling within the consented building platform on 437 Wayby Valley Road are considered separately as they are based on a number of unconfirmed assumptions. The potential visual effects during construction could be up to **Moderate** adverse (*“more than minor”*) and at **Low-Moderate** (*“minor”*) for the majority of the construction period, however there will equally be **no adverse visual effects** experienced if a dwelling has not been established. During operation it is anticipated that visual effects could be up to **Low-moderate** adverse (*minor*), immediately after the completion of the construction works are expected to reduce to Low adverse (*“less than minor”*).

With the above in mind, it is considered visual effects on existing residential properties will be less than minor. Visual effects from other existing residential properties are considered to be less than minor during the construction and operational phases of the Project. For all existing audiences, visual effects will reduce following removal of construction machinery and establishment of boundary vegetation. There is the potential for visual effects that are minor or more than minor to be experienced at a residential property to be established at 437 Wayby Valley Road. However, it is acknowledged that these adverse effects may be lower depending on the design of the dwelling,

In considering the AUP(OiP), overall, it is considered the Project acknowledges the specific character of the site and through mitigation will appropriately maintain the landscape and amenity values of the site and local context.

It is considered that the short-term adverse effects during construction on the landscape and visual aspects can be managed and mitigated in the long term by the LMPP and recommendations in this report.

Appendix 1: Method Statement

This assessment method statement is consistent with the methodology (high-level system of concepts, principles, and approaches) of 'Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines', Tuia Pito Ora New Zealand Institute of Landscape Architects, July 2022. The assessment provides separate chapters to discuss landscape, visual and natural character effects where relevant, but is referred to throughout as a Landscape Effects Assessment in accordance with these Guidelines. Specifically, the assessment of effects has examined the following:

- *The existing landscape;*
- *The nature of effect;*
- *The level of effect; and*
- *The significance of effect.*

The Existing Landscape

The first step of assessment involves examining the existing landscape in which potential effects may occur. This aspect of the assessment describes and interprets the specific landscape character and values which may be impacted by the Project alongside its natural character where relevant as set out below. The existing landscape is assessed at a scale(s) commensurate with the potential nature of effects. It includes an understanding of the visual catchment and viewing audience relating to the Project including key representative public views. This aspect of the assessment involves both desk-top review (including drawing upon area-based landscape assessments where available) and field work/site surveys to examine and describe the specific factors and interplay of relevant attributes or dimensions, as follows:

Physical –relevant natural and human features and processes;

Perceptual –direct human sensory experience and its broader interpretation; and

Associative – intangible meanings and associations that influence how places are perceived.

Statutory and Non-Statutory Provisions

The relevant provisions facilitating change also influence the consequent nature and level of effects. Relevant provisions encompass objectives and policies drawn from a broader analysis of the statutory context and which may anticipate change and certain outcomes for identified landscape values.

The Nature of Effect

The nature of effect assesses the outcome of the Project within the landscape. The nature of effect is considered in terms of whether effects are positive (beneficial) or negative (adverse) in the context where they occur. Neutral effects may also occur where the landscape or visual change is benign.

A change in a landscape (or view of a landscape) does not, of itself, necessarily constitute an adverse landscape effect. Landscapes are dynamic and are constantly changing in both subtle and more dramatic transformational ways; these changes are both natural and human induced. What is important when assessing and managing landscape change is that adverse effects are avoided or sufficiently mitigated to ameliorate adverse effects. The aim is to maintain or enhance the environment through appropriate design outcomes, recognising that both the nature and level of effects may change over time.

The Level of Effect

Where the nature of effect is assessed as ‘adverse’, the assessment quantifies the level (degree or magnitude) of adverse effect. The level of effect has not been quantified where the nature of effect is neutral or beneficial. Assessing the level of effect entails professional judgement based on expertise and experience provided with explanations and reasons. The identified level of adverse natural character, landscape and visual effects adopts a universal seven-point scale from **very low** to **very high** consistent with Te Tangi a te Manu Guidelines and reproduced below.



Landscape Effects

A landscape effect relates to the change on a landscape’s character and its inherent values in the context of what change can be anticipated in that landscape in relation to relevant zoning provisions. The level of effect is influenced by the size or spatial scale, geographical extent, duration and reversibility of the landscape change on the characteristics and values within the specific context in which they occur.

Visual Effects

Visual effects are a subset of landscape effects. They are the consequence of changes to landscape values as experienced in views. To assess where visual effects from the Project may occur requires identification of areas where the Project may be visible from, and the specific viewing audience(s) affected. Visual effects are assessed with respect to landscape character and values. This can be influenced by several factors such as distance, orientation of the view, duration, extent of view occupied, screening and backdrop, as well as the potential change that could be anticipated in the view as a result of zone provisions of relevant statutory plans.

The Significance of Effects

Decision makers assessing resource consent applications must evaluate if the effect on individuals or the environment is less than minor¹⁰ or if an adverse effect on the environment is no more than minor¹¹. For non-complying activities, consent can only be granted if the s104D 'gateway test' is satisfied, ensuring adverse effects are minor or align with planning objectives. In these situations, the assessment may be required to translate the level of effect in terms of RMA terminology.

This assessment has adopted the following scale applied to relevant RMA circumstances¹² (refer to diagram below), acknowledging low and very low adverse effects generally equate to ‘less than minor’ and high / very high effects generally equate to significant¹³.



¹⁰ RMA, Section 95E

¹¹ RMA, Section 95E

¹² Seven-point level of effect scale. Source: Te tangi a te Manu, Pg. 15

¹³ The term 'significant adverse effects' applies to specific RMA situations, including the consideration of alternatives for Notices of Requirement and AEEs, as well as assessing natural character effects under the NZ Coastal Policy Statement.

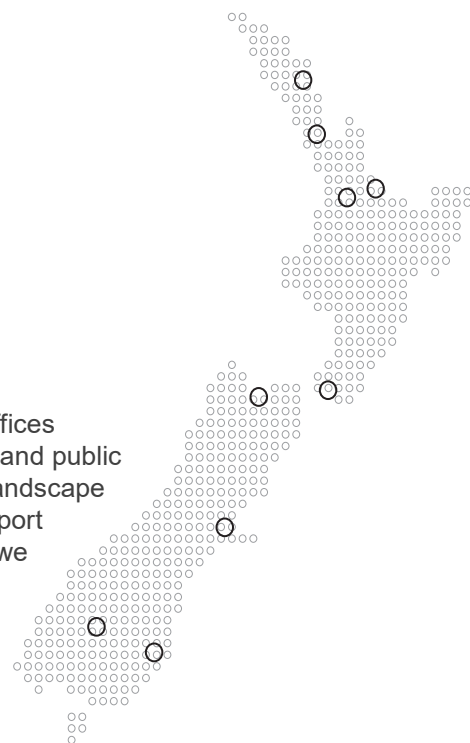
Appendix 2: Graphic Supplement

s

Appendix 3: Landscape Mitigation Planting Plan

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NEW WELLSFORD WATER TREATMENT PLANT - NOR

LANDSCAPE MITIGATION PLANTING PLAN

MAY 2025



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KEY

- LAND PARCELS
- SITE BOUNDARY
- INDICATIVE HEIGHT ENVELOPE
- STOCK FENCE (POST 7 WIRE)
- HIGH SECURITY FENCE (1.8-2m)
- EXISTING FENCE
- EXISTING PLANTING
- 3m OFFSET FROM SECURITY FENCE

NOTES

- THIS PLAN IS A CONCEPTUAL MITIGATION PLAN AND SHOULD NOT BE USED FOR PLANTING.
- WATER TREATMENT PLAN SHOWN IS A CONCEPT ONLY.
- PROPOSED MITIGATION PLANTING IS DESIGNED TO PROVIDE LONG TERM SCREENING.
- PLAN TO BE READ IN CONJUNCTION WITH THE NEW WELLSFORD WATER TREATMENT PLANT - NoR: LANDSCAPE AND VISUAL EFFECTS ASSESSMENT.

REV DATE DESCRIPTION

A 30.04.24 First Issue

B 23.07.24 Updated Following s92 Comments

C 20.05.25 Planting per 25.05.06 Design Update

APPRVD TLi TLi OMa

Scale A1 @ 1:250 A3 @ 1:500

Date 21.05.25

Design OMa

Drawn JKe

Check TLi

REVISION

For Information

DRAWING NO. BM230742-500

REVISION C

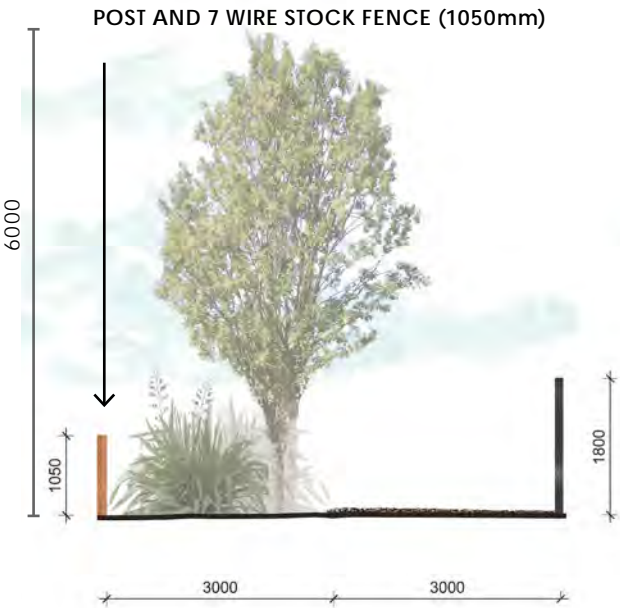
New Wellsford Water Treatment Plan - NoR

Landscape Mitigation Planting Plan

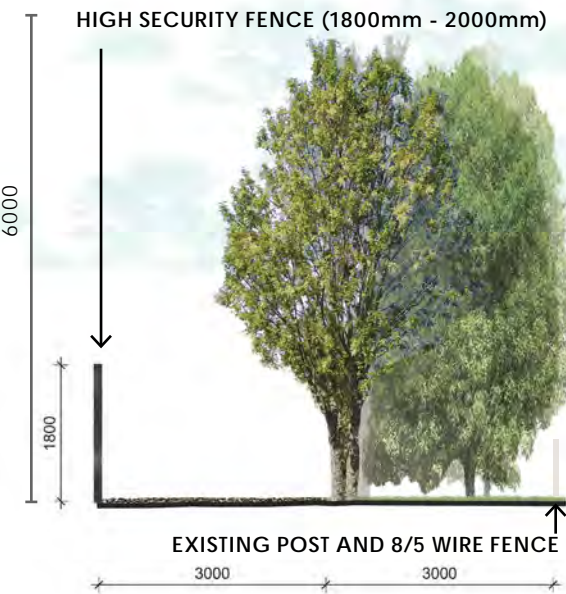
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BOUNDARY CROSS SECTION

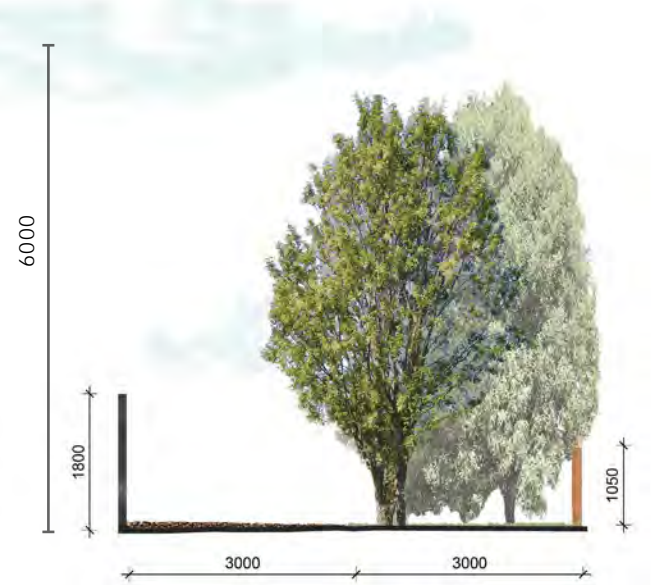
NORTHERN BOUNDARY



SOUTHERN BOUNDARY

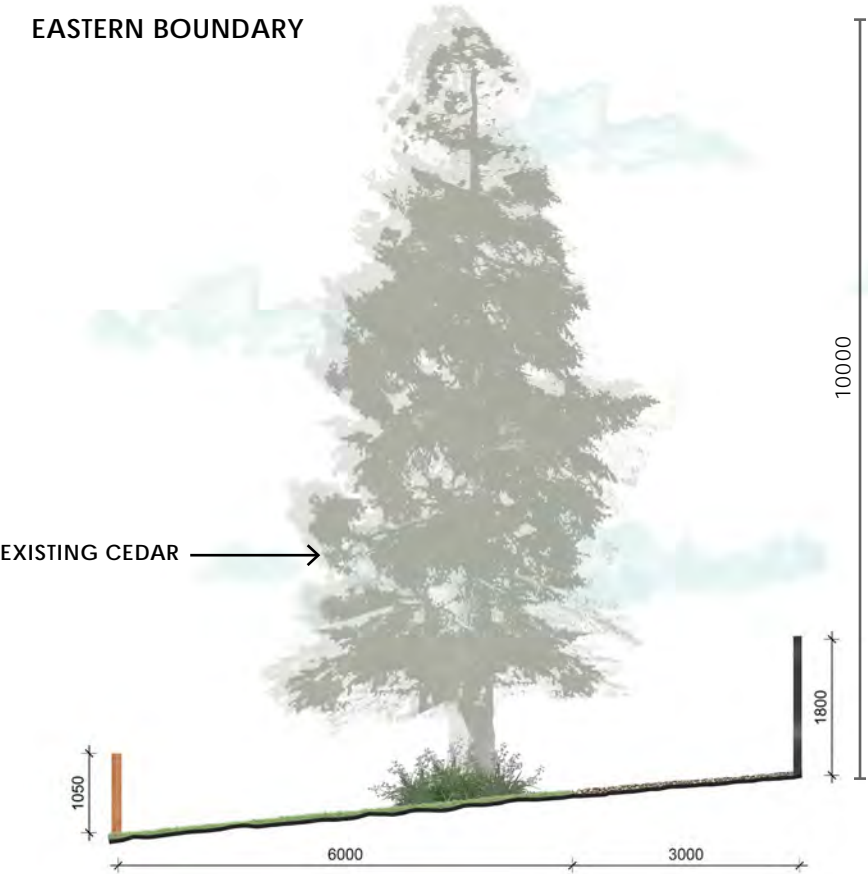


WESTERN BOUNDARY



NOTE: ALL MEASUREMENTS ARE IN MILLIMETRES

EASTERN BOUNDARY



ORIGINAL IN COLOUR



Printed 30/05/2025 2:13:00 pm

KEY

- NOTES
1. THIS PLAN IS A CONCEPTUAL MITIGATION PLAN AND SHOULD NOT BE USED FOR PLANTING.
 2. WATER TREATMENT PLANT SHOWN IS A CONCEPT ONLY.
 3. PROPOSED MITIGATION PLANTING IS DESIGNED TO PROVIDE LONG TERM SCREENING.
 4. SECTIONS TO BE READ IN CONJUNCTION WITH THE NEW WELLSFORD WATER TREATMENT PLANT - NoR: LANDSCAPE AND VISUAL EFFECTS ASSESSMENT.
 5. PLANTING HEIGHTS ARE INDICATIVE OF 6 YEARS OF GROWTH

REV	DATE	DESCRIPTION
A	30.05.25	First Issue

APPRVD
OMa

New Wellsford Water
Treatment Plan - NoR

Landscape Mitigation Planting Cross
Sections

Design	OMa	Scale	Date
Drawn	JKe	A1 @ 1:50	30.05.25
Check	OMa	A3 @ 1:100	

For Information

DRAWING NO.	REVISION
BM230742-501	A

U:\2023\BM230742_TLI_Wellsford_WTP_411_Wayby_Valley_Road\CAD\BM230742_Base_Planting.dwg

Report for an application for resource consent under the Resource Management Act 1991



Discretionary activity groundwater permit (s14)

1. Application description

Application number(s):	WAT60400411 (s14 groundwater permit)
Applicant:	Watercare Services Limited
Site address:	411 Wayby Valley Road
Legal description:	Lot 3 DP 547258
Site area:	3,500m ² more or less

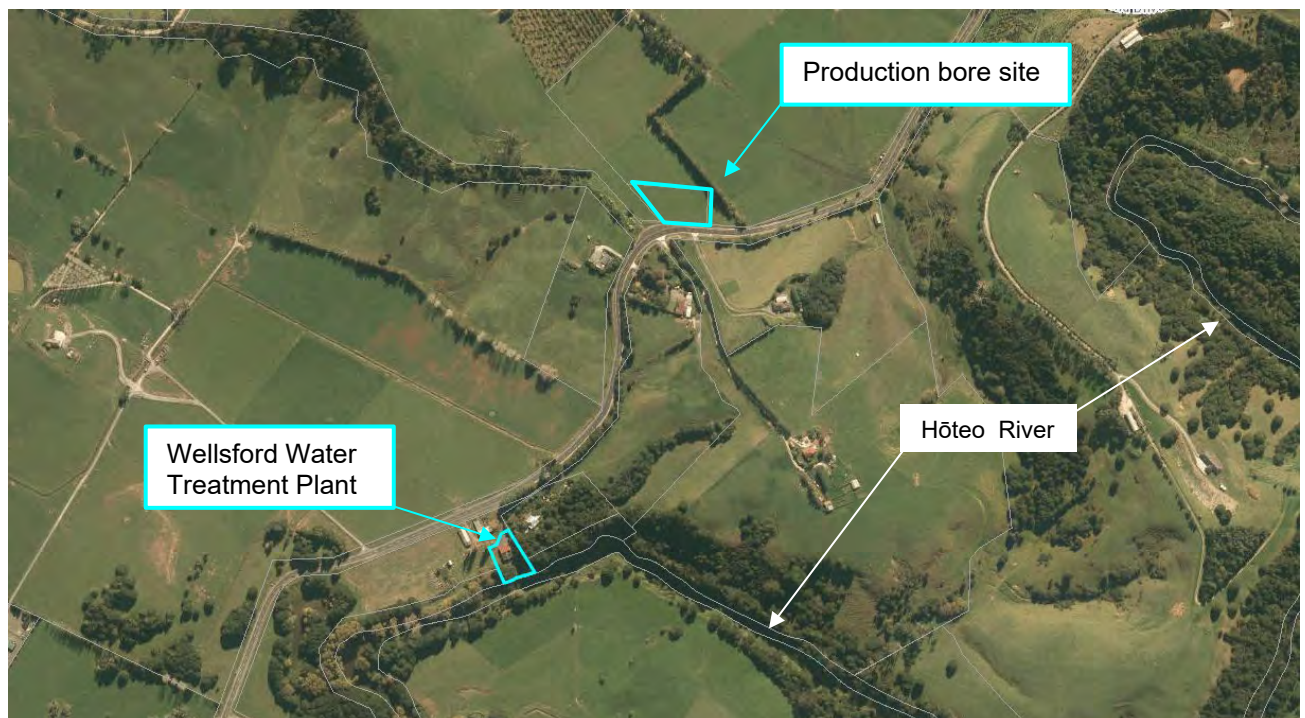
Auckland Unitary Plan (Operative in part)

Zoning and precinct:	Rural Production Zone
Overlays, controls, special features, designations, etc:	Control: Macroinvertebrate Community Index (Rural)

Proposed Plan (Plan Changes 78, 79 and 80)

Zoning and precinct:	Rural Production Zone
Qualifying matters, management layers, etc.	NA: not a relevant residential zone

2. Locality Plan



Production bore site at 411 Wayby Valley Road, Wellsford (Source: Auckland Council GIS)

3. The proposal, site and locality description

Proposal

Watercare Services Limited (WSL) is seeking a permit to take and use groundwater from an existing bore located at a site approximately 3.6km east of Wellsford town centre, for municipal water supply. WSL proposes to take a maximum of 4,084m³ /day (calculated as a rolling 5 day average), with a maximum annual allocation of 889,870m³. A permit duration of 35 years is sought.

WSL intends to implement this water take in two stages, pending the results of the pump test under WAT60397718. State 1 will comprise a maximum of 2,160 m³/day and 788,400 m³/year. Stage 2 will comprise 4,084 m³/day and 889,870 m³/year.

Site and surrounding environment description

WSP New Zealand Ltd has provided a description of the proposal and subject site on pages 6 – 11 of the Assessment of Environmental Effects (AEE) titled: *Wellsford Groundwater Abstraction for Municipal Supply, dated April 2022*.

Having undertaken a site visit on 14 April 2022, I concur with that description of the proposal and the site and have no further comments. Further comments are made where relevant in the assessment below.

4. Background

Specialist Input

The proposal has been reviewed and assessed by the following specialist:

- Stephen Crane, Senior Groundwater Specialist, Auckland Council

Operational and consent history

Watercare Services Limited (WSL) provides municipal water supply to Wellsford and Te Hana. WSL forecasts that the Wellsford population will increase to 8,740 residents by 2056, facilitated by extension of the Northern Motorway from Warkworth to Wellsford.

Since 1962, WSL has sourced this municipal supply from the Hōteio River via various surface water take and associated discharge permits. This river water is treated at the Wellsford Water Treatment Plant before being pumped through WSL's water supply network consisting of approximately 34 km of pipe and 917 connected properties, with the current supplied population estimated to be approximately 2,100.

The current permit (BUN60396927) authorises a daily take of 1,500m³ / day, and an annual abstraction volume of 330,000m³ / year. This permit also authorises WSL to discharge off-spec backwash to the Hōteio River from the Water Treatment Plant, with a total combined discharge volume up to 470m³ / day. WSL's consent also provides for a small groundwater take from the production bore at the subject site, which is used to augment surface water flows in the Hōteio during summer low-flow months.

The current operating permits for the Wellsford Water Treatment Plant (BUN60396927) will expire on 30 June 2033. This application for a groundwater take is intended to replace BUN60396927, as a more sustainable source of municipal water supply for WSL's Wellsford and Te Hana service area.

Production bore construction and test history

WSL has completed various investigations to determine whether the site at 411 Wayby Valley Road is suitable for the production bore and long-term groundwater take, including:

- Drilling an exploratory bore in April 2016, which resulted in drilling the final production well to a depth of 281m deep, with a 250mm-diameter bore shaft that is steel-cased to a depth of 190m (bore ID 30446, completed February 2018).
- In July 2018, conducting an initial pump test that confirmed the production bore is capable of the required rate and volume of yield needed to supply the future Wellsford groundwater treatment plant (consent WAT60315801). The only observation bore used to monitor interference effects was the shallow 36m deep Nelson bore (ID23589).
- WSL has consent to complete a maximum 18-day Constant Discharge Rate Test (referred to as the 'pumping test') at the production bore to assess the aquifer's parameters, determine whether the required long-term and peak yields are sustainable and identify if neighbouring bore owners will experience interference effects (WAT60397718, granted by an independent Duty Commissioner on 11 November 2022). I note that only 14-days is required to complete the test but that an additional 4-days was approved in case of power outage. This consent allows for a groundwater take from the Hōteio Waitematā aquifer for up to 4,320 m³/day at a rate of up to 50 L/s and a maximum 160,000 m³/year. At the date of writing, WSL has not completed this pump-test and results are not available to inform this assessment for the long-term groundwater take.

Production bore pump test methodology (WAT60397718)

The applicant has agreed to implement this water take in two stages. State 1 will comprise a maximum of 2,160 m³/day and 788,400 m³/year. Stage 2 will comprise 4,084 m³/day and 889,870 m³/year. The design and methodology used to conduct the pumping test has significant consequences for Council's ability to assess effects of the proposed Stage 2 take of 4,084 m³/day and 889,870 m³/year, when compared to the effects of the lessor Stage 1 take. Results from this pump test will provide confirmation to the Council regarding the aquifer's level of confinement, and whether nearby bore owners will maintain their ability to take groundwater.

During the review of WAT60397718, Council's Groundwater Specialist raised concerns regarding a belowground rock fracture zone that is known to exist around the production bore site. Council's Specialist was concerned that the groundwater flow regime within the fracture zone would perform differently to the flow regime outside this fracture zone, and so both areas needed to be monitored during the pumping test. The specialist found that 'the aquifer transmissivity outside of the fracture zone (as demonstrated by the pumping test on the new deep Nelson bore ID30831) is almost ten-fold less than within the fracture zone, and hence interference effects may be different to those on bores within the fracture zone' (Technical Memo, dated 30 June 2023).

WSL's "*Wellsford Groundwater Source Development, Proposed Aquifer Test Plan*" (March 2019) proposed three monitoring bores; OB1 & 3 (250m deep) and OB2 (20m, shallow) as well as use of two existing deep private bores, "Blennerhassett" and "Homeward Bound". All proposed observation bores are located inside the fracture zone. None are outside of this zone.

As it was unclear how the fracture zone would impact the aquifer's flow characteristics, Council's Specialist took a conservative view regarding the extent of the radius around the production bore within which WSL must advise bore owners about the pump test and offer an emergency water supply.

Ultimately, an independent review was completed by Earthtech Consulting Ltd, which addressed many of the Specialist's concerns regarding the aquifer's confinement, transmissivity and storativity values ('leakiness') and the preferred aquifer model to use when calculating drawdown effects (Hantush-Jacobs or Theis).

Through the s92 process for this application, WSL has agreed to monitoring one additional deep bore outside the fracture zone – the 281m deep Nelson Family Trust bore (ID 30831) located 160m to the WNW of the production bore. The Earthtech review found this Nelson bore is outside of the fracture zone, based on the driller's pumping test conducted in 2020.

Prior to the pumping test, WSL has agreed to survey all properties within a 4km radius to determine the location all bore owners, advise them of bore pumping and offer to provide an alternative water source if their bores can no longer operate due to drawdown effects.

Of note, conditions from WAT60397718 require WSL to submit a final version of the pumping test methodology at least one month prior to commencement of the test. This methodology must be certified by the Council. WAT60397718 conditions also require WSL to notify bore owners within a 4km radius of the production bore and offer an alternative water supply if investigations determine that the pump test has caused their bore pump to lose submergence.

I note the conditions of WAT60397718 do not require a monitoring bore to be drilled outside the fracture network as the pump test will be for a short duration and mitigation of sudden loss of water supply conditions will manage any potential effects on other bore uses. Rather, the offer to monitor a deep bore outside the fracture zone is made by WSL as a part of this application, to demonstrate that the increased groundwater take proposed under stage two can occur without interference effects to neighbouring bore owners.

No final version of the pumping test methodology is required to be submitted to Council prior to the substantive decision on this application for the long-term take.

Consent lapse date

WSL states that this groundwater take consent (if granted) will not be implemented until a new water treatment plant (WTP) is constructed and operational, as the treatment process for groundwater is different to that required for the current Hōteu River source.

Design work for the new WTP cannot commence until WSL confirms access to the groundwater resource, which is secured via Council's approval of this application. The engineering design must be sufficiently advanced before WSL can lodge a Notice of Requirement under s168A of the RMA to designate the new WTP, so any conditions of the Designation do not compromise what needs to be built and operated.

WSL anticipates that obtaining the Notice of Requirement and completing engineering design and construction, including WTP commissioning, will take approximately 10-years, including a time factor for unforeseen delays. As such, WSL is seeking:

- a lapse period of 10 years for this consent under s125 of the RMA; and
- that the 35-year duration period of this groundwater take permit does not commence under s116 of the RMA until construction of the new WTP has been completed and WSL gives written notice to the Council that the groundwater take is about to commence.

Consultation

Mana whenua

WSL has an established process for mana whenua engagement, with early notification of works that require resource consent via the Kaitiaki Managers Projects List. This list is provided monthly to 19 mana whenua groups in the Auckland area.

The proposal to take groundwater from the Hōteio Waitematā aquifer first appeared on the Kaitiaki List in 2013. WSL provided an update in May 2021 to iwi groups that had previously expressed interest, including Ngāti Manuhiri who have statutory acknowledgement in the area under the Ngāti Manuhiri Claims Settlement Act 2012, and Te Uri o Hau who have statutory acknowledgement of the Hōteio River as a tributary of the Kaipara Harbour under the Te Uri o Hau Claims Settlement Act 2002. A further update was sent to all iwi via the List in June 2021.

The following iwi groups have expressed interest in the proposal since 2013:

- Te Uri o Hau
- Ngāti Manuhiri
- Te Rūnanga o Ngāti Whātua
- Ngāti Maru
- Ngāti Whanaunga
- Ngāti Rehua Ngātiwai ki Aotea
- Te Kawerau ā Maki

Te Uri O Hau Trust

Further to WSL's consultation and a site visit conducted on 27 January 2022, Te Uri o Hau have provided a cultural impact assessment comprising a supporting cover letter dated March 2022 and an attached Ecological Assessment by Environs Te Hau (dated 12 April 2022). While this assessment mainly relates to BUN60396927, based on Te Uri o Hau cultural values in relation to Wai, with particular emphasis on river ecology, water quality and water take, river channel scouring and erosion, and backwash discharge into the Hōteio River, Te Uri o Hau states that the iwi organization supports the proposal, subject to WSL sharing the findings of any post-development monitoring and on the grounds that use and treatment of surface water from the Hōteio River will cease in approximately 10-years, to be replaced with this groundwater take, which the iwi considers to be more sustainable.

Ngāti Manuhiri

WSL has sent Ngāti Manuhiri copies of the application documents, including the Ecology and Groundwater assessments. A virtual meeting was held on 9 February 2022 and an on-site meeting scheduled for 22 February 2022.

Ngāti Manuhiri has provided a Cultural Values Assessment *Kaitiaki Report* by Courtney Shaw, Manuhiri Kaitiaki Charitable Trust, dated 19/04/2022. Ngāti Manuhiri states that the iwi organization supports granting this consent (page 7, *ibid*).

Other interested iwi organizations

Following an expression of interest, WSL sent application documents to the following iwi organizations at/around the date of lodgement:

- Te Rūnanga o Ngāti Whātua
- Ngāti Whanaunga
- Ngāti Maru
- Ngāti Rehua Ngātiwai ki Aotea
- Te Kawerau ā Maki

To date, these iwi organizations have not provided a formal response, as confirmed by WSL (email correspondence from Paul Futter, Senior Planner, Watercare dated 29 March 2023).

Neighbours

WSL has consulted with neighbouring landowners regarding the scope and potential effects of this groundwater take, including:

487 Wayby Valley Road

WSL contacted the owner occupiers of 487 Wayby Valley Road (the Nelson family) to advise of the proposal scope and to request access to bores on the property, so WSL could conduct groundwater monitoring during a pumping test, which is part of a separate but related resource consent application (WAT60397718, bores 30831 and 23589). WSL also advised these neighbours of the potential need for a temporary water supply during the proposed pumping test due to possible drawdown effects on bore 23589.

A copy of the Groundwater Assessment by GHD was also sent to these owner occupiers.

Watercare advises that it is in regular dialogue with these parties, regarding the future pump test and this groundwater take application.

406 Wayby Valley Road

WSL met with the occupiers of 406 Wayby Valley Road, including Paula Brocklehurst. Ms Brocklehurst is part owner of MB Rural Limited, being the owners of 406 Wayby Valley Road. WSL provided Ms Brocklehurst a copy of the Groundwater Assessment by GHD.

Ms Brocklehurst has identified that the spring / groundwater seep at her property is crucial for the maintenance and stock watering. WSL advised that it is highly unlikely this perched groundwater system will be impacted but daily visual inspections will be completed during the pump test to observe any potential changes.

Watercare advises that it is in regular dialogue with these parties, regarding the future pump test and this groundwater take application.

26 Homeward Bound Drive

On 18 January 2022, WSL emailed the owners of 26 Homeward Bound Drive and Bore 22011, Meritelle Limited a copy of the Groundwater Assessment and advised the owners of the potential need to provide them with temporary alternative water supply during the pumping test (WAT60397718), as a result of potential interference effects on bore 22011. WSL also requested access to this bore for monitoring during pump testing.

Meritelle responded, advising that they open to discussing the proposal requirements, subject to discussions with tenants and a neighbour. WSL states it will continue dialogue with Meritelle regarding this groundwater take application and for any future pumping test required, to manage any potential effects of testing on bore 22011.

Permitted activities

Resource Management (National Environmental Standards for Freshwater) Regulations 2020

To avoid doubt, there are no natural wetlands within 100m of the proposed groundwater take, or the discharge location into the Hōteō River so the NES:FW Regulations 2020 are not applicable to the proposal.

S176 RMA Designations

411 Wayby Valley Road (bore site) has no designations.

1% AEP flood plain and overland flow path

As no physical works occur at the production bore site, consent for works in the flood plain or overland flow path is not triggered, nor is consent for contaminated sites under the NES(CS).

5. Reasons for the application

Resource consent is required for the following reasons:

Water permit (s14) – WAT60400411

Auckland Unitary Plan (Operative in part)

Regional land use (operative plan provisions)

- To take and use groundwater from the Hōteio Waitematā aquifer for 35 years as a municipal water supply is a discretionary activity under E7.4.1(A26):
 - Stage 1: up to a maximum of 2,160m³ /day at a rate of 25 litres/second, with a maximum annual allocation of 788,400m³ and;
 - Stage 2: up to a maximum of 4,084m³ /day (calculated as a rolling 5-day average), with a maximum annual allocation of 889,870m³.

6. Public notification assessment (sections 95A, 95C-95D)

Section 95A specifies the steps the council is to follow to determine whether an application is to be publicly notified. These steps are addressed in the statutory order below.

Step 1: mandatory public notification in certain circumstances

No mandatory notification is required as:

- the applicant has not requested that the application is publicly notified (s95A(3)(a))
- there are no outstanding or refused requests for further information (s95C and s95A(3)(b)), and
- the application does not involve any exchange of recreation reserve land under s15AA of the Reserves Act 1977 (s95A(3)(c)).

Step 2: if not required by step 1, public notification precluded in certain circumstances

The application is not precluded from public notification as:

- the activities are not subject to a rule or national environmental standard (NES) which precludes public notification (s95A(5)(a)); and
- the application does not involve one or more of the activities specified in s95A(5)(b).

Step 3: if not precluded by step 2, public notification required in certain circumstances

The application is not required to be publicly notified as the activities are not subject to any rule or a NES that requires public notification (s95A(8)(a)).

The following assessment addresses the adverse effects of the activities on the environment, as public notification is required if the activities will have or are likely to have adverse effects on the environment that are more than minor (s95A(8)(b)).

Adverse effects assessment (sections 95A(8)(b) and 95D)

The applicant has provided, in accordance with schedule 4 of the RMA, an assessment of adverse environmental effects in such detail as corresponds with the scale and significance of the effects that the activities may have on the environment. This can be found on pages pp 20 - 25 of the AEE.

I concur with this assessment and note the following:

Effects that must be disregarded

Effects on persons who are owners and occupiers of the land in, on or over which the application relate, or of land adjacent to that land

The council is to disregard any effects on the land in, on, or over which the activity will occur, and on persons who own or occupy any adjacent land (s95D(a)). Properties adjacent to the subject site are shown in Table 1 and Figure 2, below:

Table 1: Adjacent properties	
399 Wayby Valley Road	400 Wayby Valley Road
406 Wayby Valley Road	412 Wayby Valley Road
437 Wayby Valley Road	487 Wayby Valley Road



Figure 2: Plan showing adjoining sites for limited notification assessment, from Council's GeoMaps

Any effect on a person who has given written approval to the application

WSL has provided written approval from P and C Nelson at 487 Wayby Valley Road, whose property contains the Nelson and Blennerhasset bores. Effects on persons at this property must be disregarded.

Effects that may be disregarded

Permitted baseline

The permitted baseline refers to the effects of permitted activities on the subject site. The permitted baseline may be taken into account and the council has the discretion to disregard those effects where an activity is not fanciful.

Under s14 of the RMA, groundwater of up to 5,000m³/year may be abstracted for domestic use or stock water drinking. In this case, the daily and annual volume of groundwater to be abstracted greatly exceeds these baselines, so no effects are disregarded.

Assessment

Receiving environment

The receiving environment beyond the subject site includes permitted activities under the relevant plans, lawfully established activities (via existing use rights or resource consent), and

any unimplemented resource consents that are likely to be implemented. The effects of any unimplemented consents on the subject site that are likely to be implemented (and which are not being replaced by the current proposal) also form part of this reasonably foreseeable receiving environment. This is the environment within which the adverse effects of this application must be assessed.

The receiving environment is described at 'site and surrounds' (above) and, more generally, is the rural-residential area surrounding the site, known as the Wellsford area. This area is zoned Mixed Rural and, while some stands of native forest remain, much of the surrounding landscape has been cleared or modified for pastoral or small-scale agricultural use. Several rural-residential blocks within 2.5km of the site, some of whom rely on groundwater supply.

Where relevant, other comments on the receiving environment are described

Adverse effects

Hōteō Waitematā aquifer water availability, current usage and volume requested

Groundwater availability for the Hōteō Waitematā aquifer is not identified in the AUP(OP) and the aquifer is not in a High Use Aquifer Management Area. The aquifer does not provide recharge to, and is not recharged from, other aquifers but is considered by Auckland Council to be confined (pressurised) and recharge occurs through the ground via infiltration from rainfall.

As the aquifer is connected and discharges into the Hōteō River, the AUP(OP) gives a guideline availability of 35% of average annual recharge for aquifers with a connection to a surface water body.

WSL and Council's Specialist generally agree on the availability of groundwater and the current volume of groundwater abstraction from the Hōteō Waitematā aquifer, although Council's Specialist has made some increases to stock water takes and discounted the Rodney Aggregate take, as this is from the higher Greywacke aquifer.

Based on annual rainfall within the aquifer's upstream catchment, the total volume of groundwater in this part of the Hōteō Waitematā aquifer is estimated to be 10,091,520 m³/year. Assuming the AUP(OP)'s policy to allow 35% average annual recharge, this leaves 3,532,000 m³/year available for abstraction. Aquifer availability and current groundwater takes are described on pages 15-17 of the Specialist's report and summarized in Table 2 (below):

Water Availability Hōteō Waitematā Aquifer up-gradient of Wilson Rd:	
3,532,000 m³/year (rounded to nearest 1,000)	
Total water demand	
Issued take consents:	184,880 m ³ /year
Applications not yet granted	Nil
Three Permitted Activity Takes @ 5000 m ³ /year	15,000 m ³ /year
Animal drinking use based on 90% of the May 2022 S92 Response total	257,400 m ³ /year

Total water demand	457,280 m ³ /year
Remaining available	3,074,720 m ³ /year
This application (Stage Two)	889,870 m ³ /year
Remaining availability for further allocation	2,184,850 m³/year

Table 2 Groundwater availability and allocation in the Hōteō Waitematā Aquifer up-gradient of Wilson Rd

Council's Specialist states that the Hōteō Waitematā has adequate volume available for the proposed take and considers that WSL has made a reasonable assessment consistent with Policy E2.3.4 (a)(ii) that requires an efficient allocation and use of the aquifer water resource, noting the use is for municipal supply at a rate of 220 litres per person per day within the Wellsford Service Area, based on forecast growth to over 8,700 population by 2056.

Council's Specialist has also reviewed WSL's report that outlines the production well's (PW's) pumping yield capacity (Beca Report (2019) and WSL Memorandum (2018) *ibid*). Based on this information, the Specialist considers the 250mm diameter bore should be capable of extracting the quantities applied for, in accordance with AUP(OP) policy E2.3.7 (g).

I adopt the Specialist's findings and conclude the proposed maximum take is feasible and will have effects on the annual recharge and overall sustainability of the Hōteō Waitematā aquifer that are less than minor.

Recharge of other aquifers

Council's Specialist agrees with WSL that the Hōteō Waitematā Aquifer does not provide recharge to other aquifers and is not recharged from other aquifers.

I adopt the Specialist's findings and conclude the proposal will have less than minor effects on surrounding aquifers.

Aquifer consolidation and surface subsidence

Council's Specialist agrees with the applicant that ground settlement around the PW is not expected to occur because of the groundwater take, as groundwater drawdown will occur at a depth greater than 16m below ground level and the aquifer's subsurface geology consists of sandstone and mudstone rock, which is unlikely to deform.

I adopt the Specialist's findings and conclude ground settlement effects are anticipated to be less than minor.

Effects on surface water

Council's Specialist agrees with WSL that the proposal will have minimal effects on nearby surface water bodies. These surface water bodies are the Hōteō River and a farm drain / seep located 170m northeast of the PW, which ultimately drains into the Hōteō.

WSL's modelling (*Hunt (2003) stream depletion solution*) shows that:

...during both the average demand and peak summer demand pumping scenarios less than 0.1 L/S is likely to be derived from the farm drain. This represents approximately 0.4% and 0.2% of the pumping rate for the average and peak summer demand, respectively.

Given the low rate of assessed stream depletion the proposed groundwater abstraction from the PW is not considered likely to cause a measurable impact to the farm drain or Hōteio River.

Council's Specialist adds that the AUP(OP) policy to limit takes to 35% of aquifer recharge is intended to ensure a base flow in any surface water body that may be connected to the aquifer. As the take falls within this policy limit, the Specialist concurs that there are negligible effects on connected surface water bodies.

I adopt the Specialist's findings and conclude the proposed take will have less than minor effects on the Hōteio River flow volume and rates, including during the River's summer low-flows. I conclude that, as effects to the Hōteio are negligible, effects to the aquatic ecosystem that relies on surface water in the Hōteio and any associated ecological values are also less than minor.

Risk of saline intrusion

The nearest point from the PW to a water body connected to the ocean is approximately 8 km to the north, a tributary of the upper Oruawharo River.

Council's Specialist agrees with WSL's assessment that, *'given the hydrogeological setting, distance to the coast and the small, estimated drawdowns, it is considered highly unlikely that saline water intrusion will be an issue as a result of pumping from the PW.'*

I adopt the Specialist's findings and conclude the risk of saline intrusion and associated effects to the Hōteio Waitematā aquifer are less than minor.

Groundwater take monitoring

Council's Specialist is satisfied that the proposed conditions offered by WSL contains a sufficient methodology and reporting provisions to allow verification of the PW's capacity to provide a viable drinking water source for the Wellsford area, including for both the smaller Stage One and maximum Stage Two allocations, over both the 90-day summer peak demand period and the annual total abstraction volumes.

I note that WSL has agreed to a two-stage groundwater take, whereby the increased abstraction volumes consented under Stage Two can only begin once results from the pump test (WAT60397718) have confirmed the aquifer's 'leaky' characteristics and demonstrated that adverse drawdown effects within the aquifer are negligible.

The applicant has also adopted standard conditions for metering and monitoring of daily and annual abstraction volumes, as well as conditions to provide monitoring results to Council thereby allowing verification of compliance with the consented water take allocations at both Stage One and Stage Two.

Adverse effects conclusions

Overall, with the adoption of recommended monitoring conditions, the proposed groundwater take for municipal supply to the Wellsford Service Area, including both the Stage One and Stage Two summer peak allocation and the annual total abstraction volumes, will have adverse effects to the sustainability of the Hōteio Waitematā aquifer, connected surface water bodies and the wider ecosystem and ecological values that are less than minor.

Step 4: public notification in special circumstances

If an application has not been publicly notified as a result of any of the previous steps, then the council is required to determine whether special circumstances exist that warrant it being publicly notified (s95A(9)).

Special circumstances are those that are:

- Exceptional, abnormal or unusual, but something less than extraordinary or unique;
- outside of the common run of applications of this nature; or
- circumstances which make notification desirable, notwithstanding the conclusion that the activities will not have adverse effects on the environment that are more than minor.

In this instance I have turned my mind specifically to the existence of any special circumstances and conclude that there is nothing exceptional or unusual about the application, and that the proposal has nothing out of the ordinary run of things to suggest that public notification should occur.

Public notification conclusion

Having undertaken the s95A public notification tests, the following conclusions are reached:

- Under step 1, public notification is not mandatory.
- Under step 2, there is no rule or NES that specifically precludes public notification of the activities, and the application is for activities other than those specified in s95A(5)(b).
- Under step 3, public notification is not required as the application is for activities that are not subject to a rule that specifically requires it, and it is considered that the activities will not have adverse effects on the environment that are more than minor.
- Under step 4, there are no special circumstances that warrant the application being publicly notified.

It is therefore recommended that this application be processed without public notification.

7. Limited notification assessment (sections 95B, 95E-95G)

If the application is not publicly notified under s95A, the council must follow the steps set out in s95B to determine whether to limited notify the application. These steps are addressed in the statutory order below.

Step 1: certain affected protected customary rights groups must be notified

There are no protected customary rights groups or customary marine title groups affected by the proposed activities (s95B(2)).

In addition, the council must determine whether the proposed activities are on or adjacent to, or may affect, land that is subject of a statutory acknowledgement under schedule 11, and whether the person to whom the statutory acknowledgement is made is an affected person (s95B(3)).

Within the Auckland region the following statutory acknowledgements are relevant:

- Te Uri o Hau Claims Settlement Act 2002
- Ngāti Manuhiri Claims Settlement Act 2012
- Ngāti Whātua Ōrākei Claims Settlement Act 2012
- Ngāti Whātua o Kaipara Claims Settlement Act 2013
- Te Kawerau ā Maki Claims Settlement Act 2015
- Ngāti Tamaoho Claims Settlement Act 2018
- Ngāi Tai Ki Tāmaki Claims Settlement Act 2018

In this instance, while the production bore site is near to the Ngati Manuhiri and the Te Uri o Hau Claims Settlement Act areas (or rohe), the proposal will not result in adversely affected persons in this regards, noting that the applicant has consulted with representatives from these iwi organizations and has obtained their written support for the proposal, which both iwi groups consider to be a more sustainable alternative over the current surface water take required to provide municipal supply to the Wellsford Service Area.

Step 2: if not required by step 1, limited notification precluded in certain circumstances

The application is not precluded from limited notification as:

- the application is not for one or more activities that are exclusively subject to a rule or NES which preclude limited notification (s95B(6)(a)); and
- the application is not exclusively for a controlled activity, other than a subdivision, that requires consent under a district plan (s95B(6)(b)).

Step 3: if not precluded by step 2, certain other affected persons must be notified

As this application is not for a boundary activity, there are no affected persons related to that type of activity (s95B(7)).

The following assessment addresses whether there are any affected persons that the application is required to be limited notified to (s95B(8)).

In determining whether a person is an affected person:

- a person is affected if adverse effects on that person are minor or more than minor (but not less than minor);

- adverse effects permitted by a rule in a plan or NES (the permitted baseline) may be disregarded; and
- the adverse effects on those persons who have provided their written approval must be disregarded.

Adversely affected persons assessment (sections 95B(8) and 95E)

The applicant has provided in accordance with schedule 4 of the RMA, an assessment of adversely affected persons in such detail as corresponds with the scale and significance of the effects that the activities may have on persons in the surrounding environment. This can be found on pages 20 to 25 of the AEE.

Mana whenua effects

As described above, mana whenua and kaitiaki for this rohe have been consulted and the applicant has considered their response. Local iwi organizations have not raised concerns regarding impacts to the mauri of the water in the Hōteao Waitematā aquifer, surrounding aquifers, local surface water bodies or the Hōteao catchment as a result of the proposed groundwater take for municipal supply to the Wellsford service area.

I consider that effects to mana whenua values are less than minor.

Bore interference effects at 487 Wayby Valley Road

G and P Nelson at 487 Wayby Valley Road have provided written approvals so bore interference effects to persons at this property are disregarded.

Bore interference effects and loss of water supply

As summarized from the application documents and the Specialist's technical memo, the assessment of bore interference effects is based on three components:

- The depth of the pump within the bore relative to the bore's natural static water level;
- In-well drawdown that occurs due to the bore's own pumping rate, and;
- Interference effects on groundwater levels around nearby bores caused by the applicant's proposed groundwater take, especially during the summer peak period where daily pumping rates are anticipated to be higher – these effects can be measured using either the Hantush-Jacob's or the Theis model, with assumed numerical values entered for aquifer transmissivity (T) and storativity (S).

To calculate drawdown effects two models are typically used: the Hantush-Jacob's model and the Theis Solution, depending on the aquifer's level of permeability, where the Hantush-Jacob's model is used for more leaky aquifers and the Theis Solution used for more confined aquifers.

At Council's request, WSL completed additional assessment of interference effects with more conservative aquifer transmissivity and storativity values, using both the Hantush-Jacob's and Theis models. This request was made due to Council's disagreement with WSL's finding that the Hōteao Waitematā aquifer is 'leaky' (see background section above).

At Council's request, WSL also completed a more detailed review of bores located within 2km of the PW site, including the depth of pump submergence, maximum yield (L/sec) and extent of in-well drawdown capacity.

Council's Specialist does not agree with WSL's updated assessment that drawdown effects from the proposed take will not cause a loss of groundwater supply for persons operating nearby bores because:

- *Lack of information from the PW pump test*

The Specialist states that, as part of the PW's pumping test, if the applicant only monitors bores within the fracture zone, drawdown effects to bores located outside the fracture zone will not be clearly shown. Secondary drawdown effects could develop outside the fracture zone within this lower permeability geology. A more accurate method of determining drawdown effects within and outside of the northeast trending fracture zone would be through monitoring the deep Nelson bore (ID30831) and through water quality sampling to determine different groundwater bodies inside and outside of the fracture zone.

- *Use of the Hantush-Jacobs or Theis models and transmissivity and storativity values*

Council's Specialist accepts that the Hantush-Jacobs model, which is used for more 'leaky' aquifers, is appropriate for calculating interference effects to nearby bores within the fracture zone. The Specialist also agrees with WSL that the Hantush-Jacobs model indicates it is unlikely that there will be loss of water supply to private bores within the fracture zone.

However, the Specialist does not agree that the Hantush-Jacobs model is appropriate for use outside the fracture zone, where the geology may be less permeable and the aquifer more confined, especially where the PW has been pumping for more than six days as longer pumping periods could extend the aquifer boundaries which would increase drawdown effects.

During the s92 process, Council's Specialist and WSL completed Hantush-Jacobs and Theis modelling for all known neighbouring bores using a conservative range of transmissivity and storativity values obtained from historic pump and other aquifer test records for the adjoining Rodney Waitematā Aquifer.

However, Council's Specialist remains unclear as to which model should be used to determine effects on specific neighbouring bores, as the extent of the fracture zone is not clear and therefore the Specialist is not certain whether the proposed abstraction will cause a loss of water supply at nearby bores, especially during the summer peak take.

- *Lack of driller's log information used to model in-well drawdown effects*

The driller's flow tests for the Homeward Bound and Chitty bores show different pumping rates / yield and different depths of in-well drawdown. This is especially within the first three-hours of constant pumping, during which the Specialist considers the most significant drawdown effects are likely to occur.

While WSL has assessed in-well drawdown using both the Hantush-Jacob and Theis models, these models both assume the same yield capacity for all bores. Council's Specialist states that the driller's flow tests clearly show these bores have different yield capacities.

The Specialist considers that the predicted in-well drawdown measurements for the Homeward Bound and Chitty bores do not properly reflect the specific capacity of these bores and therefore it is not clear whether loss of water supply may occur to these adjoining bore owners.

- *Radius around the PW within which drawdown effects may occur*

Council's Specialist states that, based on driller's logs for the Homeward Bound and Chitty bores, it is reasonable to assume that deep Waitematā bores have pump submergence of at least 15m and may have an in-well drawdown for an RMA s14(3)9b) domestic or stock water take of up to 5m. Council's Specialist concludes that pump submergence may be lost within neighbouring bores that experience an interference effect that causes groundwater levels to fall more than 10m, as a result of WSL's pump test.

Using the Theis Solution for confined aquifers, Council's Specialist calculates that the peak annual take under the Stage One abstraction could lower groundwater levels by 10m within a 4.2km radius of the PW. Under the Stage Two peak summer take, a predicted drawdown of 10m occurs at 2.8km from the PW (noting the higher take has a smaller radius of interference effects).

- *Unknown bores may be located within a 2km radius of the PW*

WSL has surveyed all properties within 1,200m of the production bore that do not have a Council bore record and states there are no additional bores within this area. WSL was not asked by Council to survey properties beyond 1,200m.

Council's Specialist also notes there are no records for most bores drilled pre-1987 and the owner of a bore that is not known to Council may experience interrupted supply during the pumping testing but be unaware that the WSL test is occurring.

To mitigate the potential loss of water supply to these persons, Watercare has adopted a consent condition to 1) notify well owners within a 2km radius of the PW prior to the Stage One take commencing, and 2) offer to provide a tankered water supply to well owners that experience an interrupted supply during this Stage One take.

The Groundwater Take Assessment Summary of assessment of effects section states:

"Pumping interference effects from the proposed take (estimated groundwater drawdown on other groundwater users) indicate that there is remaining available drawdown within all of the nearby bores to allow existing users to exercise their water takes (Section 4.3.1). It is noted that although actual pump depths in the neighbouring wells may differ from what was considered in this assessment, based on the estimated results there is available drawdown within the wells to allow for a pump to be lowered within a well to ensure sufficient head remains above the pump."

I note that this approach is consistent with AUP(OP) policies E2.3 (7) (e) & (f), which deal with the issue of groundwater interference effects, stating [emphasis added]:

(7) Require all proposals to take and use groundwater from any aquifer to demonstrate that:

(e) the taking will not cause adverse interference effects on neighbouring bores to the extent their owners are prevented from exercising their lawfully established water takes;

(f) Policy E2.3(7)(e) above will not apply in the following circumstances:

(i) where it is practicably possible to locate the pump intake at a greater depth within the affected bore; or

(ii) where it can be demonstrated that the affected bore accesses, or could access, groundwater at a deeper level within the same aquifer, if drilled or cased to a greater depth.

This policy anticipates that, where interference effects may result from a proposed take, those effects on the neighbouring bore owner are acceptable in the circumstance that the pump in the neighbouring bore can be lowered, or where groundwater could be accessed by the neighbouring bore if it were drilled or cased to a greater depth.

Noting that WSL has adopted this condition to notify all bore owners within a 2km radius and to provide an alternative drinking and/or stock water supply, it is reasonable to conclude that further works on impacted bores to either lower pumps or casing levels can occur such that interference and drawdown effects on adjoining persons are less than minor.

Land subsidence, surface water and ecological effects

In accordance with the s95A assessment (above), the proposed Stage One and Stage Two groundwater take is considered to have adverse land subsidence, surface water, and associated ecological effects to all persons that are less than minor, especially persons on adjoining sites.

Adverse effects conclusions

Overall, with WSL's agreement to notify neighbours within a 2km radius and to provide tankered water to persons within this radius who may experience loss of water supply during the Stage One take, the Stage One groundwater take will have adverse effects to persons, especially those on adjoining sites, that are less than minor.

With WSL's agreement to progress to the increased Stage Two take only following evidence from the associated pump test (WAT60397718) that there are negligible interference effects and therefore no loss of water at adjoining bores, adverse effects from the Stage Two take are also less than minor.

For the reasons above, adverse effects to mana whenua values are assessed as less than minor.

Step 4: further notification in special circumstances

In addition to the findings of the previous steps, the council is also required to determine whether special circumstances exist in relation to the application that warrants it being notified to any other persons not already determined as eligible for limited notification (excluding persons assessed under section 95E as not being affected persons).

Special circumstances are those that are:

- Exceptional, abnormal or unusual, but something less than extraordinary or unique;
- outside of the common run of applications of this nature; or
- circumstances which make limited notification to any other person desirable, notwithstanding the conclusion that no other person has been considered eligible.

In this instance I have turned my mind specifically to the existence of any special circumstances under s95B(10) and conclude that there is nothing exceptional or unusual about the application, and that the proposal has nothing out of the ordinary run of things to suggest that notification to any other persons should occur.

Limited notification conclusion

Having undertaken the s95B limited notification tests, the following conclusions are reached:

- Under step 1, limited notification is not mandatory.
- Under step 2, there is no rule or NES that specifically precludes limited notification of the activities, and the application is for activities other than that specified in s95B(6)(b).
- Under step 3, limited notification is not required as it is considered that the activities will not result in any adversely affected persons.
- Under step 4, there are no special circumstances that warrant the application being limited notified to any other persons.

It is therefore recommended that this application be processed without limited notification.

8. Notification recommendation

Non-notification

For the above reasons under section 95A this application may be processed without public notification.

In addition, under section 95B, limited notification is not required.

Accordingly, I recommend that this application is processed non-notified.



Angie Mason, Planner
Resource Consents

Date: 30 June 2023

9. Notification determination

Acting under delegated authority, and for the reasons set out in the above assessment and recommendation, under sections 95A and 95C to 95D, and 95B and 95E to 95G of the RMA this application shall be processed non-notified.



Doug Fletcher
Principal Project Lead
Resource Consents

Date: 30 June 2023

Decision on an application for resource consent under the Resource Management Act 1991



Discretionary activity for groundwater take (s14)

Application number(s): WAT60400411 (s14 water permit)
Applicant: Watercare Services Ltd
Site address: 411 Wayby Valley Road, Wayby Valley, Auckland 0974
Legal description: Lot 3 DP 547258

Proposal:

Watercare Services Limited (WSL) seeks a two stage groundwater take from the Hōteio Waitematā aquifer to supply municipal water to the Wellsford service area for a total duration of 35-years, with a consent lapse date of 10-years. This consent will commence when WSL issues written notice to the Council under s116 of the RMA that one of the following abstractions has commenced:

- Stage One: to abstract up to 2,160 m³/day and 788,400 m³/year of groundwater, at rate of up to 25 l/s prior to completing a pumping test required by WAT60397718. Following provision of the pumping test results to Council for certification, the Stage 2 abstraction will be authorized no less than two calendar months following certification, unless the Council issues written notice under s128 of the RMA;
- Stage Two: to abstract up to 4,084 m³/day of groundwater at a rate of up to 47 L/s for a consecutive 90-day period, and to abstract up to 889,870 m³/year of groundwater, which is averaged at 2,438m³/day over 365 days.

Resource consent is required for the following reasons:

Water permit (s14) – WAT60400411

Auckland Unitary Plan (Operative in part)

Regional land use (operative plan provisions)

- To take and use groundwater from the Hōteio Waitematā aquifer for 35 years as a municipal water supply is a discretionary activity under E7.4.1(A26):
 - Stage 1: up to a maximum of 2,160m³ /day at a rate of 25 litres/second, with a maximum annual allocation of 788,400m³ and;

- Stage 2: up to a maximum of 4,084m³ /day (calculated as a rolling 5-day average) over a consecutive 90-day period, with a maximum annual allocation of 889,870m³ that is averaged over 365 days to be a daily take of 2,438m³.

Recommendation

I recommend, under sections 104, 104B and Part 2 of the RMA, that this resource consent is **GRANTED**.

Decision

I have read the application, supporting documents, and the report and recommendations on the application for resource consent. I am satisfied that I have adequate information to consider the matters required by the Resource Management Act 1991 (RMA) and make a decision under delegated authority on the application.

Acting under delegated authority, under sections 104, 104B, and Part 2 of the RMA, the resource consent is **GRANTED**.

Reasons

The reasons for this decision are:

1. In accordance with an assessment under ss104(1)(a) and (ab) of the RMA, the actual and potential effects from the proposal will be acceptable as:
 - a. Mana whenua and kaitiaki for the Hōteio Waitematā aquifer have been consulted, including iwi organizations for whom the Hōteio River falls within their Statutory Acknowledgement area, and the applicant has considered their response. Mana whenua have not raised concerns regarding impacts to the mauri of the water in the Hōteio Waitematā aquifer, surrounding aquifers, local surface water bodies or the Hōteio catchment as a result of the proposed pump test. I consider that effects to mana whenua values are acceptable.
 - b. G and P Nelson at 487 Wayby Valley Road have provided written approvals so bore interference effects to persons at this property are disregarded.
 - c. Groundwater availability for the Hōteio Waitematā aquifer is not identified in the AUP(OP) and the aquifer is not in a High Use Aquifer Management Area. The AUP(OP) gives a guideline availability of 35% of average annual recharge for aquifers with a connection to a surface water body. WSL and Council agree that the proposed take will have acceptable effects on the Hōteio Waitematā aquifer's long-term sustainability, as:
 - Adequate groundwater is available within the aquifer for the Stage One and Two abstraction volumes and rates, and these takes will not restrict the aquifer's ability to recharge;
 - There are negligible effects to surrounding aquifers and the Hōteio River, including any associated aquatic ecosystems and ecological values;

- The risk of saline intrusion, aquifer consolidation and surface level subsidence is very low.
 - d. At Council's request, WSL completed additional assessment of interference effects with more conservative aquifer transmissivity and storativity values, using both the Hantush-Jacobs and Theis models. This request was made due to Council's disagreement with WSL's finding that the Hōteō Waitematā aquifer is 'leaky'. At Council's request, WSL also completed a more detailed review of bores located within 2km of the production bore site, including the depth of pump submergence, maximum yield (L/sec) and extent of in-well drawdown capacity.
 - e. Council's Specialist does not agree with WSL's updated assessment that drawdown effects to nearby bores are definitive because yield rates within each neighbouring bore were not assessed, and non-conservative transmissivity and storativity values were used in bore interference modelling. Council's own modelling shows it is not clear whether the Homeward Bound and Chitty bores and other bores up to a 4km radius of the production bore will lose groundwater supply, during the Stage One take and up to 2km under the Stage Two take (noting that the radius of interference effects is greater at the lower Stage One).
 - f. To mitigate the potential loss of water supply to these persons, Council's Specialist recommends that WSL 1) notify well owners within a 2km radius of the PW of the pump test, and 2) offer to provide a tankered water supply to bore owners that experience interrupted supply during both the Stage One and Two take. Council's Specialist considers that, if tankered water is available, adverse effects to persons on neighbouring properties will be adequately mitigated, noting also that AUP(OP) policies consider interference effects to be acceptable where it is possible to overcome loss of bore water supply by further lowering the pump or bore casing within the existing bore.
 - g. Council is broadly satisfied that the proposed Pump Test Method approved under WAT60397718 contains a sufficient methodology to allow verification of the production bore's capacity to abstract both Stage One and Stage Two volumes and rates, the extent of confinement of the aquifer inside and outside the known fracture zone near the production bore and associated interference effect to owners of neighbouring bores and the ability to maintain their current groundwater take regimes. During the pump test, WSL has offered to monitor one deep bore outside the fracture zone. This is provided for in two ways firstly via adopted condition 11A (use of the Nelson Deep bore for monitoring during the pump test). Or alternately via adopted conditions 12, 13, 14, 15, 20, 26 (use of new deep observation bore OB4, to be located outside of the fracture zone). Council's Specialist supports this approach, noting that interference effects are likely to differ in the less permeable geology outside this fractured rock. WSL has adopted standard conditions around metering and reporting test results to Council, to ensure compliance with the abstraction volumes and rates approved under this consent and to allow Council to certify the pump test findings before WSL's take can progress to the larger Stage Two abstraction volumes.
2. With reference to s104(1)(ab), the applicant has not offered specific offsetting compensation measures to ensure positive effects on the environment.

3. In accordance with an assessment under s104(1)(b) of the RMA the proposal is consistent with the relevant statutory documents, insofar as they relate to the matters over which discretion is restricted. In particular:

National Policy Statement – s104(1)(b)(iii)

National Policy Statement for Freshwater Management (NES FM)

- The applicant has submitted a summary of the applicable NES FM objectives and policies in Section 10.3. of the AEE, noting that Objective 1 prioritizes the health and well-being of water bodies and freshwater ecosystems over the health needs of people, including drinking water.
- I concur with the applicant's conclusion that the proposal aligns with these NES FM objectives and policies, given the conditions offered by the applicant to mitigate adverse interference effects to owners of adjoining bores, consider the Stage One and Stage Two takes are consistent with these objectives and policies, noting adverse effects to the Hōteio Waitemata aquifer are considered by WSL and the Council to be negligible.

Regional Policy Statement – s104(1)(b)(v)

Auckland Unitary Plan (Operative in part)

Chapter B7 - Toitū te whenua, toitū te taiao – Natural resources

- Policies B7.4.2 Coastal water, freshwater and geothermal water recognize that surface water bodies and groundwater aquifers cannot supply all of Auckland's future water needs without more efficient management approaches to the allocation and use of available freshwater. The principal consumptive use of freshwater in Auckland is for municipal water supply.
- The proposal is consistent with Policy B7.4.2(3) as mana whenua values have been considered in its design and implementation.
- The proposal is also consistent with Policy B7.4.2(11), as it promotes the efficient allocation of the Hōteio Waitemata aquifer resource by avoiding over-allocation and safeguarding aquifer recharge, while providing for the reasonable requirements of domestic and municipal water supplies.
- Finally, the proposal aligns with Policy B7.4.2(13) as it promotes the taking of groundwater rather than the taking of water from rivers and streams in an area where groundwater is available for allocation.

Chapter E2 - Water quantity, allocation and use

Chapter M - Appendix 3 Table 1 Aquifer water availabilities.

- The proposal is consistent with Policies E2.3(1) and (4) as it maintains sufficient groundwater to provide for a municipal water supply as well as other groundwater users, and the groundwater take is reasonable and justifiable with regard to the intended use.
- The proposal aligns with Policies 7(a) to (d) and (h), as the take meets the aquifer availability and recharge guidelines, aquifer consolidation and surface subsidence is avoided, there are no adverse effects to surface water flows or freshwater ecosystems,

saltwater intrusion to the aquifer is avoided and the bore is capable of extracting the proposed rate and quantity of groundwater.

- With regards to Policy 7(e) and (f), while there may be adverse interference effects on neighbouring bores to the extent that their owners are prevented from exercising their lawfully established water takes, the applicant offer to provide tankered water supplies to persons who may lose groundwater supply, noting that bore owners may also be able to lower the pump or casing within the existing bore to maintain their existing groundwater supply.
- Overall, as neighbours are provided with suitable drinking water and can continue to carry out regular domestic and agricultural activities in their usual way, the proposal is not considered to be so inconsistent with this policy that refusal is warranted, noting that Policy 8 allows consideration of mitigation options where significant adverse effects are identified under Policy 7, including use of alternative water supplies.
- Finally, the proposal is also consistent with Policy 9, as the proposal includes sufficient monitoring and reporting of effects to the groundwater resource that is appropriate for the type and scale of the activity, provided WSL installs two additional observation bores.

4. With regards to other relevant matters:

- a. In accordance with sections 123 of the RMA, WSL seeks a specific 35-year duration of consent, which is supported by Council's Groundwater Specialist as there are very few allocations in the Hōteu Waitematā aquifer and therefore there is limited requirement to align this expiration date with other local takes, as the Council typically seeks to do, to ensure a consistent and timely review of all takes within a single aquifer.
 - b. Under s125, WSL seeks a 10-year lapse date for the consent, within which time the applicant must have 'give effect to' this groundwater take permit. This time period is considered reasonable, given the additional facility engineering and pump test requirements needed to design, consent, construct, commission and commence operation of a groundwater treatment plant intended to supply potable water to a large service area, noting the applicant is a registered water utility and all municipal water supply must meet certain health and water quality standards. WSL requests that this commencement date for the Stage One take begins upon their written notification to the Council, following the completion of the proposed Wellsford groundwater treatment plant, noting this new plant is not yet consented.
 - c. A standard review condition is also recommended under s128 of the RMA, to ensure that changes in the groundwater resource and surrounding environment that may potentially arise from the exercise of this consent can be further considered by Council.
 - d. Council's Specialist considers that the proposed metering and verification methods proposed, including WSL's adoption of standard conditions, will ensure compliance with the Resource Management (Measurement and Reporting of Water Takes) Amendment Regulations 2020
5. In the context of this discretionary activity application, where the objectives and policies of the relevant statutory documents were prepared having regard to Part 2 of the RMA, they capture all relevant planning considerations and contain a coherent set of policies designed

to achieve clear environmental outcomes. They also provide a clear framework for assessing all relevant potential effects and there is no need to go beyond these provisions and look to Part 2 in making this decision as an assessment against Part 2 would not add anything to the evaluative exercise.

6. Overall, the proposal is acceptable, and consent can be granted subject to conditions.

Conditions

Under sections 108 and 108AA of the RMA, this consent is subject to the following conditions:

Activity in accordance with plans

1. The take and use of groundwater from the AUP(OP) Hōteu Waitematā Aquifer from a 250mm existing Production Bore ID 30446 at map reference 1740440 mE 5982050 mN, and/or an alternative bore on land legally described as Lot 3 DP 547258 (CT NA 933634) at 411 Wayby Valley Rd, Wayby Valley, Rodney, for municipal supply to Wellsford and Te Hana must be carried out in accordance with the plans and all information submitted with the application detailed below and all referenced by Council as consent number WAT60400411, including the report “*Assessment of Effects on the Environment for Resource Consent Application – Wellsford Groundwater Abstraction for Municipal Water Supply*”, dated April 2022, and completed by WSP New Zealand Limited, and Appendix B report titled “*Wellsford Drinking water Source; Groundwater Take Assessment-Watercare Services Ltd*”, dated 22 March 2022 and prepared by GHD.

Term of consent / duration

2. The consent must expire 35 years from the date of its commencement in terms of section 116 of the Resource Management Act 1991, unless it has lapsed, been surrendered or been cancelled at an earlier date pursuant to the RMA. This 35-year expiration period will commence on the date that the consent holder provides written notice to the Council that the groundwater treatment plant intended to service Wellsford and Te Hana is operational.
3. The consent will lapse ten years from the decision to grant unless given effect to prior to that date.

Advice Note:

Conditions 2 and 3 are intended to provide the consent holder and the Council with certainty that the consented activity, namely the Stage One groundwater take or the Stage Two groundwater take (following Council’s certification of the pump test under WAT60397716), can commence following implementation of the future groundwater treatment plant that is intended to provide municipal supply for the Wellsford and Te Hana service area.

The consent holder has advised that a 10-year period is required to design, consent, construct and commission this future groundwater treatment plant.

Authorised Quantities

4. Until a Groundwater Effects Model Verification Report, prepared by a suitably qualified and experienced hydrogeological professional, has been provided to and certified by Council in

accordance with Condition 11, the abstraction must comply with the following:

Stage One:

- (a) the rate of abstraction must not exceed 90 cubic metres per hour (25 litres per second).
- (b) the total abstraction during any 24-hour period must not exceed 2,160 cubic metres.
- (c) the total volume of water abstracted in each 12-month period, commencing 1 July of any year and ending 30 June of the following year, must not exceed 788,400 cubic metres.

Once a Groundwater Effects Model Verification Report, prepared by a suitably qualified and experienced hydrogeological professional, has been provided to and the consent holder has received written certification by Council in accordance with Condition 11, the abstraction must comply with the following:

Stage Two:

- (a) the rate of abstraction must not exceed 170 cubic metres per hour (47.2 litres per second).
- (b) the total abstraction during any 24-hour period must not exceed 4,084 cubic metres.
- (c) the total volume of water abstracted in each 12-month period, commencing 1 July of any year and ending 30 June of the following year, must not exceed 889,870 cubic metres.

Installation of water meter

5. Prior to exercise of this consent, a water meter(s) able to provide data in a form suitable for electronic storage and connected to a data logger, must be installed and maintained on the production bore(s) in accordance with the manufacturer's specifications. The water meter(s) must:
- be fit for the purpose and water it is measuring.
 - measure the volume of water taken, with an accuracy of +/- 5% of the actual volume taken.
 - provide data in a form suitable for electronic storage.
 - be tamper-proof and sealed.
 - be installed and maintained in accordance with the manufacturer's specifications.

This water meter(s) must be maintained by the consent holder for the duration of the consented activity.

Advice Note – see *Advice Note under Condition 9*

Verification of Water Meter/device accuracy

6. The water meter(s) must be verified as accurate by a suitably qualified professional at the following times:

- prior to the exercise of this consent;
- within 5 working days of the water meter(s) being serviced or replaced;
- by 30 June of the fifth year from the commencement of consent, and thereafter at five yearly intervals.

The water meter(s), its verification and evidence of its accuracy must be in accordance with the Resource Management (Measurement and Reporting of Water Takes) Amendment Regulations 2020 (or any equivalent regulations that may replace them) and a copy of the verification must be provided to the Council within 10 working days of the meter/devices being verified as accurate.

Bore construction for water level measurements.

7. Provision at the top of the Production Bore and Monitoring Bores, for water level measurements must be made and maintained so that a probe can be lowered vertically into the bore between any riser tube and casing to measure the static water level in the bore.

Advice Note:

Access to the bore head for water level measurement can be achieved by having an access tube of at least 2 centimetres internal diameter extending from the top of the bore to the submersible pump. In order to keep out foreign matter, the tube should be fitted with an easily removed plug.

Bore construction for sampling.

8. Provision at the top of the Production Bore and Monitoring Bores for water quality sampling must be made and maintained so that a sample of water can be taken from the bore for water quality analysis. For the Production Bore, a tap or hand valve must be fitted as close to the pump outlet as possible and before the water is discharged. The tap or valve must have at least 0.3 metre clearance above ground level or any other obstruction to allow a sample bottle to be filled.

Water meter readings

9. Daily water volumes must be recorded to allow reporting for a consistent 24-hour period.

The date and time of the water meter reading must be recorded and supplied to the council in accordance with the reporting condition 28 below.

Advice Notes:

If no water is taken during any period, the current meter reading must still be recorded.

As per the Resource Management (Measurement and Reporting of Water Takes) Amendment Regulations 2020, a water permit holder (resource consent holder) is required to record measurements of their water abstraction at 15-minute intervals, and electronically provide to the council daily records of the measurements by the end of the next day (unless otherwise agreed by the council), from the dates specified below:

- (a) 3 September 2022 where the allowed rate of abstraction for the water permit is ≥ 20 litres/second.

(b) 3 September 2024 where the allowed rate of abstraction for the water permit ≥ 10 but < 20 litres/second.

(c) 3 September 2026 where the allowed rate of abstraction for the water permit ≥ 5 but < 10 litres/second.

Reporting on Auckland Water Efficiency Plan (AWEP) for the Wellsford Service Area

10. To sustainably manage the Hōteio Waitematā resource for the duration of the consented activity, the consent holder must identify targets and specific measures to minimise demand within the Wellsford Service Area that align with the AWEP 2021 – 2025 Focus Areas, including:

- Focus Area 1: *Making every drop of water count by reducing loss.*
- Focus Area 2: *Improving oversight from source to tap.*
- Focus Area 3: *Optimizing pressure in our network.*
- Focus Area 4: *Residential, community and commercial water efficiency.*

The consent holder must submit to the Council for certification, within 12 months of the consent having commenced in accordance with Condition 2 (above), a report that describes:

- (a) Details of the specific targets and measures to be adopted from the above Focus Areas 1-4 of the AWEP 2021-2505 (particularly Area 4) that are relevant for the Wellsford Service Area to maximise water use efficiencies and reduce water use.

Following certification, the consent holder must also submit to the Council for certification, a monitoring and performance report at five yearly intervals on or before 30 June of that reporting year, which describes:

- i. The consent holder's performance against the targets and measures identified at (a), evidenced by performance data obtained from the consent holder's service area; and
- ii. Updated targets and future measures or actions to be undertaken by the consent holder to maintain or further improve upon targets for the Wellsford service area, especially if the AWEP is updated within the activity's duration.

Advice note:

Performance targets and measures include:

- *Installation of district meters within the Wellsford service area.*
- *Domestic and commercial consumption reduction targets.*
- *Network waste reduction targets.*
- *Number of water audits completed.*
- *Reduction in non-revenue water loss*
- *Number of network leaks detected and leakage repair timeframes.*
- *Number of new 'smart meters' installed and percentage of smart meters within the Wellsford service area.*
- *New water efficient fixtures installed.*
- *Community-based and school water education initiatives.*
- *Mana whenua consultation.*
- *Etc.*

Groundwater Effects Model Verification Report - Analysis of data collected in Pump Test take authorised by Consent WAT60397718

11. Within three months of the water quality and water level data collection during the Pumping Test authorised by Consent WAT60397718, a Groundwater Effects Model Verification Report, prepared by a suitably qualified and experienced hydrogeological professional, must be provided to Council for certification. The Report must include the analysis and interpretation of the monitoring data, and the review of the groundwater model presented in the application i.e., to verify the accuracy of that model (and in particular the local values for aquifer parameters and degree of confinement of the aquifer within and outside of the inferred fracture zone, and effect of the consented abstraction on groundwater level drawdown).

Specifically, the Report must quantify the extent of drawdown interference effect on the lawful takes from any bores (including those for which Council has no record) within a 2km radius of Production Bore ID 30446 (or any replacement bore at 411 Wayby Valley Road), arising or potentially arising from exercising the Stage One and Stage Two maximum take allowances of this consent. The Report must confirm any measures required to mitigate any adverse drawdown effects on these lawful takes.

In addition, if required, recommendations must be made for any changes to the consent conditions required to monitor for and avoid adverse effects on other lawful bore water takes.

If the monitoring data is incomplete such that the data is insufficient to verify the accuracy of the groundwater model, local values for aquifer parameters and effect of the abstraction on groundwater level drawdown at other bores within a 2km radius, then Council may direct that additional bore testing measurements, sampling and analysis be undertaken for a specific period of time, for example, up to a further 12 month period, and a further report provided.

- 11A. The Nelson deep bore (ID 30831) is located out of the fracture zone. If the pumping test authorised by consent WAT60397718 includes monitoring and the collecting of data from the Nelson deep bore (ID 30831); then this must include: The continuous monitoring of the Nelson deep bore for the full duration of the pumping test (including discharge and recovery); confirmation that no water is taken from the Nelson deep bore at any time during the pump test (discharge and recovery) or during the 14 days before the test commences. If these requirements of Condition 11a can be met, then any requirements to construct and monitor Observation Bore 4 (OB4) made at conditions 12, 13, 14, 15, 20, 26 no longer apply.

Advice Note:

Condition 11A relating to Observation Bore 4 (OB4 – referred to in the conditions below as 'fracture zone bore OB4') is intended to ensure information is collected from an appropriate bore located outside of the inferred fracture zone. The Nelson deep bore (ID 30831) is located outside the fracture zone. Therefore, if the Nelson deep bore is monitored continuously for the full duration of the pump test and no water is taken from the Nelson bore during the pump test (discharge and recovery) it will yield the data required to confirm effects from the proposed take

outside the fracture zone and thus enable the development of an appropriate Groundwater Effects Model Verification Report (required by condition 11); and make the parts of each condition which specifically relate to OB4 redundant.

Production and Monitoring Bores

12. Existing or proposed Production and Monitoring Bores screened in the Hōteio Waitematā Aquifer must be identified or constructed (at least twelve months prior to the date of commencement of abstraction from the bore), and maintained, for groundwater level and water quality monitoring as follows:
- (a) Production Bore ID 30446 (1740440 mE 5982050 mN) screened in the deep Hōteio Waitematā Aquifer, located within the inferred fault fracture zone.
 - (b) Monitoring Bore OB1 (1740440 mE 5982050 mN) screened in the deep (100m+) Hōteio Waitematā Aquifer, located within the inferred fault fracture zone to measure the drawdown effects in the deep sandstone which is highly fractured.
 - (c) Monitoring Bore 'fracture zone bore OB4', screened in the deep (100m+) Hōteio Waitematā Aquifer, located outside of, and perpendicular to, the inferred fault fracture zone to measure the drawdown effects in the sandstone which is not highly fractured. OB4 must be set at a distance of at least 150 metres north-west from the Production Bore (or other distance recommended in accordance with condition 13) to ensure that accurately measurable drawdowns will occur if non-conservative values for aquifer parameters are experienced and allow a more robust assessment of interference effects on private bores within a 2km radius.

Advice Note:

Conditions relating to Observation Bore 4 (OB4) are intended to ensure monitoring information is collected from a deep bore outside of the inferred fracture zone. The Nelson deep bore (ID 30831) is located outside the fracture zone.

13. The location and suitability of the monitoring bore, fracture zone bore OB4, required by Condition 12 for the monitoring purpose must be assessed and demonstrated by a suitably qualified and experienced hydrogeological professional, and be subject to written agreement of Council, within 20 working days of being required in writing by Council. OB4 must be maintained for the duration of the consented Stage One and Stage Two takes. If the OB4 bore becomes inoperable or access is lost, then the bore must be substituted with another constructed bore, or otherwise identified as suitable within a 12-month period of the cessation of monitoring at OB4. The replacement bore will then be subject to the same monitoring and reporting requirements outlined in this consent.

Advice Note:

Monitoring Bore OB1 will be constructed for the WSL 14-day constant discharge pumping test (WAT60397718). One suitable location for an "inferred fault fracture zone off-set" bore OB4 may be located on the road reserve between the properties at 351A and 47 Wayby Valley Road or may be the existing "Nelson" bore ID 30831.

Water level measurement in Production Bore ID 30446, and Monitoring Bores OB1, OB2 and OB4 (Fracture zone off-set monitoring bore)

14. Equipment to continuously measure and record on a data logger, water levels must be installed, maintained and periodically calibrated, in Production Bore ID 30446 (or its replacement), and Monitoring Bores OB1 and OB4. Groundwater levels in the bore must be measured and recorded at fifteen-minute intervals except when the water level equipment is removed from the bore for manual check readings, water quality sampling, or maintenance.

Water levels in the monitoring bores must be measured and recorded from at least 12 months prior to the date of commencement of the activity, as described at Condition 2 (above). As a minimum, the first 12 months of records must be used to establish the seasonal water level variation needed to set Water Level Trigger Levels and reported in the Annual Report referenced at Condition 27. All reasonable steps must be taken to ensure that no more than 2% of any of the water level records fail to be recorded or are inaccurately recorded on an annual basis.

Manual water level measurements must be taken at three monthly intervals to confirm the calibration of the equipment.

In the event of failure of the monitoring equipment, Council must be advised in writing within five working days, the equipment must be repaired or replaced within 15 working days of that written advice or as otherwise agreed in writing with Council, and the water level must be measured manually at daily intervals towards the end of a day's production pumping cycle until the equipment is repaired or replaced.

The time, date and the water level readings must be recorded and supplied to the Council in accordance with Condition 30.

The elevation of the top of the casing of each of the Production and Monitoring bores listed in Condition 12 must be measured to an accuracy of 0.01m and recorded and submitted to Council prior to the commencement of abstraction.

Monitoring Bore water level drawdown triggers

15. The Monitoring Bore water level drawdown triggers are equal to the seasonal water level variation determined in accordance with Condition 14, plus the water level drawdown calculated for each bore based on the Hantush-Jacob Solution for OB1 located within the fracture zone, and an appropriate method and Solution agreed and certified by Council for OB4 located outside of the fracture zone; separation distance; and appropriate values for transmissivity and storativity must be submitted to the Council for certification in accordance with the reporting requirements outlined in Conditions 11 to 14.

Monitoring Bore water level drawdown triggers and Exceedance Report

16. In the event that monitoring in accordance with condition 14 (water levels) indicates that any of the water level drawdown triggers specified in Condition 15 are exceeded over more than seven consecutive days, the Council must be notified within 5-working days, and an appropriately qualified independent consultant approved by Council commissioned to prepare a Trigger Exceedance Report. The report must be submitted to the Council within three months of the first recorded exceedance event. As a minimum, this report must include (but not necessarily be limited to) the following:

- (a) the number and duration of exceedances;

- (b) whether the exceedance is attributed to actual drawdown of groundwater or a data anomaly;
- (c) whether the exceedance was caused by the exercise of the consent;
- (d) in the event that the exceedance is attributed to an actual drawdown of groundwater, and this was caused by the exercise of consent, the report must also include (but not necessarily be limited to) the following:
 - (i) an assessment of the adverse environmental effects of the groundwater level drawdown, including (depending on which is appropriate) the effects on other users, or base flow to the Hōteio River;
 - (ii) any further work required to better understand the adverse effects identified, including increased monitoring of aquifer parameters;
 - (iii) any proposed mitigation measures that may be required in the event that adverse environmental effects are identified;
 - (iv) any recommended monitoring of the effectiveness of the mitigation measures, and;
 - (v) timeframes for the implementation of mitigation measures and the monitoring of the effectiveness of the mitigation measures determined to be required by the Report.

Once the Trigger Exceedance Report has been submitted to the Council, the mitigation measures, including any required monitoring, must be implemented within the timeframes required by the report.

Within 20-working days following the first 12 months of trigger exceedance monitoring, a Mitigation Effectiveness Report must be submitted to the Council. The purpose of this report is to describe the effectiveness of the mitigation measures implemented in accordance with Condition 16.

Trigger level exceedance – opportunities for review

17. If the Council receives a Mitigation Effectiveness Report and the mitigation measures implemented in accordance with Condition 16 do not address the adverse effects identified through monitoring, the Council may initiate a review of the consent conditions pursuant to section 128 of the Act within three months of receiving the report, by giving notice pursuant to section 129 in order to:

Vary the quantities, monitoring and reporting requirements, mitigation, and contingency measures in order to take account of information, including the results of previous monitoring and investigations relating to:

- (a) water availability, including alternative water sources.
- (b) the interaction of surface and groundwater.
- (c) the effects of the abstraction on groundwater levels.

Water bores within 2km radius from Production Bore area

18. Prior to the activity commencing in accordance with Condition 2 (above), the consent holder must complete a survey of all properties within 2km radius of the Production Bore to determine the source of animal drinking and domestic use water. All available details of bore construction and installed pump, and owner contact details (email, phone number, postal address, etc) must be obtained and provided to Council within one month of completion of the survey.

At least 20-working days prior to commencement, the consent holder then must communicate with all identified property/bore owners within a 2km radius of the production bore and advise them when the bore pumping / water take as provided for by condition 4 of this consent will commence. All bore owners must be provided with a 24-hour contact for the Consent Holder, or an agent appointed by the Consent Holder, for the situation where a bore owner seeks to make a claim of sudden loss of water supply or claim of bore interference in accordance with consent conditions for Mitigation of a sudden loss of water supply or Mitigation of a claim of bore interference.

Mitigation of sudden loss of water supply

19. Council may notify the Consent Holder (or their appointed representative) by way of phone (in person, voicemail or text message) or in writing (by email, fax or post) of a new or repeat claim of sudden loss of water supply within a 2km radius from the Production Bore ID 30446 or its replacement.
- (a) the Consent Holder (or their appointed representative) must, within twelve (12) hours of the notification of claim, contact the claimant and, provided that there is owner access agreement, investigate the claim of sudden loss of water supply and must offer an Emergency Water Supply Action Plan to the claimant, unless in the written opinion of Council received within twenty-four (24) hours of the claim, that it is unreasonable to do so on the available evidence.
 - (b) the Consent Holder must, within twenty-four (24) hours of the notification of a claim, report in writing to the Council, the results of the investigation, the steps that have been and are to be taken in response, and whether these steps have been agreed with the claimant.
 - (c) the Emergency Water Supply Action Plan must be ready to be implemented within two (2) working days of the report to the Council, unless agreed otherwise by the Council by way of phone or in writing on the basis of the Consent Holder's investigations.
 - (d) the requirement for an Emergency Water Supply Action Plan and any consequent action may be cancelled in the event that the Council is satisfied that the loss of water is not caused by drawdown of groundwater level at the Production Bore ID 30446 (or any replacement).
 - (e) The Emergency Water Supply Action Plan must be implemented by the consent holder until written notice is received and certified by the Council that the permanent loss of water supply has been rectified, either through the restoration of groundwater supply to the impacted claimant, or through the provision of an alternative, permanent water supply for the claimant.

Exceedance of Monitoring Bore water level drawdown triggers

20. In the event that water level drawdown, as measured in accordance with Condition 14 above is greater than the water level drawdown trigger determined in accordance with Condition 15 above in any of Monitoring Bores OB1 or OB4, or any bores substituted in accordance with the requirements of conditions 12 and 13, then the Consent Holder must investigate the cause and, if caused by drawdown of groundwater level at the Production Bore ID 30446, must offer to develop and implement a Water Supply Mitigation Plan with the occupiers of properties with, and/or owners of any affected, deep Waitematā Aquifer bores within 2km of the Production Bore ID 30446.
21. To determine, for the purposes of Conditions 16, whether groundwater drawdown in a monitoring bore has been caused by drawdown of groundwater level at Production Bore ID 30446 (or at an alternative production bore in accordance with Condition 1) or caused by another private bore abstraction, and/or whether a private bore is affected, the Consent Holder must provide relevant information to the Council, including a review of bore static water level records (including any measured by the Consent Holder), seasonal variation in water levels, bore operating water level (during normal pumping) and the specific capacity record of the bore.

Mitigation of claim of bore interference.

22. If required in writing by the Council, the Consent Holder must investigate and report to the Council within one month of the date of the written requirement of any new or repeat claim of bore interference. The claim of bore interference may be from a bore at any site within a 2km radius from the Production Bore ID 30446 or its replacement (or from an alternative production bore in accordance with Condition 1).

Specific investigations may include a review of rainfall records, or a review of a bore's static water level records; bore operating water level (during normal pumping) provided that there is owner access agreement; and the specific capacity record of relevant bores to assess whether an effect from drawdown of groundwater level at the Production Bore ID 30446 (or any replacement bore) (or from an alternative production bore in accordance with Condition 1), has developed on the bore in question.

All investigation findings and recommendations must be submitted in writing to the Council within 20-working days of completion of this investigation.

23. If required in writing by the Council, the Consent Holder must offer to develop and implement a Water Supply Mitigation Plan in agreement with the Council and any bore owner or user, if in the Council's opinion based on the investigation and reporting required and completed in accordance with Condition 22 above, the bore has, or is likely to have, been affected by drawdown of groundwater at the Production Bore ID 30446 (or any replacement bore) (or at an alternative production bore in accordance with Condition 1).

Water supply mitigation plan

24. Subject to any landowner accepting an offer made in accordance with the requirement of Conditions 19 to 23, a Water Supply Mitigation Plan must be developed and submitted to the Council and owner or user within 14 days of the Council's written requirement, for review by the Council and owner, and written approval of the owner or user, and any approved Plan implemented within 14 days of the owner or user's written approval. The Council will advise the Consent Holder in writing if any aspects of the Water Supply Mitigation Plan are considered to be inconsistent with achieving compliance with the conditions of this consent. Offers of mitigation may include but not be limited to lowering a pump; replacing a pump; deepening a bore; providing

a new bore; and providing an alternative equivalent water supply.

25. Any development and implementation of an Emergency Water Supply Action Plan or a Water Supply Mitigation Plan in response to a claim of sudden loss of water supply, groundwater drawdown, or a claim of bore interference, in accordance with the requirements of Conditions 19 to 24 inclusive, does not prevent the Consent Holder being required in writing by the Council, to offer to develop and implement a new subsequent Water Supply Mitigation Plan for the same bore owner or user should similar conditions or circumstances arise in the future.

Water Quality Sampling of Production Bore and Monitoring Bores

26. A water sample must be taken from the Production Bore ID 30446 (or its replacement), Monitoring Bore OB1, and fracture-zone bore OB4 and/or, provided there is owner access agreement, from Nelson Bore ID 30831 and Watercare Services Ltd / Auckland Transport Bore ID 23657 prior to commencement of exercise of consent and then annually in October and February for the duration of the consented take.

The sample must be analysed for the following parameters:

- (a) Electrical Conductivity at 25°C (mS/m)
- (b) Chloride (Cl)
- (c) Sulphate (SO₄)
- (d) Temperature of water at the head of the bore
- (e) pH
- (f) Potassium (K)
- (g) Silica (SiO₂)
- (h) Nitrate nitrogen (NO₃-N)
- (i) Total Alkalinity (CaCO₃)
- (j) Calcium Hardness (CaCO₃)
- (k) Magnesium Hardness (CaCO₃)
- (l) Sodium (Na)
- (m) and any other parameters required to obtain an ion balance for the sample of between 95% and 105%

The bore purging, sample bottles and filling, sample transport and handling, laboratory measurements, data processing and quality assurance must be in accordance with “*National Environmental Monitoring Standards-Water Quality Part 1 sampling, Measuring, Processing and Archiving of Discrete Groundwater Quality Data*” (March 2019 or latest edition) at www.nems.org.nz or the equivalent as approved in writing by Council.

Advice Note:

Taumata Arowai legislated source water monitoring standards may be the equivalent to NEMS and be approved by Council

The results of the analyses must be supplied to the Council in accordance with the Annual Reporting Condition below.

Annual Environmental Reporting

27. No later than 30 September each year an Annual Monitoring Report for the previous 12-month period ending 30 June must be submitted to the Council for confirmation that the requirements of this condition have been met. This report is to contain:

- (a) a description of the results of monitoring required in accordance with conditions 14, 15, 16 and 26 of this consent (including confirmation of the Water Level Triggers in Condition 15 following establishment of the seasonal variation in accordance with condition 14).
- (b) an evaluation of those results, including comparison with the results of all previous monitoring and an assessment of:
 - (i) water use compared with the allocation.
 - (ii) the extent of groundwater drawdown, in response to short term periods of higher-than-average pumping rates.
 - (iii) analysis of the water quality data in terms of groundwater signatures on a piper plot or equivalent to help identify groundwater bodies inside and outside of the fracture zone.
- (c) a description of any incidences of failure to comply with the conditions of this consent, along with reasons for the failure to comply and a description of any resulting adverse environmental effects;
- (d) identification of any measures required to ensure any adverse environmental effects identified by the monitoring or resulting from non-compliance with consent conditions are avoided, remedied or mitigated;
- (e) a summary of claims of Sudden loss of water supply, claims of bore interference, and Water Supply Mitigation Plans submitted to Council.

Water Reporting

28. The following information must be entered, at the frequency and date specified, to the council's Water Use Data Management System or to any replacement database identified in writing by the Council.

Information	Frequency	Due Dates for reporting
Water take meter reading, time and date	Daily	If provided electronically, e.g., telemetered.
	otherwise	otherwise
	Quarterly	If submitted online, by the:

		<ul style="list-style-type: none"> • 7th October, for records between 1 July – 30 September, • 7th January, for records between 1 October – 31 December, • 7th April, for records between 1 January – 31 March, • 7th July, for records between 1 April – 30 June.
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Advice Notes:

The web address for council's on-line Water Use Data Management System is:

<http://aklc.hydrotel.co.nz/hydrotel/cgi-bin/WudmsWebServer.cgi>

Your WUDMS customer number is P2650022927 for consent WAT60400411, and the password is 1234. For the link to work properly you need to ensure that Council has your up-to-date email address for contact purposes. An on-line manual explaining how to enter and submit your water readings is available at the web address specified above.

As per the Resource Management (Measurement and Reporting of Water Takes) Amendment Regulations 2020, a water permit holder (resource consent holder) is required to record measurements of their water abstraction at 15-minute intervals, and electronically provide to the council daily records of the measurements by the end of the next day (unless otherwise agreed by the council).

Review under s128 of the RMA

29. Pursuant to Section 128 of the RMA, the conditions of this consent may be reviewed by the Council at the Consent Holder's cost:

In June 2028 and subsequently at intervals of not less than five years thereafter in order:

- (a) To deal with any adverse effect on the environment which may arise or potentially arise from the exercise of this consent and which it is appropriate to deal with at a later stage or;
- (b) To vary the quantities, monitoring, operating and reporting requirements and performance standards in order to take account of information, including the results of previous monitoring and changed environmental knowledge on: water availability, including alternative water sources; actual and potential water use; groundwater levels; efficiency of water use; groundwater quality; and the relationship of Māori with water.

Advice Note:

Under section 128 of the RMA the conditions of this consent may be reviewed by the Manager Resource Consents at the consent holder's cost in the following circumstances:

To provide compliance with rules in any regional plan relating to use of water, water or air quality etc. (refer section 128(1) (b) of the RMA) that have been made operative since the commencement of consent.

To provide compliance with any relevant national environmental standard that has been made since the commencement of consent.

At any time, if it is found that the information made available to the council in the application contained inaccuracies which materially influenced the decision and the effects of the exercise of the consent are such that it is necessary to apply more appropriate conditions.

Advice notes

1. Any reference to number of days within this decision refers to working days as defined in s2 of the RMA.
2. For the purpose of compliance with the conditions of consent, “the council” refers to the council’s monitoring officer unless otherwise specified. Please email monitoring@aucklandcouncil.govt.nz to identify your allocated officer.
3. For more information on the resource consent process with Auckland Council see the council’s website: www.aucklandcouncil.govt.nz. General information on resource consents, including making an application to vary or cancel consent conditions can be found on the Ministry for the Environment’s website: www.mfe.govt.nz.
4. If you disagree with any of the above conditions, and/or disagree with the additional charges relating to the processing of the application(s), you have a right of objection pursuant to sections 357A and/or 357B of the Resource Management Act 1991. Any objection must be made in writing to the council within 15 working days of your receipt of this decision (for s357A) or receipt of the council invoice (for s357B).
5. The consent holder is responsible for obtaining all other necessary consents, permits, and licences, including those under the Building Act 2004, and the Heritage New Zealand Pouhere Taonga Act 2014. This consent does not remove the need to comply with all other applicable Acts (including the Property Law Act 2007 and the Health and Safety at Work Act 2015), regulations, relevant Bylaws, and rules of law. This consent does not constitute building consent approval. Please check whether a building consent is required under the Building Act 2004.

Delegated decision maker:

Name: Doug Fletcher

Title: Premium Team – Project Lead, Resource Consents

Signed:



Date: 30 June 2023

Resource Consent Notice of Works Starting

Please email this form to monitoring@aucklandcouncil.govt.nz at least **5 days** prior to **work starting** on your development or post it to the address at the bottom of the page.

Site address:				
AREA (please tick the box)	Auckland CBD <input type="checkbox"/>	Auckland Isthmus <input type="checkbox"/>	Hauraki Gulf Islands <input type="checkbox"/>	Waitakere <input type="checkbox"/>
Manukau <input type="checkbox"/>	Rodney <input type="checkbox"/>	North Shore <input type="checkbox"/>	Papakura <input type="checkbox"/>	Franklin <input type="checkbox"/>
Resource consent number:			Associated building consent:	
Expected start date of work:			Expected duration of work:	

Primary contact	Name	Mobile / Landline	Address	Email address
Owner				
Project manager				
Builder				
Earthmover				
Arborist				
Other (specify)				

Signature: Owner / Project Manager (indicate which)	Date:
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Once you have been contacted by the Monitoring Officer, all correspondence should be sent directly to them.

SAVE \$\$\$ minimise monitoring costs!

The council will review your property for start of works every three months from the date of issue of the resource consent and charge for the time spent. You can contact your Resource Consent Monitoring Officer on 09 301 0101 or via monitoring@aucklandcouncil.govt.nz to discuss a likely timetable of works before the inspection is carried out and to avoid incurring this cost.

411 WAYBY VALLEY ROAD, WELLSFORD: ARCHAEOLOGICAL ASSESSMENT

Prepared for Watercare Services Limited

December 2023



By
Kirstin Roth MArchP
Glen Farley MA (Hons)

Clough
& ASSOCIATES LTD

321 Forest Hill Rd,
Waiatarua, Auckland 0612
Telephone: (09) 8141946
Mobile 0274 850 059
www.clough.co.nz

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INTRODUCTION

Project Background

Watercare Services Limited is preparing a Notice of Requirement for the New Wellsford Water Treatment Plant. The proposed plant will be situated at 411 Wayby Valley Road, Wellsford (legal description - Lot 3 DP 547258; Figure 1). The property consists of some 3500m² with Wayby Valley Road bordering to the south with rural properties located on all other sides (Figure 2).

An archaeological assessment was commissioned by Watercare Services Limited to establish whether the proposed Project is likely to impact on archaeological values. This report has been prepared as part of the required assessment of effects accompanying a resource consent application under the Resource Management Act 1991 (RMA) and to identify any requirements under the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA). Recommendations are made in accordance with statutory requirements.

Methodology

The New Zealand Archaeological Association's (NZAA) site record database (ArchSite), Auckland Council's Cultural Heritage Inventory (CHI), Auckland Unitary Plan Operative in Part (AUP OP) schedules and the Heritage New Zealand Pouhere Taonga (Heritage NZ) New Zealand Heritage List/Rārangi Kōrero were searched to determine whether any archaeological sites had been recorded on or in the immediate vicinity of the proposed Project Area. Literature and archaeological reports relevant to the area were consulted (see Bibliography). Early survey plans and aerial photographs were checked for information relating to past use of the property.

A visual inspection of the property was conducted on 16 November 2023 by Kirstin Roth. The ground surface was examined for evidence of former occupation (in the form of shell midden, depressions, terracing or other unusual formations within the landscape, or indications of 19th century European settlement remains). Exposed and disturbed soils were examined where encountered for evidence of earlier modification, and an understanding of the local stratigraphy. Photographs were taken to record the landscape and any features of interest, in conjunction with field notes.

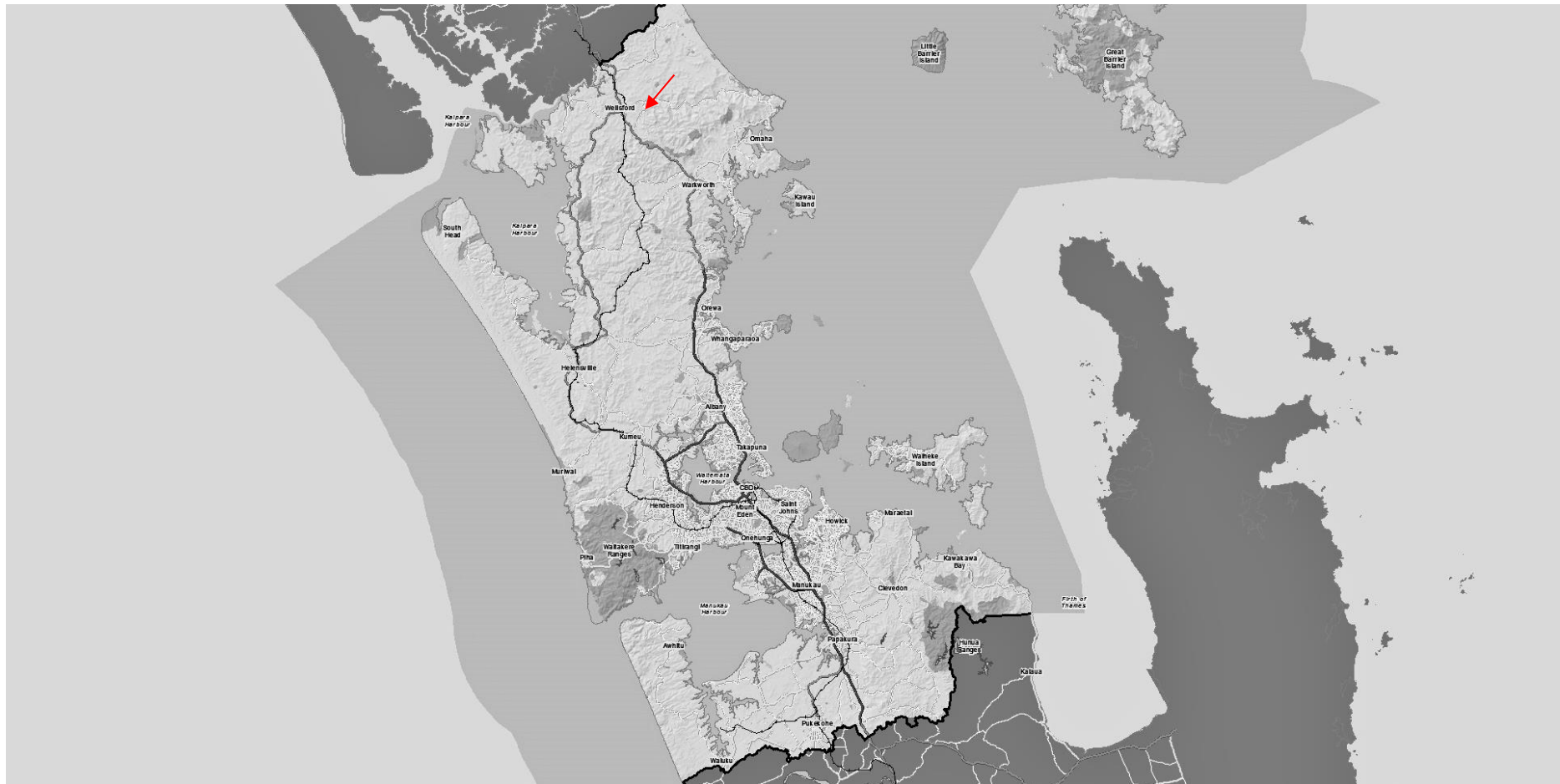


Figure 1. General map showing the location of the Project Area in the Auckland Region (source: AC Geomaps)



Figure 2. Location of the Project Area, with 411 Wayby Valley Road indicated in blue (source: Auckland Council Geomaps)

HISTORICAL BACKGROUND¹

Māori Settlement

The traditional Māori settlement pattern in the Kaipara and Mahurangi districts involved seasonal movements between kainga (villages). The east and west coastal areas provided abundant marine resources, whilst the inland forest supplied Māori with hunting and resource gathering opportunities. Rivers such as the Mahurangi supplied plentiful fresh water, and sandy soils near coastal areas were highly suited to kumara cultivation (Murdoch 1992; Dave Pearson Architects 2003: 11).

At various periods, there was competition between tribes for important resources such as winter food sources and this led to a protracted conflict between the Te Kawerau and Hauraki tribes in the 1700s.

Further warfare occurred in the 1820s and 1830s when raiding Ngāpuhi from the north, armed with muskets, launched a series of attacks throughout the tribal territories of Ngāti Whātua. Māori of the Kaipara and Mahurangi, armed only with traditional hand combat weapons such as mere and taiaha, were swiftly defeated. Most fled the invasion, leaving the region virtually deserted for several years (Murdoch 1992). By the late 1830s small numbers of Ngāti Whātua and Te Kawerau/ Ngāti Rongo Māori began to return to their traditional occupation areas in the Kaipara and Mahurangi (Murdoch 1992).

European Settlement

Missionaries and sawyers began appearing in the Kaipara and Mahurangi districts by the early 1830s, and with the arrival of Europeans Māori came under increasing pressure to relinquish land (Mackintosh 2005: 5). Although several Ngāti Whātua chiefs signed the Treaty of Waitangi in 1840, including Te Roha from Te Uri-O-Hau, large tracts of land were lost through Crown purchases, pre-1840 claims and Native Land Court proceedings (NZMCH 2006: 199).

Further pressure was placed on Māori land after the decision by Governor Hobson to relocate the colonial capital southwards from the Bay of Islands shortly after the signing of the Treaty of Waitangi. Hobson ordered his Surveyor General Felton Mathew to investigate every inlet from the Bay of Islands to the Firth of Thames, including the Mahurangi River, which was surveyed in June 1840. In Mathew's report of the Mahurangi he noted that:

‘...it would be highly desirable that the Government should obtain possession of this harbour and a considerable portion of the surrounding country. A settlement once formed here, would I have no doubt, rapidly attain a very flourishing condition. Several Europeans lay claim, I believe, to this portion of the country, but their titles, I am informed, are of no value. And even among the native chiefs a dispute exists to the right of ownership. The government should therefore have no difficulty in taking possession of it. I did not see the slightest trace of native inhabitants during the time I was in the place’ (Locker 2001: 61-2).

When the Tamaki isthmus was chosen as the site of the new capital, land in the Mahurangi became even more essential to the Crown, as it was now one of the main gateways to Auckland (Rigby 1998: 11). On 13 April 1841, the Crown acquired its first large tract of

¹ The following history is derived from Cameron, and Apfel (2021)

land in the area, known as the Mahurangi Purchase. This included the Mahurangi and Omaha Block (Deed No. 192) comprising 100,000 acres, ‘more or less’, with boundaries stretching from Takapuna in the south to Te Arai Point in the north (Locker 2001: 64). In 1853 the Puhoi (or Te Hemara) Reserve was granted to Ngāti Rongo, the boundaries of which ran ‘from the south shore of the Pukapuka to Waiwera, and inland to the western boundary of the [Mahurangi] Purchase’ (Locker 2001: 80). In 1866 the title to this reserve was granted to Ngāti Rongo at a Native Land Court hearing. The Puhoi Reserve was eventually surveyed into 10 blocks, with Te Hemara retaining the titles to Maungatauhoro (70 acres), Orokaraka (8 acres) and Puhoi (2537 acres) (Mackintosh 2005: 6).

Following the final settlement of claims against the Mahurangi Purchase in 1853, surveying and land sales in the district continued. Ngāti Whātua were among the signatories of several large land purchases by the Crown, including: the Ahuroa–Kourawhero Block (Deed 201) on 22 June 1854 for £1200; the Wainui Block (Deed 200) on 22 June 1854 for a first instalment of £600, with a final payment of £200 made on 22 January 1855; the Komokoriki No. 1 Block (Deed 203) on 29 September 1862 for £3,500 and the Komokoriki No. 2 Block (Deed 204) on 4 November 1862 for £39-10 (Locker 2001: 81). Across the western boundary of the Mahurangi Purchase line, the Oruawharo Block No. 1 and Block No. 2 were sold to the Crown in 1860 (Turton 1877: 212-213). The above discussed blocks are shown in Figure 3.

Wellsford

Wellsford was founded by non-conformist settlers known as the ‘Albertlanders’, who had arrived under a Special Settlement Scheme within the provisions of the Waste Land Act of 1858. The Oruawharo Block had been set aside for the Albertland Settlement movement, and by September 1862 the arrival of the Matilda Wattenbach had brought the first settlers (Mabbett 1977: 197-198). Wellsford was established in two stages, known as ‘Old Wellsford’ and ‘New Wellsford’. ‘Old’ Wellsford stretched between the mouth of the Whakapirau Stream and the eastern boundary line of the Oruawharo Block. Most settlers in this area arrived together on the vessel Hanover. It was not until 1885, when the Old Pakiri Block to the east of the Oruawharo Purchase line was sold to the Crown, that settlement spread further inland, and ‘New’ Wellsford was developed (Mabbett 1977: 372).

Industry in early Wellsford was driven by the timber trade. In 1864 Nicholson’s timber mill was opened on the south bank of the Oruawharo River, allowing for cut timber or logs to be floated down the Whakapirau Stream to be milled (Mabbett 1968: 177). Kauri gum, used for the manufacture of linoleum and varnish, was also an important local resource to early settlers. Temporary gumdiggers’ camps were scattered across the district in the 1870s, with notable diggings at Pakiri, Te Arai, Kaipara Flats and Port Albert (Locker 2001: 226). South of Wellsford, the Wayby Kauri Gum Reserve set aside 500 acres for diggers. The present site of Wellsford at this time was known simply as ‘the gum ridge’ (Mabbett 1968: 177).

By 1900 the timber and gum trades had begun to recede. Settlers turned to farming on their cleared land as the primary source of income. Home dairying was widely developed in the district, and by 1902-3 the establishment of the Wayby Co-operative Dairy Co. provided the area with a creamery factory. Butter and cheese were also produced, with butter sent to Auckland by steamer (Mabbett 1977: 322). The arrival of the North Railway to ‘New’ Wellsford in 1909 cemented viable industry in the town, and as settlers continued to move

further inland away from the Whakapirau, modern Wellsford became more clearly defined (Mabbett 1977: 372).

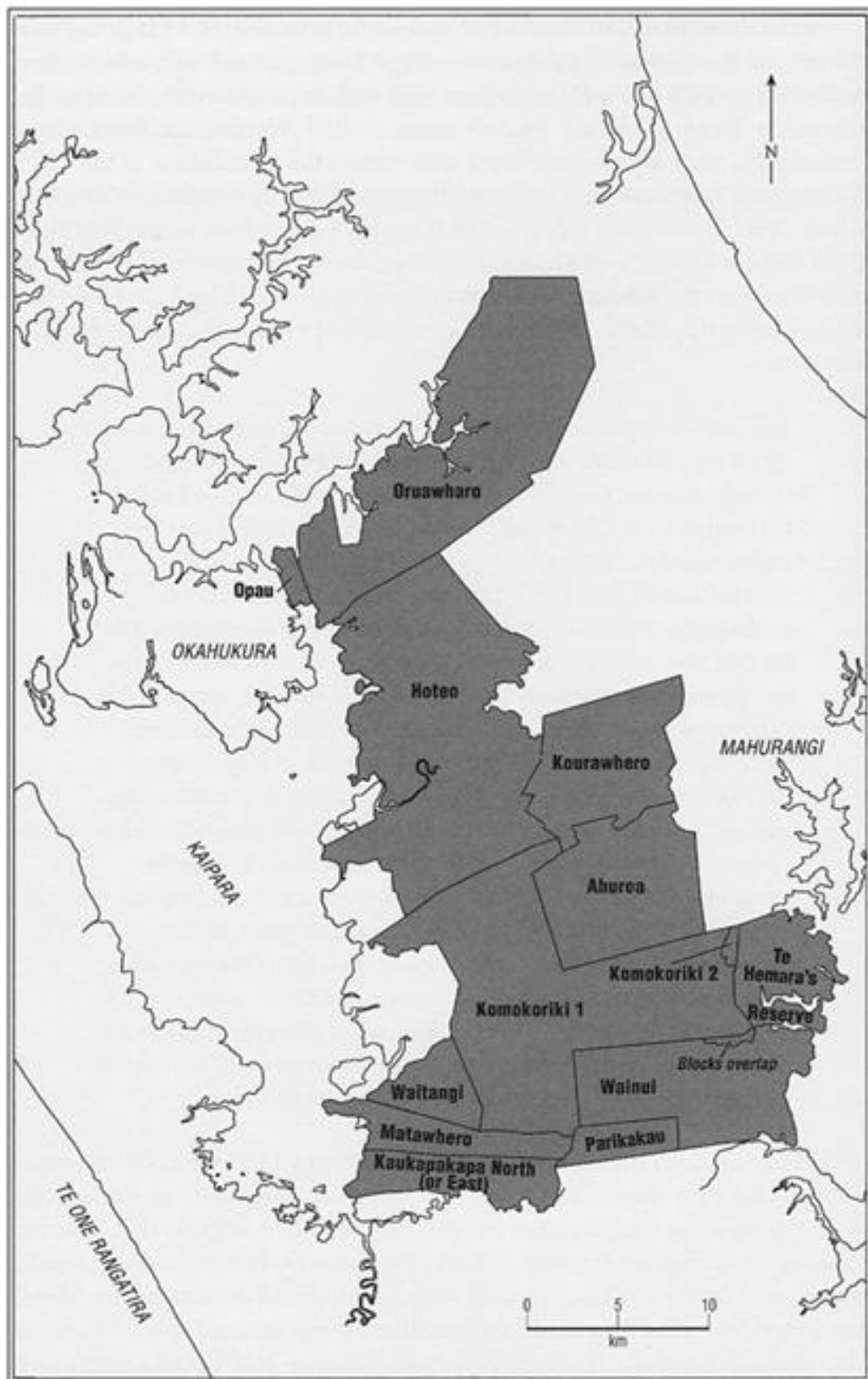


Figure 3. Plan showing Crown purchases in the Mahurangi and Kaipara (source: Goldsmith 2003: 36)

ARCHAEOLOGICAL BACKGROUND

Previous Archaeological Work

The Wellsford area has had little by way of archaeological survey and investigation. Clough and Associates have completed some assessments in the area such as one completed for the proposed upgrade to State Highway 1 from Warkworth to Wellsford (Phear and Clough, 2016) and finalised in 2019. The assessment recorded a total of seven archaeological (NZAA) and historic heritage (CHI) sites clustered in Te Hana, located to the north of the Project Area. The second survey was for a plan change request for properties at Rodney Street and Monowai Road in Wellsford (Apfel and Cameron, 2021). No archaeological sites were found during this assessment. In 2022 an assessment for a proposed managed fill site near Wellsford was also undertaken (Harding and Cameron, 2022). No archaeological sites were found during this assessment.

An archaeological assessment was also completed for the Dome Valley as part of the proposed Landfill area located off Wayby Valley Road, south of the Project Area (Felgate, 2017; 2018). The assessment encompassed a large land area, with research established the land was part of land grants for new settlers in the 19th century, although the report states many Crown Grants were probably never settled in this area, bought as investments or for speculation (Felgate, 2018:2). No archaeological sites were recorded as part of the assessment, although two house site locations were of interest with a cottage possibly dating to the 19th century. Further assessment would be required to confirm a 19th century date for the cottage. Felgate states that the soils were not suitable for Māori horticulture, with limited potential therefore for Māori archaeological sites to be present across the majority of the project area, with less steep land in the Hoteo Valley area having the greatest potential for unrecorded sites (Felgate, 2018:2).

Recorded Archaeological Sites

There are no recorded archaeological or historic heritage sites within the Project Area or in the near vicinity, with the majority of sites located along the east and west coasts and sections of navigable waterways, as can be seen in the map in Figure 4. The nearest recorded site is a 19th century house site (Q09/1216) to the southwest that belonged to W. Armitage marked on 1874 plan (SO84) and 1889 plan (SO 3966). It should be noted that the land around the Project Area has not been surveyed previously and that lack of recorded archaeological sites may be a reflection of this.

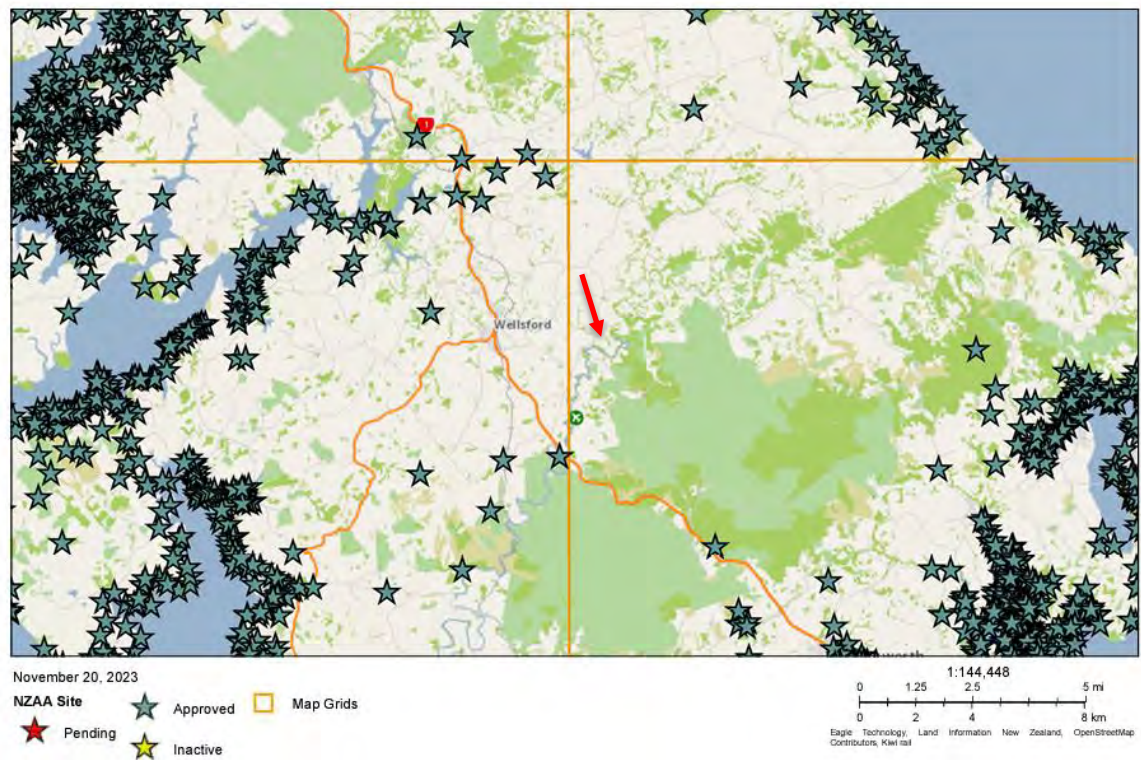


Figure 4. 10. Map showing the Plan Change Area (indicated by red arrow) and the general distribution of recorded archaeological sites in the broader area (NB. that blue stars indicate approved sites and the status of red star sites is pending (source: NZAA ArchSite)

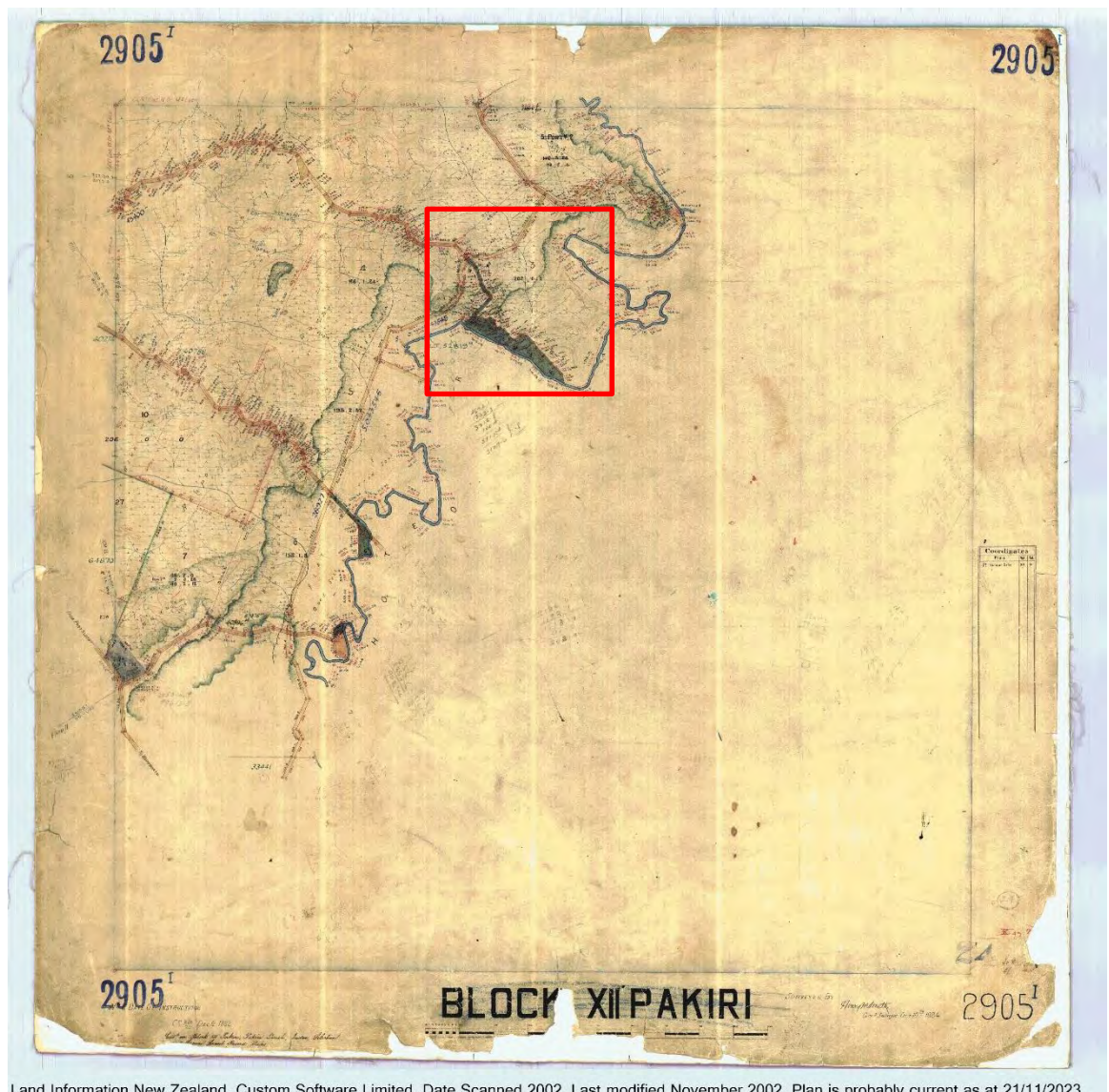
HISTORICAL SURVEY

Information from Early Maps and Plans

Early Deposited Plans and Survey Ordinances (DPs and SOs) were examined, but no detailed information was located.

Survey plan SO 2095, dated from 1885 shows the subject area (Figure 5 and Figure 6). The plan shows a number of small streams through the wider area, with the ground cover noted in an annotation as 'Flax, Wiewie, Raupo'. No features of potential archaeological interest are indicated.

Survey plan SO 5420, dated from 1889 also shows the subject area (Figure 7 and Figure 8). The plan marks a number of house and homestead compounds along Wayby Valley Road. The subject area as an annotation marking 'flax and wiwi'. No features of potential archaeological interest are indicated.



Land Information New Zealand, Custom Software Limited, Date Scanned 2002, Last modified November 2002, Plan is probably current as at 21/11/2023

Figure 5. SO 2095, dated 1882, showing a survey of Block XII Pakiri, with the general location of the Project Area indicated by the red box and provided in detail in Figure 6 (source: Quickmap)

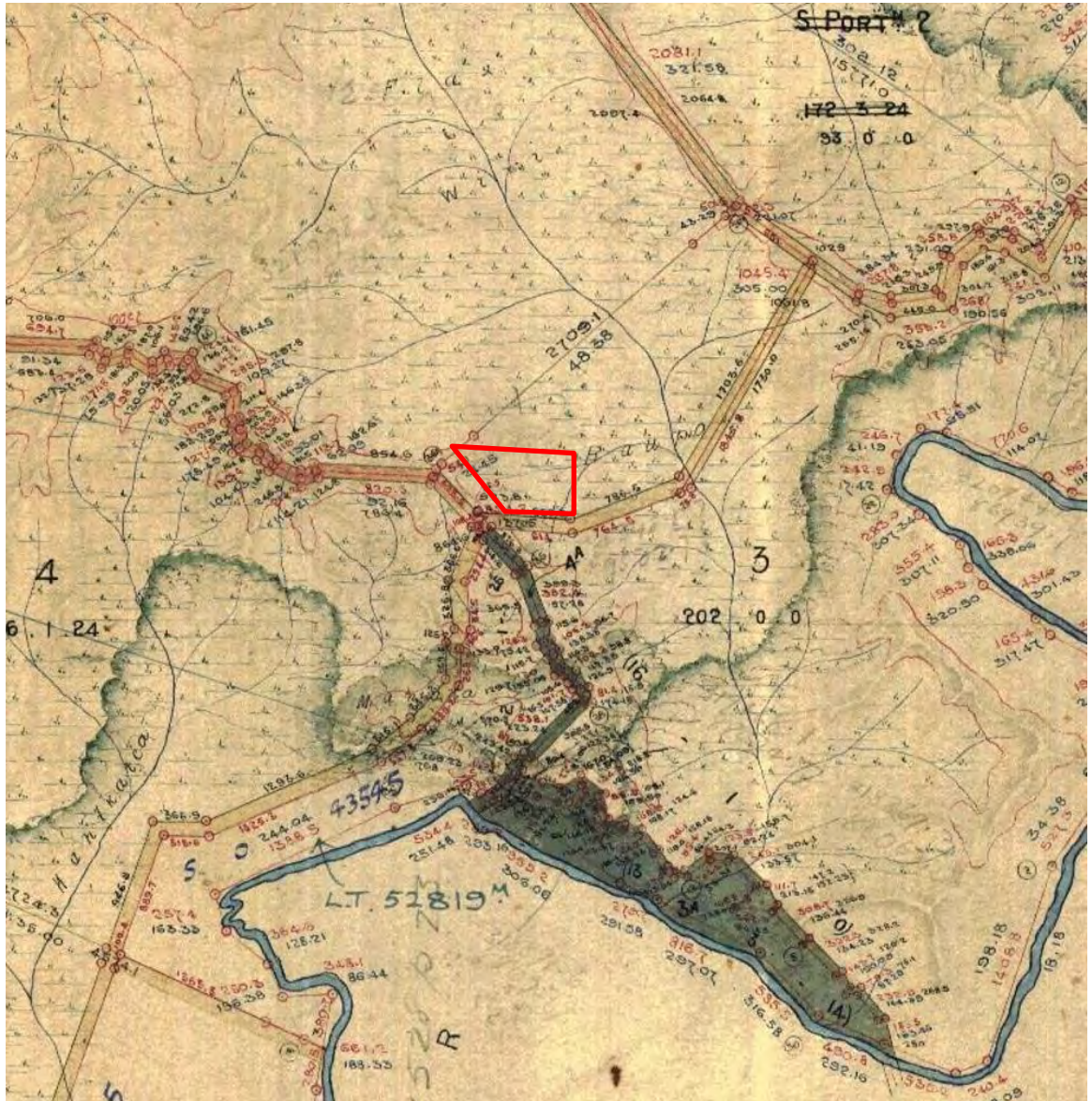
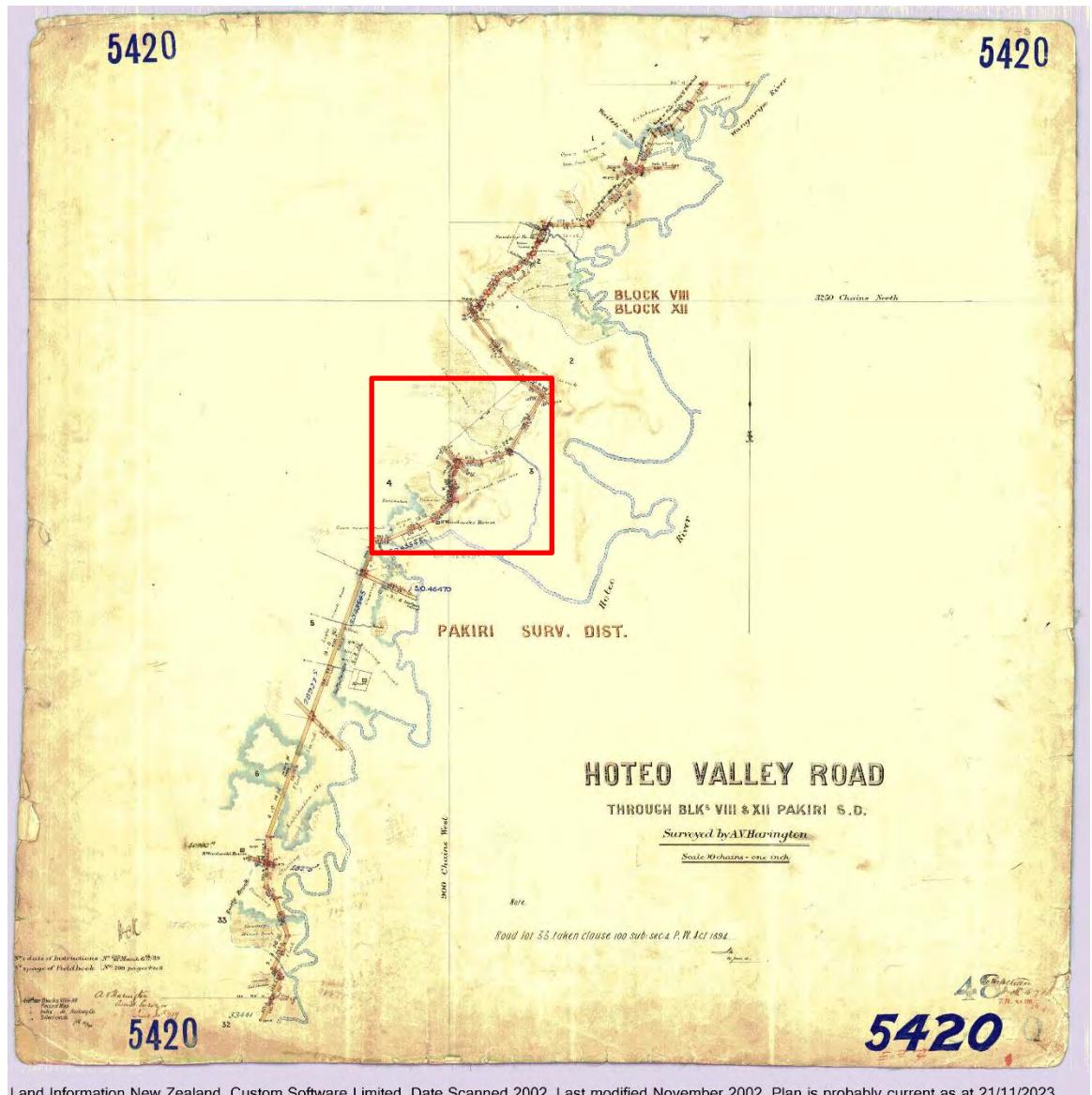


Figure 6. Detail of SO 2095, with the approximate extent of Project Area highlighted (source: Quickmap)



Land Information New Zealand, Custom Software Limited, Date Scanned 2002, Last modified November 2002, Plan is probably current as at 21/11/2023

Figure 7. SO 5420, dated 1889, entitled “Hoteo Valley Road. Through Blocks VIII & XIII Pakiri S.D.” The Project Area is generally indicated by the red box and shown in detail in Figure 8 (source: Quickmap)

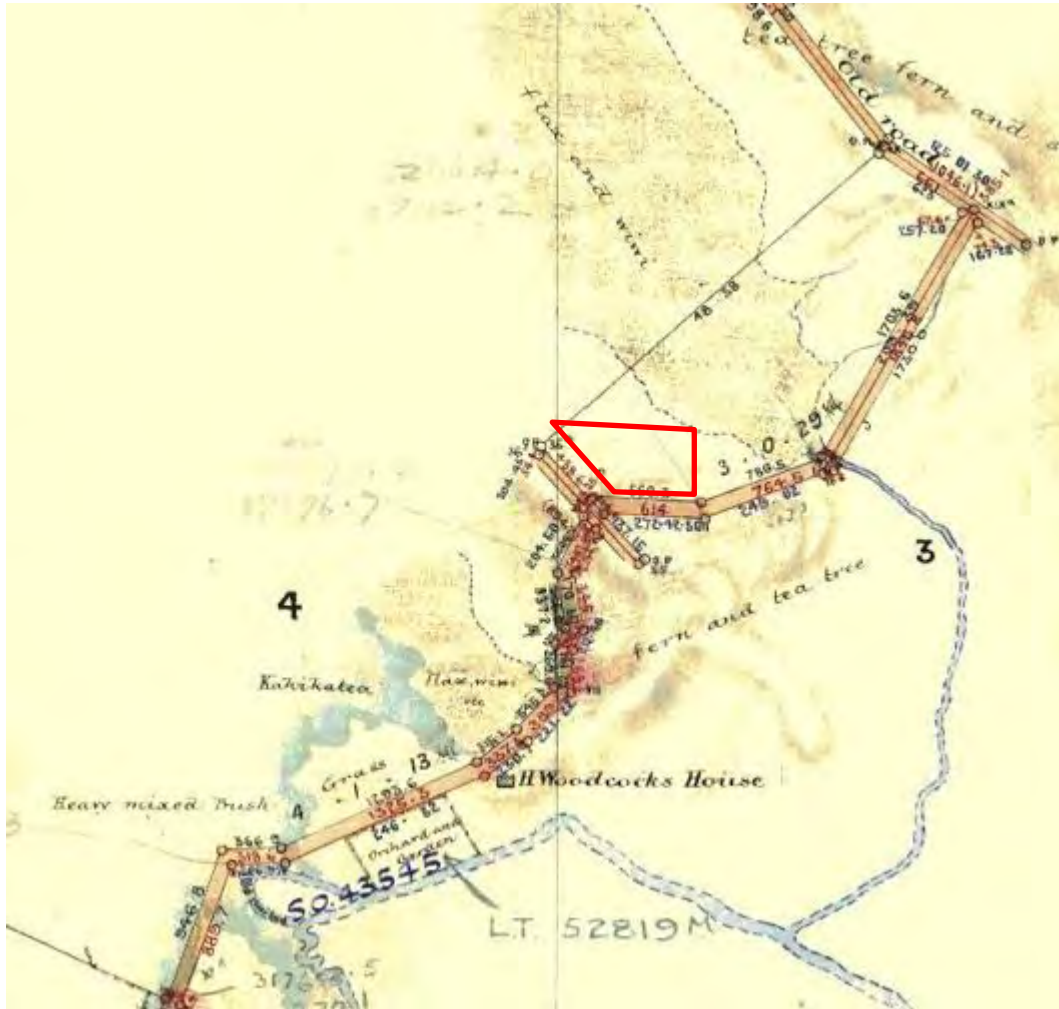


Figure 8. Detail of SO 5420, with approximate extent of Project Area highlighted (source: Quickmap)

Information from Early Aerials

A number of aerial images were reviewed dating from 1966 to 1996 (Figure 9 - Figure 11). These illustrate limited landscape modifications in the Project Area over this period of time with the land remaining for the most part in pasture. The 1966 (Figure 9) and 1979 (Figure 10) aerials show the subject property and the surrounding landscape almost entirely in pasture. By 1996 an expansion of the Wellsford township can be seen by an increase in housing to the west of the Project Area (Figure 11). By 1996 a new line of trees along the eastern boundary of the property can be seen.



Figure 9. Close up of aerial photograph (SN1875 5038-12), dated 1966, with the location of the subject property indicated by a red arrow (source: Retrolens)



Figure 10. Close up of aerial photograph (SN5477 C-1), dated 1979, with the location of the subject property indicated by a red arrow (source: Retrolens)



Figure 11. Close up of Aerial photograph (SN9482 F-17), dated 1996, with the location of the subject property indicated by a red arrow (source: Retrolens)

FIELD ASSESSMENT

Field Survey Results

The survey was completed by Kirstin Roth under overcast conditions, with the property accessed from the southern end through the farm gate and proceeded to the western side of the temporary fencing.

The Project Area can be described as a relatively small piece of land with a fairly uniform terrain (Figure 12). During the field survey, a line of trees extended from northwest to southeast along the eastern boundary (Figure 13). The southern boundary was demarcated by both an electric fence and a temporary fence, running from east to west. South of the Project Area, additional wooden fencing and two gates, remnants from previous farming activities, were present (Figure 14-Figure 15). The wooden farming fence bordered the broader paddock area just beyond the Project Area, running along both the north and south on the east (parallel to the tree line) and western sides, as well as east to west along the northern boundary. A container was present on the southern side of the property between the wooden and temporary fencing on a flat gravel portion just south of the Project Area (Figure 16). A farm track followed the southern side of the northern fence boundary (Figure 17).

The terrain was a long grass paddock with slopes that are relatively gentle with the highest point on the southwestern corner and the sloping down to the eastern side (Figure 18-Figure 20). There are numerous relatively flat areas amongst the gentle slopes.

Impacts to the ground surface from stock movements (such as cattle pugging) were observed throughout the property. The only structure present on the property was a water trough on the northeastern corner of the paddock (Figure 21).

Two spade test pits were hand dug in the northern paddock on flat areas, and the stratigraphic profiles were recorded (see Figure 22 for test pit locations; Table 2 provides the NZTM coordinates).

Test Pit 1 was located in the north west corner of the Project Area (Figure 23 -Figure 24). This pit was 17cm deep and the stratigraphy was as follows:

- Layer 1: 12cm of mid-brown moderately compacted silty soil with frequent root disturbance
- Layer 2: 5cm of compacted orange clay

Test Pit 2 was located east of Test Pit 1 (Figure 25-Figure 26). This pit was 16cm deep and stratigraphy was as follows:

- Layer 1: 9cm of mid-brown moderately compacted silty soil with frequent root disturbance
- Layer 2: 7cm of compacted orange clay

Both the ground surface and subsurface of the majority of the property appears to be relatively undisturbed. However, the stratigraphy from almost every profile showed evidence of significant stock trampling where clay had mixed with topsoil. No archaeological features or deposits were identified during the survey.



Figure 12. Aerial plan showing permanent streams (turquoise lines), overland flow paths (blue lines), and contour lines (Orange) (source: Auckland Council Geomaps)



Figure 13. View facing northeast showing line of trees running along the eastern boundary of the paddock



Figure 14. View facing northeast, showing site entrance closed off by two gates and temporary fencing



Figure 15. View facing southwest, showing site access and long grass



Figure 16. View facing east, showing flat gravel area with container, just south of the Project Area



Figure 17. View facing northwest, showing the gentle slope down to the east. The farm track is indicated by a red arrow



Figure 18. View facing west northwest, showing the gentle uphill slope



Figure 19. View facing northeast, showing the lowest point of the paddock along the eastern boundary



Figure 20. View facing southeast, showing the lowest point of the slope to Wayby Valley Road which forms the southern boundary



Figure 21. View facing northeast, showing the farm track and water trough



Figure 22. Locations of the two test pits recorded during the survey (pink dots). The Project Area indicated by red outline

Table 1. Coordinates of recorded profiles from test pits recorded during the survey

Test Pits	Easting (NZTM)	Northing (NZTM)
Test Pit 1	1740372	5982081
Test Pit 2	1740395	5982081



Figure 23. View facing northeast showing location of Test pit 1



Figure 24. North facing profile of test pit 1



Figure 25. View facing northeast showing location of Test pit 2



Figure 26. West facing profile of test pit 2

DISCUSSION AND CONCLUSIONS

Summary of Results

A new Wellsford Water Treatment Plant is proposed at 411 Wayby Valley Road (Lot 3 DP 547258). No archaeological sites have previously been recorded on the property, and no archaeological remains were identified during the field survey. Recorded archaeological sites associated with Māori settlement and occupation in the general area (apart from isolated find spots) are generally located near major waterways or along the coast. Review of older aerial images, supported by the visual walkover, indicate the area has undergone some modifications by farming activities in the last few years which would have adversely affected the survival of any in situ archaeology (if present) within the Project Area.

Māori Cultural Values

This is an assessment of effects on archaeological values and does not include an assessment of effects on Māori cultural values. Such assessments should only be made by the tangata whenua. Māori cultural concerns may encompass a wider range of values than those associated with archaeological sites.

The historical association of the area with the tangata whenua is evident from the recorded sites, traditional histories and known Māori place names.

Survey Limitations

It should be noted that archaeological survey techniques (based on visual inspection and minor subsurface testing) cannot necessarily identify all subsurface archaeological features or detect wāhi tapu and other sites of traditional significance to Māori, especially where these have no physical remains.

The field survey conditions were generally good, although long grasses obscured the ground surface to some extent.

Archaeological Value and Significance

The archaeological value of sites relates mainly to their information potential, that is, the extent to which they can provide evidence relating to local, regional and national history using archaeological investigation techniques, and the research questions to which the site could contribute. The surviving extent, complexity and condition of sites are the main factors in their ability to provide information through archaeological investigation. For example, generally pa are more complex sites and have higher information potential than small midden (unless of early date). Archaeological value also includes contextual (heritage landscape) value. Archaeological sites may also have other historic heritage values including historical, architectural, technological, cultural, aesthetic, scientific, social, spiritual, traditional and amenity values.

The Project Area has no known archaeological value or significance as no archaeological sites have been identified within its boundaries and it is considered unlikely that any unidentified subsurface archaeological remains are present.

Effects of the Proposal

Future development resulting from the proposed water treatment plant will have no known effects on archaeological values as no archaeological sites have previously been recorded within the boundaries of the Project Area and none were identified during the survey for this assessment. The inland location of the Project Area, generally unsuitable soils for horticulture, and the lack of recorded archaeological sites in close proximity mean that it is unlikely to contain unidentified archaeological sites associated with Māori occupation. It is noted that land was granted to early European settlers in the mid-19th century but there is no indication that the Project Area was used for anything other than general agricultural purposes.

Resource Management Act 1991 Requirements

Section 6 of the RMA recognises as matters of national importance: ‘the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga’ (S6(e)); and ‘the protection of historic heritage from inappropriate subdivision, use, and development’ (S6(f)).

All persons exercising functions and powers under the RMA are required under Section 6 to recognise and provide for these matters of national importance when ‘managing the use, development, and protection of natural and physical resources’. There is a duty to avoid, remedy, or mitigate any adverse effects on the environment arising from an activity (S17), including historic heritage.

Historic heritage is defined (S2) as ‘those natural and physical resources that contribute to an understanding and appreciation of New Zealand’s history and cultures, deriving from any of the following qualities: (i) archaeological; (ii) architectural; (iii) cultural; (iv) historic; (v) scientific; (vi) technological’. Historic heritage includes: ‘(i) historic sites, structures, places, and areas; (ii) archaeological sites; (iii) sites of significance to Māori, including wāhi tapu; (iv) surroundings associated with the natural and physical resources’.

Regional, district and local plans contain sections that help to identify, protect, and manage archaeological and other heritage sites. The plans are prepared under the provisions of the RMA. The Auckland Unitary Plan Operative in Part 2016 (AUP OP) is relevant to the proposed activity.

There are no scheduled historic heritage sites located in the Project Area. This assessment has established that the proposed activity will have no effect on any known archaeological sites and has little potential to affect unrecorded subsurface remains. If resource consent is granted, consent conditions relating to archaeological monitoring or protection would therefore not be required. However, if suspected archaeological remains are exposed during subdivision development works, the Accidental Discovery Rule (E12.6.1) set out in the AUP OP must be complied with. Under the Accidental Discovery Rule works must cease within 20m of the discovery and the Council, Heritage NZ, Mana Whenua and (in the case of human remains) NZ Police must be informed. The Rule would no longer apply in respect to archaeological sites if an Authority from Heritage NZ was in place.

Heritage New Zealand Pouhere Taonga Act 2014 Requirements

In addition to any requirements under the RMA, the HNZPTA protects all archaeological sites whether recorded or not, and they may not be damaged or destroyed unless an Authority to modify an archaeological site has been issued by Heritage NZ (Section 42).

An **archaeological site** is defined by the HNZPTA Section 6 as follows:

‘**archaeological site** means, subject to section 42(3), –

(a) any place in New Zealand, including any building or structure (or part of a building or structure) that –

(i) was associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where the wreck occurred before 1900; and

(ii) provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and

(b) includes a site for which a declaration is made under section 43(1)’

Authorities to modify archaeological sites can be applied for either in respect to archaeological sites within a specified area of land (Section 44(a)), or to modify a specific archaeological site where the effects will be no more than minor (Section 44(b)), or for the purpose of conducting a scientific investigation (Section 44(c)). Applications that relate to sites of Māori interest require consultation with (and in the case of scientific investigations the consent of) the appropriate iwi or hapu and are subject to the recommendations of the Māori Heritage Council of Heritage NZ. In addition, an application may be made to carry out an exploratory investigation of any site or locality under Section 56, to confirm the presence, extent and nature of a site or suspected site.

An archaeological Authority will not be required for the proposed development as no known sites will be affected, and it is unlikely that any undetected sites are present. However, should any sites be exposed during development the provisions of the HNZPTA must be complied with.

Conclusions

Watercare Services Ltd are proposing a new Wellsford Water Treatment Plant on land at 411 Wayby Valley Road. This archaeological assessment has established that the proposed Water Treatment Plant will have no known effects on archaeological values, as no archaeological sites have been identified within the Project Area and the potential for any unidentified subsurface remains to be exposed during development is considered to be very low.

In the unlikely event that previously unidentified archaeological remains are exposed by earthworks resulting from the proposed development in the future, they would have statutory protection under the HNZPTA and cannot be modified without authorisation from Heritage NZ.

RECOMMENDATIONS

- There should be no constraints on the proposed new Water Treatment Plant on archaeological grounds, since no archaeological sites are known to be present, and it is considered unlikely that any will be exposed during development.
- If subsurface archaeological evidence should be unearthed during construction (e.g. intact shell midden, hāngi, storage pits relating to Māori occupation, or cobbled floors, brick or stone foundation, and rubbish pits relating to 19th century European occupation), or if human remains should be discovered, the Accidental Discovery Rule (section E.12.6.1 of the AUP OP) must be followed. This requires that work ceases within 20m of the discovery and that the Auckland Council, Heritage NZ, Mana Whenua and (in the case of human remains) the NZ Police are notified. The relevant authorities will then determine the actions required.
- If modification of an archaeological site does become necessary, an Authority must be applied for under Section 44(a) of the HNZPTA and granted prior to any further work being carried out that will affect the site. (Note that this is a legal requirement).
- Since archaeological survey cannot always detect sites of traditional significance to Māori, such as wāhi tapu, the tangata whenua should be consulted regarding the possible existence of such sites on the property.

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DOCUMENTS

93XX Wellsford Water Treatment Plant

Designation Number	93XX
Requiring Authority	Watercare Services Limited
Location	411 Wayby Valley Road and part of 254 Whangaripo Valley Road, Wellsford, Auckland
Lapse Date	10 years from the date on which it is included in the Auckland Unitary Plan (Operative in Part)

Purpose

Water supply purposes, including abstraction, treatment and storage of water at the new Wellsford Water Treatment Plant (WTP).

Conditions

General Conditions

1. Except as provided for in the conditions below, and subject to final design and Outline Plan(s), works within the designation must be undertaken in general accordance with the Project Description in Section 2.1.1 of the Notice of Requirement document dated 23 June 2025.

Lapse Period

2. In accordance with section 184(1)(c) of the Resource Management Act 1991 (RMA), this designation will lapse if not given effect to within 10 years from the date on which it is included in the Auckland Unitary Plan (Operative in Part) (AUP).

Outline Plan of Works

3. An Outline Plan of Works (or Outline Plans) must be prepared in accordance with section 176A of the RMA. An Outline Plan (or Plans) must include the following management plans and plans:
 - a) Construction Management Plan (CMP) (required by Condition 5);
 - b) Construction Noise Management Plan (CNMP) (if required by Condition 9);
 - c) Construction Traffic Management Plan (CTMP) (required by Condition 11); and
 - d) Final Landscape Mitigation Planting Plan (LMPP) (required by Condition 14).
4. All management plans prepared as part of the Outline Plan of Works (or Plans) must be prepared by a suitably qualified person.

Advice note:

The requiring authority is advised that they shall provide confirmation of Engineering Plan Approval from the relevant Road Controlling Authority for:

- a) *The design and construction of the permanent vehicle entrance to the operational site; and*
- b) *Any new stormwater discharge to the road network.*

Where separate approvals or consents are required under the Auckland Unitary Plan or other relevant bylaws, these must be obtained prior to construction.

Construction Management Plan

5. The Requiring Authority must prepare a CMP for construction of the WTP and associated infrastructure. The purpose of the CMP is to set out the management procedures and construction

methods to be undertaken in order to avoid, remedy or mitigate potential adverse effects arising from construction activities. The CMP must include:

- a) Contact details of the site or project manager;
- b) An outline construction programme;
- c) The proposed hours of work;
- d) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/storage of rubbish, storage and unloading of construction materials and similar construction activities;
- e) Procedures for controlling sediment run-off, dust and the removal of soil, debris, demolition and construction materials (if any) to public roads or places adjacent to the work site;
- f) Procedures for ensuring that residents, road users and businesses in the immediate vicinity of construction are given prior notice of the commencement of construction activities and are informed about the expected duration and effects of the works;
- g) Means of providing for the health and safety of the general public;
- h) Procedures for responding to complaints about construction activities;
- i) Procedures for the management of noise and vibration; and
- j) actions to respond to warnings of heavy rain periods.

Operational noise

6. Noise from the operation of the WTP must meet the following noise limits at the notional boundary of rural zone receivers existing as at the date on which this designation is included in the AUP:

Receiving Zone	Daytime (7am – 10pm Mon – Sat, 9am – 6pm Sunday)	Night-time (All other times)	Assessment Position
Rural – Rural Production Zone	55 dB LAeq	45 dB LAeq 75 dB LAFmax	Notional boundary of receiver

Operational noise levels are to be measured in accordance with New Zealand Standard NZS 6801:2008 *Acoustics – Measurement of environmental sound* and assessed in accordance with New Zealand Standard NZS 6802:2008 *Acoustics – Environmental Noise*.

7. The WTP must be designed and operated to meet the operational noise limits in Condition 6.

Construction Noise

8. Noise from the construction of the WTP must be measured and assessed in accordance with the provisions of New Zealand Standard NZS 6803:1999 *Acoustics – Construction Noise* and comply with the limits in the following table.

Time	Weekdays (dBA)		Saturdays (dBA)		Sundays and Public Holidays (dBA)	
	L _{eq}	L _{max}	L _{eq}	L _{max}	L _{eq}	L _{max}
0630 – 0730	55	75	45	75	45	75
0730 – 1800	70	85	70	85	55	85
1800 – 2000	65	80	45	75	45	75
2000 – 0630	45	75	45	75	45	75

9. If concrete pours are to be undertaken between 10pm to 7am, a CNMP must be prepared for the proposed works as part of the Outline Plan of Works under Condition 3 prior to construction

commencing. The purpose of the CNMP is to identify the best practicable option for management and mitigation of temporary construction noise effects.

10. The CNMP must include, but not be limited to, the following information:

- a) Construction noise criteria;
- b) Identification of the most affected premises where there exists the potential for noise effects;
- c) Description and duration of the works, anticipated equipment and the processes to be undertaken;
- d) Hours of operation, including specific times and days when construction activities causing noise would occur;
- e) Mitigation options where noise levels are predicted or demonstrated to approach or exceed the relevant limits. Specific noise mitigation measures must be implemented which may include, but are not limited to, the temporary relocation of receivers;
- f) The erection of temporary construction noise barriers where appropriate; and
- g) Methods for monitoring and reporting on construction noise.

Construction Traffic Management Plan

11. A CTMP must be prepared for the proposed works as part of the Outline Plan of Works under Condition 3 in consultation with Auckland Transport. The purpose of the CTMP is to:

- a) Manage the impacts of construction traffic on the road transport network for the duration of construction to minimise delays to road users;
- b) Inform the public about traffic management on the road transport network for the duration of construction;
- c) Protect staff and public safety;
- d) Minimise damage to private and public property including roads;
- e) Maintain vehicle access to, and manage traffic from, surrounding private properties adjacent to the construction site.

12. The CTMP must describe the measures that will be taken to avoid, remedy or mitigate the traffic effects associated with construction of the proposed works. In particular, the CTMP must describe:

- a) Construction programme with a detailed schedule of the various work stages, deliveries and associated delivery routes;
- b) Driver protocols;
- c) Temporary traffic management controls:
 - i. to manage the effects of the delivery of construction material, plant and machinery;
 - ii. to maintain traffic capacity or minimise the impact on traffic capacity during weekdays and weekends; and
 - iii. to safely manage and maintain local property access.
- d) Monitoring schedule of the traffic generation levels and the safety and effectiveness of the temporary traffic management controls during construction; and
- e) Procedures for communicating with local residents along the primary route, Auckland Transport, Auckland Council, emergency services, and / or any other affected person(s) including provision of prior notice of traffic arrangements and any road closures.

13. Any damage in the road corridor directly caused by heavy vehicles entering or exiting the construction site must be repaired as soon as practicable or within a timeframe agreed with Auckland Transport.

Landscape and Visual Effects Mitigation

14. A final Landscape Mitigation Planting Plan (LMPP) must be prepared for the proposed works as part of the Outline Plan of Works under Condition 3. The final LMPP must be in general accordance with the conceptual LMPP drawings (dated September 2025) which were provided alongside the Landscape and Visual Effects Assessment (dated 30 May 2025) and subsequent Boffa Miskell landscape memo (dated 8 September 2025). The purpose of the final detailed LMPP is to demonstrate how the planting undertaken and proposed planting on the site is the best practicable option for the mitigation of landscape and visual effects on surrounding visual audiences and provide details on the management regime for the implementation, maintenance and establishment of the required mitigation measures.
15. The final LMPP must contain, but not be limited to, the following:
 - a) A plan of the planted area detailing the finished soil levels, plant species, plant sourcing, plant sizes at time of planting, plant locations, density of planting, and timing of planting; and
 - b) A programme of post establishment planting protection and maintenance with clear objectives as to what the planting is to achieve and how the planting is to be managed to achieve these objectives.
16. The final LMPP must be implemented as soon as practicable following completion of earthworks on the site, in order to establish planting as early as possible, and thereafter the planting is to be maintained for the life of the WTP to achieve the agreed planting establishment objectives.

Exterior finishing of buildings and structures

17. To ensure that buildings and structures within the WTP site integrate with the surrounding rural landscape, the materiality and form of the buildings and structures must be designed and constructed with rural aesthetics and features, including (where practical):
 - a) Using natural materials and natural finishes that reflect the character of rural development and structures;
 - b) Design buildings with steel roofs in a dark/neutral/recessive colour;
 - c) Using neutral / low reflectivity finishes to the proposed structures to reduce glare and contrast with the surrounding rural landscape;
 - d) Not using bright yellow or red standard non safety elements of the structures to neutral or recessive colours;
 - e) Materials used for the retaining structures will be timber, timber clad or be finished with a dark or neutral colour that will appear recessive in the rural landscape; and
 - f) Fencing surrounding the WTP will use approved Watercare fencing using materials and finishes that are recessive in colour and use materials that are in keeping with the rural landscape aesthetic. This includes the 'high security' boundary fencing.

External lighting

18. Any external lighting within the WTP site must utilise the following mitigation measures to reduce the potential adverse effects on the rural amenity of people within adjacent properties to the site at during the hours of darkness:
 - a) Limit the duration that lighting is used by timers;
 - b) Use directional cones to limit and focus the light downwards and reduce effects related to light spill, glare and sky glow; and
 - c) Use LED bulbs where possible to focus the light to a narrow area and reduce the amount of light spill.

or otherwise demonstrate compliance with Lighting category 3 (medium brightness) from Table E24.6.1.1 of the AUP.

Archaeology and Heritage

19. Should works result in the identification of any previously unknown sensitive materials (i.e., archaeological sites), the requirements of land disturbance – Accidental Discovery Rule (E12.6.1) set out in the AUP in part must be complied with.

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15 August 2025

Kris Lian
Auckland Council
Private Bag 92300
Auckland 1142

Via email: kris.lian@aucklandcouncil.govt.nz
unitaryplan@aucklandcouncil.govt.nz

Dear Kris

Notice of Requirement Wellsford Water Treatment Plant, 411 Wayby Valley Road

This letter responds to the Auckland Council (AC) request for further information dated 21 August 2025. It responds to all the request, except Query 2 requesting a copy of the latest record of Title that reflects the newly purchased additional land. Due to delays caused by a LINZ error, this will not be available until 23 September 2025. Once available a copy will be provided to AC.

The numbering below refers to the numbering used in the AC s92 request, excluding the recommended conditions where AC restarted the numbering.

- | | |
|----------|--|
| Query 1 | Please provide a proposed set of draft conditions. Note that these will be subject to Council's review, and further amendments may be required as part of the Section 92 process. |
| Response | Proposed conditions are attached as Attachment 1. |
| Query 2 | Please provide the latest Record of Title that reflects the newly purchased / additional land acquired. |
| Response | As mentioned above this will be provided later this month once available. |
| Query 3 | Please clarify whether the proposed designation overlaps with the existing property boundaries. On the Wellsford Water Treatment Plant Civil Services map Potential Site Layout, I was unable to locate the "existing property boundary" shown in the legend. Please indicate where this can be found. |
| Response | The Notice of Requirement boundaries match the outside boundaries of the Record of Title, being Part Lot 1 DP 517895, Part Lot 2 DP 517895 and Lot 3 DP 547258 |
| Query 4 | Please provide the Cultural Impact Assessment referenced in your AEE. |
| Response | The Cultural Impact Assessment from Ngāti Manuhiri is attached as Attachment 2. Note that this is a confidential document intended for use by Watercare and Auckland Council in the context of this project. Any distribution or reproduction of this document beyond its intended use must be approved by the Manuhiri Kaitiaki Charitable Trust. |
| Query 5 | The NoR AEE notes that "landowners were happy with the level of noise during the treatment process and the effectiveness of the internal walls" and that "the screen planting proposed ... was... agreed to by the landowners of 437 Wayby Valley Road and 254 |

Whangaripo Road” Council requires written approval from the relevant property owners/occupiers in order to disregard potential effects on these properties when making the notification decision.

Response	<p>The statement in the consultation section is merely a record of the consultation. In terms of noise Watercare is relying on the Acoustic assessment that the noise will be within permitted levels and therefore within the permitted baseline that Council is required to discard in its notification assessment. The specific response from the Acoustic Specialist is:</p> <p>'Our Acoustic Impact Assessment states that there will be no unreasonable adverse noise effects on the neighbouring receivers, including 437 Wayby Valley Road. We note that our assessment did not include 254 Whangaripo Valley Road, however as the dwelling at this address is over a km from the site, noise effects at this dwelling will be negligible. Noise effects have not been disregarded.'</p>
Query 6	<p>Please provide a summary of any consultation that has occurred in relation to 412, and 437 Wayby Valley Road.</p>
Response	<p>A summary of consultation with the neighbours, including 412 and 437 Wayby Valley Road is contained in section 3.2.2 of the AEE. However, it is noted the statement relating to potential impact on horses should have referenced 406 Wayby Valley Road, not 412 Wayby Valley Road. We apologise for the error.</p>
Query 7	<p>Proposed Maximum Building Height.</p> <p>Please confirm whether the proposed maximum building height has been reduced from 15 metres (as per the previous NoR) to 9 metres in the current NoR.</p>
Response	<p>Watercare confirm the proposed building envelope is as presented in the bullet points at the end of Section 2.1.1 - Project Description.</p>
Query 8	<p>Timing of Boundary Planting</p> <p>Please confirm whether implementation of the proposed boundary planting is explicitly proposed to occur prior to the construction of the new facility. The AEE notes the intent to encourage early planting; further clarification would assist in assessing landscape integration and mitigation.</p>
Response	<p>Please refer to 8 September 2025 memo from Boffa Miskell to Watercare attached as Attachment 3.</p>
Query 9	<p>Eastern Boundary Landform Modifications</p> <p>Please provide further information on the extent of proposed landform modifications along the eastern boundary (for stormwater management purposes), and clarify whether these works will impact existing vegetation. If so, please identify how any affected vegetation will be managed or replaced.</p>
Response	<p>Please refer to 8 September 2025 memo from Boffa Miskell to Watercare attached as Attachment 3.</p>

Query 10	<p>Visual Effects on Private Properties</p> <p>In order to assist with an understanding of the potential effects on the visual amenity values of people viewing from properties at 412 and 437 Wayby Valley Road, please provide two cross-sectional diagrams to illustrate the elevational relationship between the dwelling (at 412) and building platform (at 437) and the site, to show the effectiveness of the proposed boundary planting.</p>
Response	<p>Please refer to 8 September 2025 memo from Boffa Miskell to Watercare attached as Attachment 3 and the Updated LMPP attached as Attachment 4.</p>
Query 11	<p>Boffa Miskell Mitigation Measures</p> <p>Please confirm that all mitigation measures recommended in the Boffa Miskell Landscape and Visual Assessment, including lighting recommendations, as identified in Sections 7 and 8 of the report, are captured in the current proposal and will be included in the proposed designation conditions.</p>
Response	<p>As discussed in the AEE and reiterated in Attachment 3 all measures recommended in the Boffa Miskell Landscape and Visual Assessment will be included in the proposed designation conditions. Refer to proposed conditions 15 and 16 in Attachment 1.</p>
Query 12	<p>Recommendation Note – South-Eastern Corner Planting (not an RFI)</p> <p>It is recommended that the applicant consider additional planting in the south-eastern corner of the site to supplement existing vegetation. This may assist in mitigating potential adverse landscape and visual amenity effects, particularly for viewers travelling south-west on Wayby Valley Road. Such planting may require an adjustment of the proposed internal fencing alignment and location in this south-eastern corner of the site in order to provide adequate planting space.</p>
Response	<p>Based on our assessment it is anticipated that the potential visual effects on road users traveling south west along Wayby Valley Road will experience only glimpsed and transient views of the site and once the proposed LMPP planting has established (after approximately 6 years) effects will reduce from Very Low to neutral. As a result it is anticipated that additional planting will not be required to reduce the level of effects for this transient audience to an acceptable level.</p>
Query 13	<p>Please provide further comment on the night-time site noise effect. Given that predicted WTP noise levels comply with AUP day/night limits but are 20–25 dB above the local background levels at night (21 dB LA90), please clarify whether this noise will cause any annoyance or disturbance to receivers in indoor and outdoor environments.</p>
Response	<p>The specific response from the Acoustic Specialist is: 'As stated in our Acoustic Impact Assessment, operational noise at night may be audible at some receivers some of the time. Receivers are likely to be indoors at night, and with windows open for ventilation, site noise levels will be no more than 25 dB LAeq inside. Noise at this level may be faintly audible but will not cause sleep disturbance. Noise from the site may be audible to receivers outside at night, however we consider potential</p>

annoyance or disturbance would be minimal given the steady-state nature of the plant, compared to the transient noise of cars travelling on Wayby Valley Rd.'

Query 14 Please clarify how noise compliance will be verified once the WTP/upgraded plant is in operation. Will any noise monitoring be undertaken to confirm compliance with the 45 dB LAeq margin?

Response Acoustic performance is part of the Detailed Design criteria and is tested during commissioning.

Recommended Land Contamination Conditions

This land has a long history of cattle grazing and as such is not likely to have had an activity or industry described in the Hazardous Activities and Industries List undertaken on it. Therefore, it is not Land Covered under Section 5(7) of the Resource Management (National Environment Standard for Assessing and managing Contaminants in Soil to Protect Human Health) Regulations 2011.

Consequently, Watercare do not believe the suggested land contaminated conditions are necessary or appropriate.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Paul Futter', is written over a light blue horizontal line.

Paul Futter
Senior Resource Consent Planner
Watercare Services Limited

93XX Wellsford Water Treatment Plant

Designation Number	93XX
Requiring Authority	Watercare Services Limited
Location	411 Wayby Valley Road and part of 254 Whangaripo Valley Road, Wellsford, Auckland
Lapse Date	5 years from the date on which it is included in the Auckland Unitary Plan (Operative in Part)

Purpose

Water supply purposes, including abstraction, treatment and storage of water at the New Wellsford Water Treatment Plant (WTP).

Conditions

General Conditions

1. Except as provided for in the conditions below, and subject to final design and Outline Plan(s), works within the designation shall be undertaken in general accordance with the Project Description in Section 2.1.1 of the Notice of Requirement.

Lapse Period

2. In accordance with section 184(1)(c) of the Resource Management Act 1991 (RMA), this designation will lapse if not given effect to within 5 years from the date on which it is included in the Auckland Unitary Plan (Operative in Part) (AUP).

Outline Plan of Works

3. An Outline Plan of Works (or Outline Plans) shall be prepared in accordance with section 176A of the RMA. An Outline Plan (or Plans) shall include the following management plans and reports:
 - a) Construction Management Plan (CMP) (required by Condition 5);
 - b) Construction Noise Management Plan (CNMP) (if required by Condition 9);
 - c) Construction Traffic Management Plan (CTMP) (required by Condition 11); and
 - d) Final Landscape Mitigation Planting Plan (LMPP) (required by Condition 14).
4. All management plans prepared as part of the Outline Plan of Works (or Plans) shall be prepared by a suitably qualified person.
5. The OPW shall be accompanied by confirmation of the Engineering Plan Approval from the Roading Authority:
 - a) For the permanent entrance to the operational site; and
 - b) Any new stormwater discharge to the road.

Construction

6. The Requiring Authority shall prepare a CMP for construction of the WTP and associated infrastructure. The purpose of the CMP is to set out the management procedures and construction methods to be undertaken in order to avoid, remedy or mitigate potential adverse effects arising from construction activities. The CMP shall include:
 - a) Contact details of the site or project manager;

- b) An outline construction programme;
- c) The proposed hours of work;
- d) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/storage of rubbish, storage and unloading of construction materials and similar construction activities;
- e) Procedures for controlling sediment run-off, dust and the removal of soil, debris, demolition and construction materials (if any) to public roads or places adjacent to the work site;
- f) Procedures for ensuring that residents, road users and businesses in the immediate vicinity of construction are given prior notice of the commencement of construction activities and are informed about the expected duration and effects of the works;
- g) Means of providing for the health and safety of the general public;
- h) Procedures for responding to complaints about construction activities;
- i) Procedures for the management of noise and vibration; and
- j) Actions to respond to warnings of heavy rain periods.

Operational noise

7. Noise from the operation of the WTP shall meet the following noise limits at the notational boundary of rural zone receivers existing as at the date on which this designation is included in the Auckland Unitary Plan (Operative in Part):

Receiving Zone	Daytime (7am – 10pm Mon – Sat, 9am – 6pm Sunday)	Night-time (All other times)	Assessment Position
Rural – Rural Production Zone	55 dB LAeq	45 dB LAeq 75 dB LA _{Fmax}	Notional boundary of receiver

Operational noise levels are to be measured in accordance with New Zealand Standard NZS 6801:2008 *Acoustics – Measurement of environmental sound* and assessed in accordance with New Zealand Standard NZS 6802:2008 *Acoustics – Environmental Noise*.

8. The WTP shall be designed and operated to meet the operational noise limits in Condition 6.

Construction Noise

9. Noise from the construction of the WTP shall be measured and assessed in accordance with the provisions of New Zealand Standard NZS 6803:1999 *Acoustics – Construction Noise* and comply with the limits in the following table.

Time	Weekdays (dBA)		Saturdays (dBA)		Sundays and Public Holidays (dBA)	
	L _{eq}	L _{max}	L _{eq}	L _{max}	L _{eq}	L _{max}
0630 – 0730	55	75	45	75	45	75
0730 – 1800	70	85	70	85	55	85
1800 – 2000	65	80	45	75	45	75
2000 – 0630	45	75	45	75	45	75

10. If concrete pours are to be undertaken between 10pm to 7am, a CNMP shall be prepared for the proposed works as part of the Outline Plan of Works under Condition 3 prior to construction commencing. The purpose of the CNMP is to identify the best practicable option for management and mitigation of temporary construction noise effects.

11. The CNMP shall include, but not be limited to, the following information:

- a) Construction noise criteria;
- b) Identification of the most affected premises where there exists the potential for noise effects;
- c) Description and duration of the works, anticipated equipment and the processes to be undertaken;
- d) Hours of operation, including specific times and days when construction activities causing noise would occur;
- e) Mitigation options where noise levels are predicted or demonstrated to approach or exceed the relevant limits. Specific noise mitigation measures must be implemented which may include, but are not limited to, the temporary relocation of receivers;
- f) The erection of temporary construction noise barriers where appropriate; and
- g) Methods for monitoring and reporting on construction noise.

Construction Traffic

12. A CTMP shall be prepared for the proposed works as part of the Outline Plan of Works under Condition 3 in consultation with Auckland Transport. The purpose of the CTMP is to:

- a) Manage the impacts of construction traffic on the road transport network for the duration of construction to minimise delays to road users;
- b) Inform the public about traffic management on the road transport network for the duration of construction;
- c) Protect staff and public safety;
- d) Minimise damage to private and public property including roads;
- e) Maintain vehicle access to, and manage traffic from, surrounding private properties adjacent to the construction site.

13. The CTMP shall describe the measures that will be taken to avoid, remedy or mitigate the traffic effects associated with construction of the proposed works. In particular, the CTMP shall describe:

- a) Construction programme with a detailed schedule of the various work stages, deliveries and associated delivery routes;
- b) Driver protocols;
- c) Temporary traffic management controls:
 - i. to manage the effects of the delivery of construction material, plant and machinery;
 - ii. to maintain traffic capacity or minimise the impact on traffic capacity during weekdays and weekends; and
 - iii. to safely manage and maintain local property access.
- d) Monitoring schedule of the traffic generation levels and the safety and effectiveness of the temporary traffic management controls during construction; and
- e) Procedures for communicating with local residents along the primary route, Auckland Transport, Auckland Council, emergency services, and / or any other affected person(s) including provision of prior notice of traffic arrangements and any road closures.

14. Any damage in the road corridor directly caused by heavy vehicles entering or exiting the construction site shall be repaired as soon as practicable or within a timeframe agreed with Auckland Transport.

Landscape and Visual

15. A final LMPP shall be prepared for the proposed works as part of the Outline Plan of Works under Condition 3, based on the draft LMPP provided alongside the Landscape and Visual Assessment. The purpose of the final LMPP is to demonstrate the planting undertaken on site was the best practicable option for the mitigation of landscape and visual effects on surrounding visual audiences and provide details on the management regime.
16. The final LMPP shall contain, but not be limited to, the following:
- a) A plan of the planted area detailing the finished soil levels, plant species, plant sourcing, plant sizes at time of planting, plant locations, density of planting, and timing of planting;
 - b) A programme of post establishment protection and maintenance.



Memorandum

Auckland

Level 3
82 Wyndham Street
Auckland 1010
PO Box 91250
Auckland 1142

+649 358 2526

Whangarei

15 Porowini Avenue, Morningside, Whangarei 0110

+649 358 2526

Hamilton

PO Box 1094, Hamilton 3240

+647 960 0006

Tauranga

PO Box 13373, Tauranga 3141

+647 571 5511

Wellington

PO Box 11340, Wellington 6142

+644 385 9315

Nelson

27 Vanguard Street, Nelson 7010

+643 548 8551

Christchurch

PO Box 110, Christchurch 8140

+643 366 8891

Queenstown

PO Box 1028, Queenstown 9348

+643 441 1670

Dunedin

49 Water Street, Dunedin 9016

+643 470 0460

Attention:	Paul Futter
Company:	Watercare Services Limited
Date:	8 September 2025
From:	Oliver May, Associate Principal Landscape Architect
Message Ref:	New Wellsford Water Treatment Plant NoR – S92 Response
Project No:	BM230742

Introduction

The following memo responds to the landscape and visual related questions set out in the Auckland Council Section 92 Request of Further Information with regards to the Notice of Requirement lodged by Watercare Ltd for the Wellsford Water Treatment Plant, at 411 Wayby Valley.

Further Information Request Response

REQUEST: (7) Proposed Maximum Building Height - Please confirm whether the proposed maximum building height has been reduced from 15 metres (as per the previous NoR) to 9 metres in the current NoR

RESPONSE: It is confirmed that the proposed and assessed maximum building height has been reduced to 9m in the current proposal.

REQUEST: (8) Timing of Boundary Planting - Please confirm whether implementation of the proposed boundary planting is explicitly proposed to occur prior to the construction of the new facility. The AEE notes the intent to encourage early planting; further clarification would assist in assessing landscape integration and mitigation.

RESPONSE: In section 8.0 Recommendations of the Landscape and Visual Effects Assessment (LVEA) it is recommended that the Landscape Mitigation Planting Plan (LMPP) “is planted as soon as possible after the public works are consented and prior to the construction of the proposed WTP”. As discussed later in response to “Request 11” the AEE indicates that all of the recommendations proposed in the LVEA are adopted by the project.

The final timing of the construction of the project are not currently available and will be developed in more detail during the outline plan of works (OPW). It is Watercare’s intention to plant the majority of trees within the next available planting season following consent being granted. However, the extent of the area available to be planted may be restricted by construction access requirements and the wishes of the neighbouring property to allow the area to be grazed in the interim.

REQUEST: (9) Eastern Boundary Landform Modifications - Please provide further information on the extent of proposed landform modifications along the eastern boundary (for stormwater management purposes), and clarify whether these works will impact existing vegetation. If so, please identify how any affected vegetation will be managed or replaced.

RESPONSE: Currently, detailed information on the proposed or required earthworks are available and will be provided in the OPW as the design is developed. However, it is proposed that any proposed earthworks

or retaining walls are located outside of the root protection zone of the trees along the eastern boundary of the site.

REQUEST: (10) Visual Effects on Private Properties - *In order to assist with an understanding of the potential effects on the visual amenity values of people viewing from properties at 412 and 437 Wayby Valley Road, please provide two cross-sectional diagrams to illustrate the elevational relationship between the dwelling (at 412) and building platform (at 437) and the site, to show the effectiveness of the proposed boundary planting.*

RESPONSE: Two cross sections have been added to an updated LMPP (Appendix 1) which indicate the elevational relationship between the site and the properties at 412 and 437 Wayby Valley Road. The height of vegetation within the sections are presented at 6 years after planting (consistent with the heights of vegetation in the Boundary Cross Sections) and at maturity. The heights of planting at maturity are representative of information provided by the New Zealand Plant Conservation Network¹. At maturity the Hopseed Bush (*Dodonaea viscosa*) is displayed at 10m tall (maximum height 12m) and the New Zealand Lacebark (*Hoheria populnea*) is displayed at 8m tall.

It is noted that the outlook from the property at 412 Wayby Valley Road is primarily to the north and not directly over the site. The cross section indicates an oblique view towards the site within a wider far reaching panoramic view as described in the LEA. Additionally, the position and development of a future property at 437 Wayby Valley Road are not currently known and the relationship between the site and the dwelling will be dependent in part on the design of the dwelling. As discussed in the LVEA visual effects will be mitigated by a suite of proposed mitigation measures including architectural design treatments and the building material palette. The proposed mitigation planting will assist in the softening and integration of the proposal to reduce visual effects.

REQUEST: (11) Boffa Miskell Mitigation Measures - *Please confirm that all mitigation measures recommended in the Boffa Miskell Landscape and Visual Assessment, including lighting recommendations, as identified in Sections 7 and 8 of the report, are captured in the current proposal and will be included in the proposed designation conditions.*

RESPONSE: As discussed above and in the AEE the proposed Mitigation Strategy (Section 7.0) and Recommendation (Section 8.0) will be included in the proposed designation conditions.

RECOMMENDATION NOTE: South-Eastern Corner Planting – *It is recommended that the applicant consider additional planting in the south-eastern corner of the site to supplement existing vegetation. This may assist in mitigating potential adverse landscape and visual amenity effects, particularly for viewers travelling south-west on Wayby Valley Road. Such planting may require an adjustment of the proposed internal fencing alignment and location in this south-eastern corner of the site in order to provide adequate planting space.*

RESPONSE: Based on our assessment it is anticipated that the potential visual effects on road users traveling south west along Wayby Valley Road will experience only glimpsed and transient views of the site and once the proposed LMPP planting has established (after approximately 6 years) effects will reduce from **Very Low** to **neutral**. As a result it is anticipated that additional planting will not be required to reduce the level of effects for this transient audience to an acceptable level.

Regards,
BOFFA MISKELL LTD

Oliver May
Associate Principal / Chartered Landscape Architect

¹ New Zealand Plant Conservation Network [online], accessed 4 September 2025 - <https://www.nzpcn.org.nz/>

Appendix 1: Updated Landscape and Mitigation Planting Plan

NEW WELLSFORD WATER TREATMENT PLANT - NOR

LANDSCAPE MITIGATION PLANTING PLAN

SEPTEMBER 2025



This graphic has been prepared by Boffa Miskell Limited on the specific instructions of our Client. It is solely for our Client's use in accordance with the agreed scope of work. Any use or reliance by a third party is at that party's own risk. Where information has been supplied by the Client or obtained from other external sources, it has been assumed that it is accurate. No liability or responsibility is accepted by Boffa Miskell Limited for any errors or omissions to the extent that they arise from inaccurate information provided by the Client or any external source.



PLANT SCHEDULE						
SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	CONT	CANOPY	QTY
TREES						
	Dod.vis	Dodonaea viscosa	Hopseed Bush	10L	1.2 m	156
	Hoh.pop	Hoheria populnea	New Zealand Lacebark	10L	1.5 m	168
SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	CONT	SPACING	QTY
SHRUBS						
	Pho.coo	Phormium cookianum	Wharaririki	2L	1.2 m	163

ORIGINAL IN COLOUR



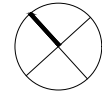
Printed 30/05/2025 2:14:09 pm

KEY

- LAND PARCELS
- SITE BOUNDARY
- INDICATIVE HEIGHT ENVELOPE
- STOCK FENCE (POST 7 WIRE)
- HIGH SECURITY FENCE (1.8-2m)
- EXISTING FENCE
- EXISTING PLANTING
- 3m OFFSET FROM SECURITY FENCE

NOTES

- THIS PLAN IS A CONCEPTUAL MITIGATION PLAN AND SHOULD NOT BE USED FOR PLANTING.
- WATER TREATMENT PLAN SHOWN IS A CONCEPT ONLY.
- PROPOSED MITIGATION PLANTING IS DESIGNED TO PROVIDE LONG TERM SCREENING.
- PLAN TO BE READ IN CONJUNCTION WITH THE NEW WELLSFORD WATER TREATMENT PLANT - NoR: LANDSCAPE AND VISUAL EFFECTS ASSESSMENT.



0 1 3 5 m

REV	DATE	DESCRIPTION
A	30.04.24	First Issue
B	23.07.24	Updated Following s92 Comments
C	20.05.25	Planting per 25.05.06 Design Update

APPRVD	TLI	OMa

New Wellsford Water Treatment Plan - NoR

Landscape Mitigation Planting Plan

Design	OMa	Scale	Date
Drawn	JKe	A1 @ 1:250	21.05.25
Check	TLi	A3 @ 1:500	

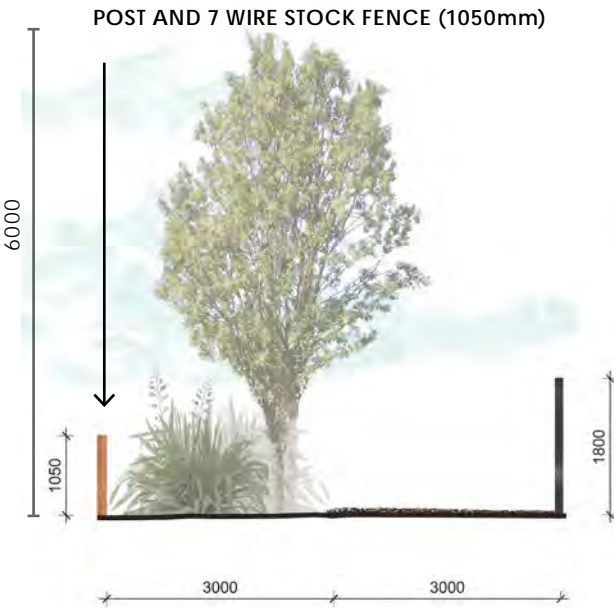
For Information

DRAWING NO.	REVISION
BM230742-500	C

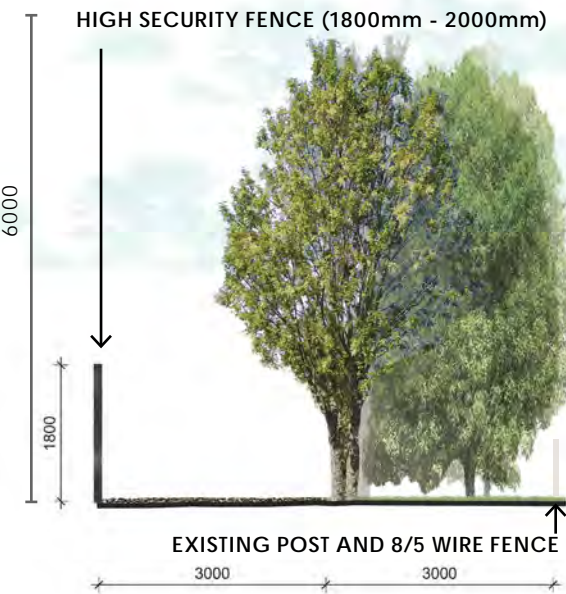
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BOUNDARY CROSS SECTION

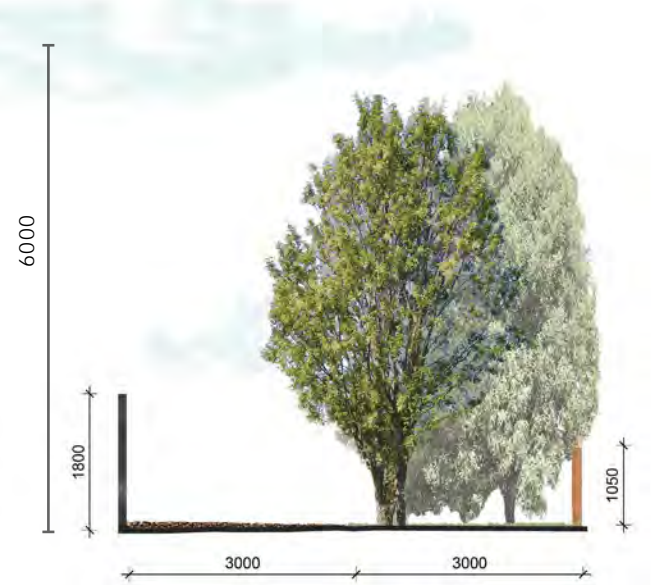
NORTHERN BOUNDARY



SOUTHERN BOUNDARY

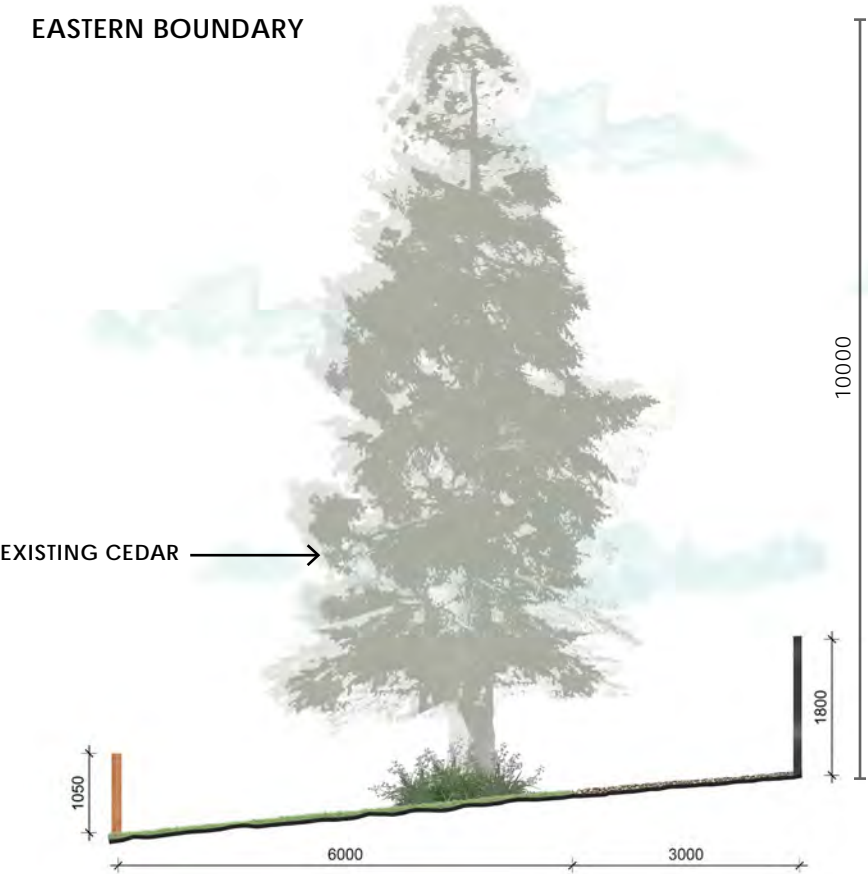


WESTERN BOUNDARY



NOTE: ALL MEASUREMENTS ARE IN MILLIMETRES

EASTERN BOUNDARY



ORIGINAL IN COLOUR



Printed 30/05/2025 2:13:00 pm

KEY

- NOTES
1. THIS PLAN IS A CONCEPTUAL MITIGATION PLAN AND SHOULD NOT BE USED FOR PLANTING.
 2. WATER TREATMENT PLANT SHOWN IS A CONCEPT ONLY.
 3. PROPOSED MITIGATION PLANTING IS DESIGNED TO PROVIDE LONG TERM SCREENING.
 4. SECTIONS TO BE READ IN CONJUNCTION WITH THE NEW WELLSFORD WATER TREATMENT PLANT - NoR: LANDSCAPE AND VISUAL EFFECTS ASSESSMENT.
 5. PLANTING HEIGHTS ARE INDICATIVE OF 6 YEARS OF GROWTH

REV	DATE	DESCRIPTION
A	30.05.25	First Issue

APPRVD
OMa

New Wellsford Water
Treatment Plan - NoR

Landscape Mitigation Planting Cross
Sections

Design	OMa	Scale	Date
Drawn	JKe	A1 @ 1:50	30.05.25
Check	OMa	A3 @ 1:100	

For Information

DRAWING NO.	REVISION
BM230742-501	A

U:\2023\BM230742_TLI_Wellsford_WTP_411_Wayby_Valley_Road\CAD\BM230742_Base_Planting.dwg



ORIGINAL IN COLOUR



Printed 5/09/2025 4:55:28 pm

KEY

- LAND PARCELS
- SITE BOUNDARY
- INDICATIVE HEIGHT ENVELOPE
- STOCK FENCE (POST 7 WIRE)
- HIGH SECURITY FENCE (1.8-2m)
- EXISTING FENCE
- EXISTING PLANTING
- 3m OFFSET FROM SECURITY FENCE
- 0.25m CONTOURS
- 437 WAYBY VALLEY ROAD BUILDING PLATFORM

NOTES

- PLAN TO BE READ IN CONJUNCTION WITH THE NEW WELLSFORD WATER TREATMENT PLANT - NoR: LANDSCAPE AND VISUAL EFFECTS ASSESSMENT.
- SOURCE: AUCKLAND CONCIL LIDAR

REV	DATE	DESCRIPTION
A	04.09.25	Section Plan



APPRVD
OMa

NEW WELLSFORD WATER TREATMENT PLANT

LANDSCAPE MITIGATION PLANTING SECTION PLAN

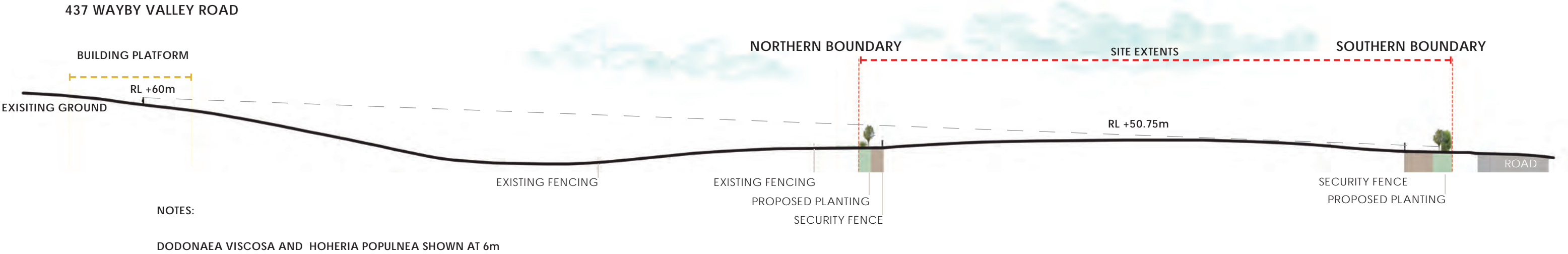
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Design	OMa	Scale	Date
Drawn	JKa	1:750 @A1	05.09.2025
Check	OMa	1:1500 @ A3	

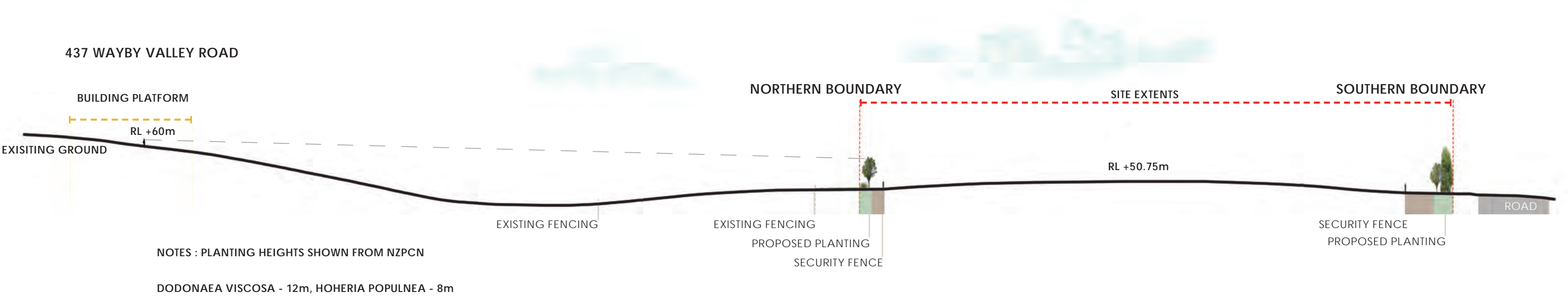
FOR INFORMATION

DRAWING NO.	REVISION
BM230742-502	(A)

CROSS SECTION 1- AT 6 YEARS GROWTH

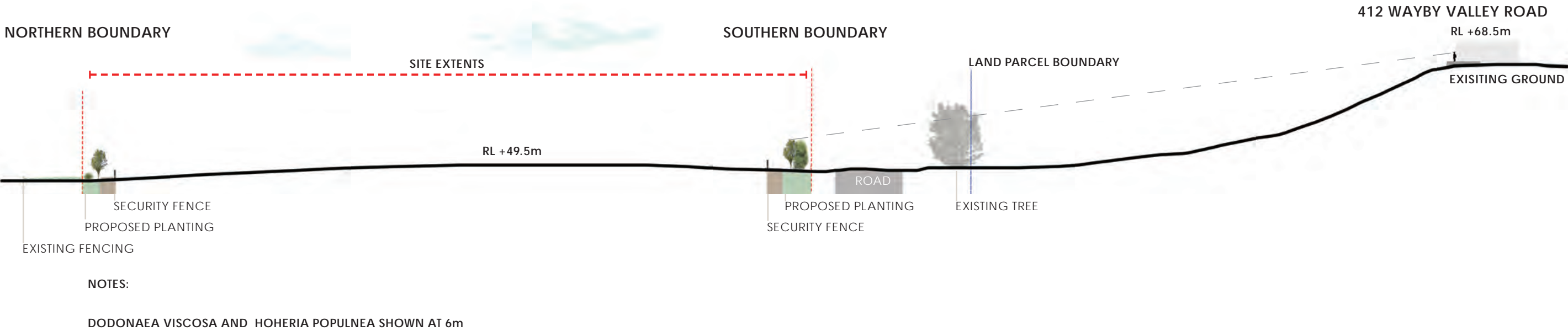


CROSS SECTION 1- AT MATURITY

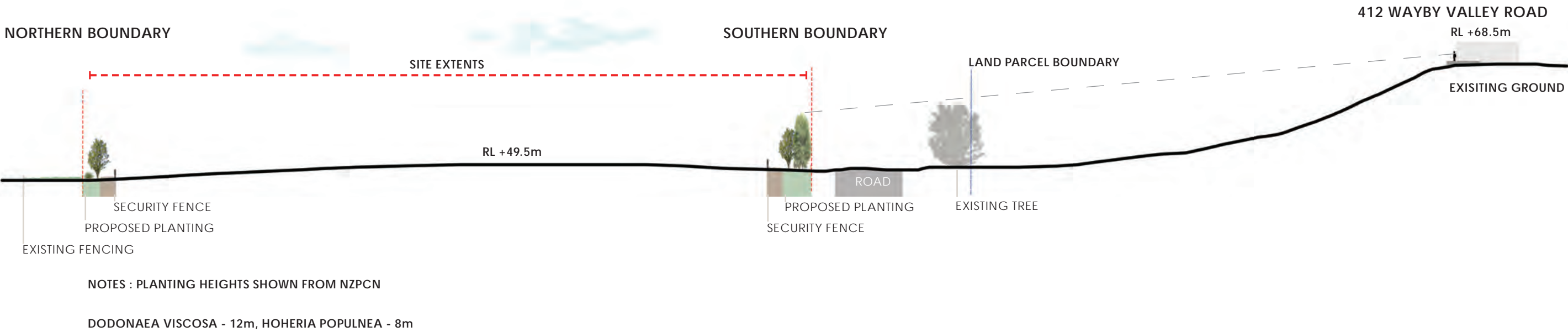


CROSS SECTION 2- AT 6 YEARS GROWTH

SCALE - 1:8000 @A3



CROSS SECTION 2- AT MATURITY



Attachment E	Auckland Council Specialist memos
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From: [Mica Plowman](#)
To: [Kris Lian](#)
Subject: RE: Specialist Input Request - Archaeology - Wellsford WTP NoR
Date: Thursday, 7 August 2025 12:07:04 pm

Hi Kris

I have looked over the documents for the revised Wellsford NoR and Wayby Valley Road- it's hard to see what has changed.. nonetheless, there is nothing archaeological recorded for miles and so the minor changes will have no effect, nor require changes to the original memo.

Best Mica Plowman

Mica Plowman | Principal Heritage Advisor
Cultural Heritage Implementation | Heritage Unit
Planning and Resource Consents Department | Planning and Governance
Division
[Mobile +64 021 825571](#) | [DDI 8908230](#) | [Extn \(46\) 8230](#)
Auckland Council, L24, 135 Albert Street, Auckland Central
Visit our website: www.aucklandcouncil.govt.nz

From: Chris Mallows <Chris.Mallows@aucklandcouncil.govt.nz> **On Behalf Of** Heritage Consents
Sent: Wednesday, 6 August 2025 7:06 pm
To: Mica Plowman <Mica.Plowman@aucklandcouncil.govt.nz>
Subject: FW: Specialist Input Request - Archaeology - Wellsford WTP NoR

Hi Mica,

Please can you review this consent?

Ngā mihi | Kind regards,

Chris Mallows | Team Leader Cultural Heritage Implementation
Heritage Unit | Planning and Resource Consents | Policy, Planning and Governance
Directorate

Waea pūkoro / Phone 021 807 348

Te Kaunihera o Tāmaki Makaurau / Auckland Council

Level 16, Te Wharau o Tāmaki Auckland House, 135 Albert Street, Auckland

www.aucklandcouncil.govt.nz

Sign up for our heritage e-newsletter at

<http://engage.ubiquity.co.nz/forms/Y0cnmwhVX0OqnwjQulvemQ>

Please consider the environment before printing this email.

From: Kris Lian <kris.lian@aucklandcouncil.govt.nz>

Memo

To: Kris Lian, Policy Planner; Regional, North West and Islands Unit; Auckland Council

From: Katherine Dorofaeff, Principal Planner, Spatial Planning and Policy Advice, Auckland Transport

Date: 23 October 2025

Subject: **Watercare NOR for Wellsford WTP - Transport comments**

1.0 Introduction

- 1.1 Watercare Services Limited (**Watercare**), has lodged a Notice of Requirement (**NOR**) for the Wellsford Water Treatment Plant (**WWTP**), at 411 Wayby Valley Road (and part of 254 Whangaripo Valley Road), Wellsford. Auckland Council (the **Council**) has advised that the application is at the conclusion of the section 92 stage, and has asked for Auckland Transport's (**AT**) input. In particular Council has asked for AT's comments on the proposed conditions.


2.0 Comments


- 2.1 I have reviewed the proposed designation conditions and sought input from relevant subject matter experts on the Transportation Assessment Report from Jacobs NZ Ltd dated 24 June 2025.
- 2.2 AT comments on the proposed conditions are as follows:

Topic	AT comments
Outline plan, conditions 3(c) and 5	<p>AT supports the requirement for the Outline Plan of Works to:</p> <ul style="list-style-type: none"> include a Construction Traffic Management Plan (CTMP) be accompanied by confirmation of Engineering Plan Approval from the Road Controlling Authority for the permanent entrance and stormwater discharge. <p>Condition 3(c) should be amended to refer to cross-reference condition 12 rather than condition 11.</p>
CTMP, conditions 12 to 14.	AT supports these conditions.

- 2.3 Following the review of the Transportation Assessment Report, AT has some comments on the operational vehicle access arrangements as follows:

SME	AT comments
Traffic engineering	The proposed site access is in-between bends. Although visibility is achieved as per the RTS 6, vehicles approaching the location might not have enough visibility of the truck movements. Support the installation of permanent warning

SME	AT comments
	<p>signs to show the concealed accessway' Also suggest installing permanent truck turning signage on the approach.</p> <p>Vehicle tracking at the development accessway shows left-in and left-out movements. Is this assumed to be the only turning movements to and from the site - what mitigation measures will be adopted to restrict the right-in and right-out movements? The vehicle movement also shows the truck is tracking over an existing driveway - is the intention to reconstruct this as a wide driveway?</p> <p>Support the intention as set out in Section 3.1 of the Transport Assessment to have pre-arranged deliveries with gates opened and closed by on-site staff so that the B-train drivers will not need to park on the road edge.</p>
Road safety	<p>There is a visibility restriction to the south. Safe Intersection Site Distance (SISD) for 60km/h is about 123m - see following markup from geomaps to illustrate and show approximate locations for access 1 and 2 :</p>  <p>The sightline in blue goes through property boundary and also has a vertical curve. See Photo 1 (page 15 of the Transport Assessment). There is a visibility restriction.</p> <p>For a Heavy Commercial Vehicle exiting the site, there should be the SISD. This allows for a northbound vehicle to avoid a collision.</p> <p>Consider the limited sightlines on exiting the site and either:</p> <ol style="list-style-type: none"> 1) Resolve as one access (the southern end). 2) Consider reversing the direction, this would be the most simple solution, see markup below.

SME	AT comments
	<p>This puts a vehicle exiting the site with a better view of both directions of traffic, and also ensures traffic along Wayby Valley Road has safe visibility at 60km/h to avoid a crash.</p> 

MEMO TO: Kris Lian
Policy Planner

FROM: Bin Qiu
Senior Specialist

DATE: 23/09/2025

SUBJECT: Notice of requirement (D.002476): To establish a new replacement water treatment plant (WTP) at 411 Wayby Valley Road
Peer review of noise and vibration effects
* * * * *

Dear Kris

I refer to your request for commenting on the potential noise effects for this application.

The NOR is to allow Watercare, the requiring authority, to establish a new designation at No.411 Wayby Valley Road, Wellsford for construction and operation of a *new Wellsford Water Treatment Plant (WTP)* at this site.

I have reviewed the applicant's noise report: Wellsford Water Treatment Plant Assessment of Acoustic Effects dated 9 June 2025 prepared by MDA and applicant's responses to council's S92 noise queries.

Auckland Unitary Plan Operative in part (AUP)

The application site has an area of ~11,500m², itself and the surrounding area are zoned Rural - Rural Production Zone under AUP: The potential noise matters of the NOR and the relevant AUP noise rules are these:

- Construction Noise and vibration – E25.6.27 (noise) and E25.6.30.(1) (vibration)
- Operational noise and vibration – E25.6.3 (noise) and E25.6.30.(2) (vibration)

Noise Assessment

Construction noise

The noise intensive works are described for the project as excavation, construction of retaining walls and foundation, and installation of underground sewage tank. The proposed work hours are standard hours between 7.30am to 6.00pm, Monday to Saturday for general construction but early start at 5am for concrete pours may be required, and the construction will take longer than 20 weeks to complete.

The 4 potential noise receivers have been identified in the report and listed in Table 1, who are located in in approximately from 55m to 150m the application site.

I confirm relevant AUP standards (E25.6.27.(4) are referenced: permitted weekday noise level of 70 dB LAeq covers the period 7.30am to 6:00pm and 45 dB LAeq and 75 dB LAmax for works starting at 5am.

The noisiest plant expected to be used and noise predictions at the adjacent receivers are outlined in Table 9 and Table 10 in the MDA Report.

Based on my experience, this information is representative and the noise assessment is performed in accordance with the NZS 6803 :1999 "*Acoustics – Construction Noise*". I note the construction noise levels have been predicted to readily comply with the relevant limits during typical day hours but the early concrete pours (if required) have been predicted to reach upto 61 dB LAeq, exceeding the noise limits of 45 dB LAeq at these neighbours: 399, 400 and 412 Wayby Valley Road.

Based on the above information, I confirm that the daytime construction works can meet the AUP construction noise limits but the early concrete works will exceed the AUP limit of 45 dB LAeq.

The construction vibration is predicted to fully comply with the AUP requirements. I concur with the assessment given the large separation to the adjacent dwellings.

The noise of upto 61 dB LAeq at the residential dwellings is likely to disturb the sleeping of the house occupants, MDA has suggested all concrete pours to be scheduled at daytime hours, but if early starts are required, MDA recommends to manage and mitigate the noise effect by implementing a CNVMP, which will include offering relocation of the receivers while the concrete pours are carried out.

I note that the proposed NOR conditions contain correct construction limits (in condition 9) and requirement for CNVMP for concrete works undertaken between 10pm and 7am. I further note that the proposed condition 11 sets out the details of the CNVMP including specific mitigation measures such as identifications of affected receivers, use of noise barriers, temporary relocation of receivers.

I am satisfied that these measures discussed above are the practical options to manage the early work noise and the construction noise effect can be mitigated to a reasonable level.

Operational noise

The applicable AUP noise limits for the operational noise are as follows measured within the notional boundary on any site in any rural zone

Time	Noise level
Monday to Saturday 7am-10pm	55dB LAeq
Sunday 9am-6pm	
All other times	45dB LAeq 75dB LAmax

The MDA noise analysis results are provided in its Table 7 and copied below:

Table 7: Calculated operational noise levels

Rec. no.	Address	Project Noise Limits [Daytime / Any other time]	Predicted noise level (Initial) (dB LAeq)	Predicted noise level (Future) (dB LAeq)	Complies?
R1	399 Wayby Valley Road	55 / 45	39	43	Yes
R2	400 Wayby Valley Road	55 / 45	40	44	Yes
R3	412 Wayby Valley Road	55 / 45	35	39	Yes
R4	437 Wayby Valley Road	55 / 45	34	38	Yes

It shows that the current proposed plant and the total noise in future project can comply with the AUP noise limits.

The noise of upto 44 dB LAeq is clearly over the surveyed local background noise levels (21 dB LA90) and would be clearly noticeable outside the affected houses.

MDA advised that the WTP noise would still be reasonable as at nighttime the receivers may mainly remain inside the houses, the internal noise levels would be 25 dB LAeq which is only faintly perceptible.

The noise surveys show that the ambient noise was controlled by the traffic on Wayby Valley Road and the noise levels (LAeq) were typically higher than the predicted WTP noise levels, which means the traffic noise may mask the WTP noise at the receivers' sites.

Given the large separation distances, I agree with MDA the WTP vibration can readily meet the AUP vibration requirements.

As such, I concur with the MDA assessment, the WTP noise will be compliant and reasonable.

I have reviewed the proposed noise conditions 7 and 8 for the WTP operations and considered they are appropriate for this NOR.

There may be a typo in condition 8, see highlighted in red which may be condition 7.

8. The WTP shall be designed and operated to meet the operational noise limits in Condition 6.

Conclusions

The applicant has provided adequate acoustic assessment through MDA to address the potential noise and vibration effect of the proposed activity. I have reviewed the noise reports and concur with their assessment and findings.

The construction works at daytime can comply with the AUP noise and vibration standards, but the early concrete pours (from 5am) may exceed the AUP noise limit (45 dB LAeq). However further assessment shows the best practicable measures are available and will be implemented through a CNVMP to address and mitigate the noise effect. The vibration is predicted to meet AUP vibration Standards at all receivers.

Operational noise can be designed to achieve the relevant AUP E25's requirement.

The proposed noise conditions for both WTP construction and operation are appropriate.

Therefore, the overall noise effect of this application is reasonable.

Please do not hesitate to contact me directly if you have any further queries.

Yours sincerely,

Bin Qiu
Senior Specialist I Contamination, Air & Noise Team

From: [CANconsents](#)
To: [Kris Lian](#)
Subject: RE: Lighting: Specialist Input Request – Contamination, Air & Noise – Wellsford WTP NoR
Date: Wednesday, 20 August 2025 10:37:45 am

Hi Kris,

The link worked, and I have looked through the information available in the application material.

Lighting standards

Chapter E24 of the AUP(OP) addresses cross boundary lighting effects.

Table E24.6.1.1 sets out the different lighting category classifications that apply for each zone – The proposed WTP site and adjacent sites are all zoned Rural – Rural Production Zone. This zone is classified as Lighting Category 3 – Medium Brightness.

To give some context, this is the same brightness category that applies to residential zoned land in urban areas, including the Terrace Housing and Apartment Buildings Zone.

E24.6.1 sets out the permitted activity standards for obtrusive / cross boundary lighting and glare matters. Key standards for light spill and glare matters are at E24.6.1(6) and (8).

For light spill (illuminance) it is notable that the standard (E246.1(6) only applies either at the boundary of an adjacent site containing a dwelling, or the window of a habitable room. Compliance with either is considered to meet the standard.

For glare (luminous intensity) the standard only applies where there are adjacent properties with dwellings.

It is important to note that this is not a visual amenity type assessment – lighting that meets the standards for spill and glare will still be visible from a long distance, and more so in a rural setting where there are not as many other light sources.

Proposed WTP

The only details of the proposed lighting for the WTP is at Page 32 of the Landscape and Visual Assessment (appendix F). This states:

The proposed WTP will not be continuously lit, however security lighting will be

required when the WTP needs to be accessed after daylight hours. Potential landscape and visual effects related to lighting of the Project are considered in three parts- skyglow, glare and light spill effects. Mitigation measures to reduce effects related to lighting will:

- o Limit the duration that lighting is used by using timers*
- o Use directional cones to limit and focus the light downwards and reduce effects related to light spill, glare and sky glow*
- o Use LED bulbs where possible to focus the light to a narrow area and reduce the amount of light spill.*

Pages 22 – 27 of the Landscape and Visual Assessment discuss the lines of sight to the 3 closest dwellings. This is relevant as it indicates where lighting may be screened out. For the purposes of E24 I will assume these are the ‘adjacent’ properties with residential dwellings. The distance from, and light of site to, the proposed WTP is summarised as follows;

- 399 Wayby Valley Road– 70m away, screened by ridgeline and vegetation
- 400 Wayby Valley Road – 90m away, may see some of the site – some obscuring
- 412 Wayby Valley Road – 130m away, can see the site

Screening planting is proposed for the WTP and will provide additional visual mitigation approximately 6 years after planting.

On the basis of the above, only 2 adjacent properties may have line of sight to lighting, one (400 Wayby Valley Road) with 90m separation and some obscured views and one (412 Wayby Valley Road) with 130m separation and a more open line of sight.

Whilst these properties can be considered adjacent, the dwellings are still significantly separated from the proposed WTP compared to typical separation distances within urban areas where the same Category 3 lighting levels apply. For context, continuous lighting for outdoor car parks in urban areas can regularly meet the Category 3 levels at adjacent residential dwellings in significantly less distance than the separation available in this proposed scenario.

The proposed WTP will not be continuously lit, with lighting only operating on an as-needed basis where access is needed outside daylight hours.

On the basis of the lighting being security style, intermittently required and the separation distances to adjacent dwellings, I don’t consider further information is required to conclude that lighting will comply with the relevant permitted activity

From: [CANconsents](#)
To: [Kris Lian](#)
Subject: RE: Contam: Specialist Input Request – Contamination, Air & Noise – Wellsford WTP NoR
Date: Wednesday, 20 August 2025 4:41:09 pm
Attachments: [image001.png](#)
[image002.png](#)

Hi Kris

I have reviewed the below documents in the context of the *National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS)* and Chapter E30 of the Auckland Unitary Plan (Operative in Part) (AUP OP) –Contaminated land:

- Wellsford Water Treatment Plant-Notice of Requirement -Watercare Services Limited (aurecon, 23 June 2025) (NoR)
- Potential Site Layout
- Site photos

The application documents show that Watercare has identified 411 Wayby Valley Road, Wellsford (11,800 m²), as its preferred location for a new, upgraded WTP to replace the existing WTP located at 362 Wayby Valley Road, Wellsford, which is at the end of its design life, susceptible to contamination and cannot always meet the current demands. The construction of the new WTP will involve approximately 15,500 m³ of cut and 500 m³ of fill for enabling works, construction of building platforms, accessways, retaining walls, structures, pipelines, utilities, drainages and security fence.

The AEE indicates that the site has no known history of Hazardous Activities and Industries List activity and is unlikely to be contaminated. However, it states minimal contamination is expected from farming practices that have occurred on site. It recommends preparing a Preliminary Site Investigation (PSI) or a Detailed Site Investigation (DSI) to confirm whether the soil on site is contaminated or not. The site visit photos indicate a storage container for carbon dioxide, which will be removed. The photos show a small area appeared to be earth worked or filled. The proposed PSI/DSI is expected to confirm any suspected contamination.

Since there are no apparent HAIL activities observed on the site, I concur with the AEE that the proposed earthwork can be assessed under discretionary pursuant to regulation 7 of the NESCS and the PSI/DSI can be conditioned. I recommend the following standard conditions to cover potential health and environmental risk from the proposed earthworks.

Condition 1: At least 10 working days prior to the commencement of earthworks, a Preliminary and Detailed Site Investigation (PSI/DSI) must be submitted to the council for review and certification. The PSI/DSI must:

- a. Detail sampling undertaken to characterise the site's contamination profile based on the PSI findings;
- b. Be prepared in accordance with the *Contaminated Land Management Guidelines No.1 & No.5*: (Ministry for the Environment, revised 2021);
- c. Include a map of sampling locations and tabulated sampling results;
- d. Include an interpretation of the sampling results against the Soil Contaminant Standards (SCS_{health}) for the protection of human health as set out in the *National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health* (NES:CS) and the Permitted Activity soil acceptance criteria detailed by Standard E30.6.1.4 of the AUP(OP); and

- e. Be prepared by a Suitably Qualified and Experienced contaminated land Practitioner (SQEP).

Condition 2: If the PSI/DSI as **per Condition 1** identifies soil contamination on the site, at least 10 working days prior to the commencement of earthworks, a Contamination Site Management Plan (CSMP) / Remediation Action Plan (RAP) (when remediation is required) must be submitted to the council for review and certification. The CSMP/RAP must:

- a. Detail the procedures and controls required during and following earthworks to minimise potential effects on human health and the environment as a result of actual and potential soil contamination;
- b. If remediation is required, detail how the site's surface soils are to be remediated and validated to achieve compliance with the relevant Soil Contaminant Standards (SCS_{health}) for the protection of human health as set out in the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES:CS) and the Permitted Activity soil acceptance criteria detailed by Standard E30.6.1.4 of the AUP(OP);
- c. Be prepared in accordance with the *Contaminated Land Management Guidelines No. 1* (Ministry for the Environment, revised 2011);
- d. Account for the soil contamination profile as detailed in the PSI/DSI as **per condition 1**;
- f. Be prepared by a Suitably Qualified and Experienced contaminated land Practitioner (SQEP).

Condition 3: In the event of the accidental discovery of contamination during earthworks which has not been previously identified, including asbestos material, the consent holder must immediately cease the works in the vicinity of the contamination, notify the council, and engage a Suitably Qualified and Experienced contaminated land Practitioner (SQEP) to assess the situation (including possible sampling and revision of the CSMP/RAP) and decide on the best option for managing the material.

Advice Note: Accidental discovery of contamination

Where unanticipated contamination is discovered during the works, a revision of the CSMP/RAP may be required to ensure that the contamination is appropriately managed. Any revision of the CSMP/RAP is required to be submitted to Council for certification prior to its implementation.

Condition 4: Within three months of the completion of earthworks on the site, a Works Completion Report (WCR) must be submitted to the Council for review and certification. The WCR must contain sufficient detail to address the following matters:

- a. A summary of the works undertaken, including the locations and dimensions of excavations and the volume of soil excavated;
- b. Conditions of the final site contamination profile, including details and results of any validation testing undertaken (with a map of sampling locations and tabulated sampling results) and interpretation of the results in the context of the NES:CS and the AUP(OP);
- c. Details and results of any other contamination testing undertaken during the works (including any sampling undertaken on materials re-used on site or imported to site);
- d. Records/evidence of the appropriate disposal for any material removed from the site;
- e. Records of any unexpected contamination encountered during the works and response actions, if applicable;
- f. Any on-going monitoring and/or management measures required to minimise risks to human health or the environment as a result of the final site contamination profile;

- g. Reports of any complaints, health and safety incidents related to contamination, and/or contingency events during the earthworks; and
- h. A statement certifying that all works have been carried out in accordance with the requirements of the CSMP and consent, otherwise providing details of relevant breaches, if applicable.

Regards
Sharon

Ngā mihi | Kind regards

**Sharon Tang |Senior Specialist|Contamination, Air & Noise Team
Specialist Unit|Planning & Resource Consents**

Ph 09 301 0101 | Mobile 027 491 2916

Auckland House, Level 6, 135 Albert Street, Auckland

Visit our website: www.aucklandcouncil.govt.nz

From: Kris Lian <kris.lian@aucklandcouncil.govt.nz>

Sent: Wednesday, 13 August 2025 10:14 am

To: CANconsents <canconsents@aucklandcouncil.govt.nz>

Subject: RE: Contam: Specialist Input Request – Contamination, Air & Noise – Wellsford WTP NoR

Hi Sharon,

Please try access via below link:

 [NoR Wellsford WTP Relodged](#)

Let me know if it works. Thanks.

Ngā mihi | Kind regards,

**Kris Lian | Policy Planner | Regional North West and Islands Unit
Policy, Planning & Governance**

Waea pūkoro / Phone [027 254 7263](tel:0272547263)

Te Kaunihera o Tāmaki Makaurau / Auckland Council

Level 16, Te Wharau o Tāmaki Auckland House, 135 Albert Street, Auckland

Aucklandcouncil.govt.nz

In the Office = ✓ Working from home = WFH

Mon	Tue	Wed	Thu	Fri
✓	WFH	✓	✓	✓

From: CANconsents <canconsents@aucklandcouncil.govt.nz>

Sent: Wednesday, 13 August 2025 9:06 am

To: Kris Lian <kris.lian@aucklandcouncil.govt.nz>

Subject: RE: Contam: Specialist Input Request – Contamination, Air & Noise – Wellsford WTP NoR

Hi Kris

I have picked up this job but I couldn't open those PDF documents. It appears the below error message. I can open other PDF files.

Can you please check it?

From: [CANconsents](#)
To: [Kris Lian](#)
Subject: RE: Contam: Specialist Input Request – Contamination, Air & Noise – Wellsford WTP NoR
Date: Monday, 3 November 2025 1:55:37 pm
Attachments: [image001.png](#)
[image002.png](#)

Hi Kris

As per our discussions, I understand that Watercare intends to remove contamination conditions all together. Based on the information being reviewed, the only uncertainty area is a small area where the photos show the area appeared to have been earth worked or filled. Uncertified fill is classified as a HAIL activity. However, in consideration of the large size of the site, it is likely that any fill materials were sourced from onsite. Since there are no known HAIL activities occurred on the land, I concur with the applicant that the NESCS does not apply and no condition or recommendations with regard to soil contamination are required. Any accidental discovery of contamination during earthworks can be dealt with under the accidental discovery rules of the AUP OP.

Regards
Sharon

Ngā mihi | Kind regards

**Sharon Tang | Senior Specialist | Contamination, Air & Noise Team
Specialist Unit | Planning & Resource Consents**

Ph 09 301 0101 | Mobile 027 491 2916

Auckland House, Level 6, 135 Albert Street, Auckland

Visit our website: www.aucklandcouncil.govt.nz

From: CANconsents <canconsents@aucklandcouncil.govt.nz>
Sent: Wednesday, 20 August 2025 4:41 pm
To: Kris Lian <kris.lian@aucklandcouncil.govt.nz>
Subject: RE: Contam: Specialist Input Request – Contamination, Air & Noise – Wellsford WTP NoR

Hi Kris

I have reviewed the below documents in the context of the *National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS)* and Chapter E30 of the Auckland Unitary Plan (Operative in Part) (AUP OP) –Contaminated land:

- Wellsford Water Treatment Plant-Notice of Requirement -Watercare Services Limited (aurecon, 23 June 2025) (NoR)
- Potential Site Layout
- Site photos

The application documents show that Watercare has identified 411 Wayby Valley Road, Wellsford (11,800 m²), as its preferred location for a new, upgraded WTP to replace the existing WTP located at 362 Wayby Valley Road, Wellsford, which is at the end of its design life, susceptible to contamination and cannot always meet the current demands. The construction of the new WTP will involve approximately 15,500 m³ of cut and 500 m³ of fill for enabling works, construction of building platforms, accessways, retaining walls, structures, pipelines,

utilities, drainages and security fence.

The AEE indicates that the site has no known history of Hazardous Activities and Industries List activity and is unlikely to be contaminated. However, it states minimal contamination is expected from farming practices that have occurred on site. It recommends preparing a Preliminary Site Investigation (PSI) or a Detailed Site Investigation (DSI) to confirm whether the soil on site is contaminated or not. The site visit photos indicate a storage container for carbon dioxide, which will be removed. The photos show a small area appeared to be earth worked or filled. The proposed PSI/DSI is expected to confirm any suspected contamination.

Since there are no apparent HAIL activities observed on the site, I concur with the AEE that the proposed earthwork can be assessed under discretionary pursuant to regulation 7 of the NESCS and the PSI/DSI can be conditioned. I recommend the following standard conditions to cover potential health and environmental risk from the proposed earthworks.

Condition 1: At least 10 working days prior to the commencement of earthworks, a Preliminary and Detailed Site Investigation (PSI/DSI) must be submitted to the council for review and certification. The PSI/DSI must:

- a. Detail sampling undertaken to characterise the site's contamination profile based on the PSI findings;
- b. Be prepared in accordance with the *Contaminated Land Management Guidelines No. 1 & No.5:* (Ministry for the Environment, revised 2021);
- c. Include a map of sampling locations and tabulated sampling results;
- d. Include an interpretation of the sampling results against the Soil Contaminant Standards (SCS_{health}) for the protection of human health as set out in the *National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health* (NES:CS) and the Permitted Activity soil acceptance criteria detailed by Standard E30.6.1.4 of the AUP(OP); and
- e. Be prepared by a Suitably Qualified and Experienced contaminated land Practitioner (SQEP).

Condition 2: If the PSI/DSI as **per Condition 1** identifies soil contamination on the site, at least 10 working days prior to the commencement of earthworks, a Contamination Site Management Plan (CSMP) / Remediation Action Plan (RAP) (when remediation is required) must be submitted to the council for review and certification. The CSMP/RAP must:

- a. Detail the procedures and controls required during and following earthworks to minimise potential effects on human health and the environment as a result of actual and potential soil contamination;
- b. If remediation is required, detail how the site's surface soils are to be remediated and validated to achieve compliance with the relevant Soil Contaminant Standards (SCS_{health}) for the protection of human health as set out in the *National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health* (NES:CS) and the Permitted Activity soil acceptance criteria detailed by Standard E30.6.1.4 of the AUP(OP);
- c. Be prepared in accordance with the *Contaminated Land Management Guidelines No. 1* (Ministry for the Environment, revised 2011);
- d. Account for the soil contamination profile as detailed in the PSI/DSI as **per condition 1**;
- f. Be prepared by a Suitably Qualified and Experienced contaminated land Practitioner (SQEP).

Condition 3: In the event of the accidental discovery of contamination during earthworks which has not been previously identified, including asbestos material, the consent holder must immediately cease the works in the vicinity of the contamination, notify the council, and engage a Suitably Qualified and Experienced contaminated land Practitioner (SQEP) to assess the situation (including possible sampling and revision of the CSMP/RAP) and

decide on the best option for managing the material.

Advice Note: Accidental discovery of contamination

Where unanticipated contamination is discovered during the works, a revision of the CSMP/RAP may be required to ensure that the contamination is appropriately managed. Any revision of the CSMP/RAP is required to be submitted to Council for certification prior to its implementation.

Condition 4: Within three months of the completion of earthworks on the site, a Works Completion Report (WCR) must be submitted to the Council for review and certification. The WCR must contain sufficient detail to address the following matters:

- a. A summary of the works undertaken, including the locations and dimensions of excavations and the volume of soil excavated;
- b. Conditions of the final site contamination profile, including details and results of any validation testing undertaken (with a map of sampling locations and tabulated sampling results) and interpretation of the results in the context of the NES:CS and the AUP(OP);
- c. Details and results of any other contamination testing undertaken during the works (including any sampling undertaken on materials re-used on site or imported to site);
- d. Records/evidence of the appropriate disposal for any material removed from the site;
- e. Records of any unexpected contamination encountered during the works and response actions, if applicable;
- f. Any on-going monitoring and/or management measures required to minimise risks to human health or the environment as a result of the final site contamination profile;
- g. Reports of any complaints, health and safety incidents related to contamination, and/or contingency events during the earthworks; and
- h. A statement certifying that all works have been carried out in accordance with the requirements of the CSMP and consent, otherwise providing details of relevant breaches, if applicable.

Regards
Sharon

Ngā mihi | Kind regards

Sharon Tang |Senior Specialist|Contamination, Air & Noise Team
Specialist Unit|Planning & Resource Consents
Ph 09 301 0101 | Mobile 027 491 2916
Auckland House, Level 6, 135 Albert Street, Auckland
Visit our website: www.aucklandcouncil.govt.nz

From: Kris Lian <kris.lian@aucklandcouncil.govt.nz>
Sent: Wednesday, 13 August 2025 10:14 am
To: CANconsents <canconsents@aucklandcouncil.govt.nz>
Subject: RE: Contam: Specialist Input Request – Contamination, Air & Noise – Wellsford WTP NoR

Hi Sharon,

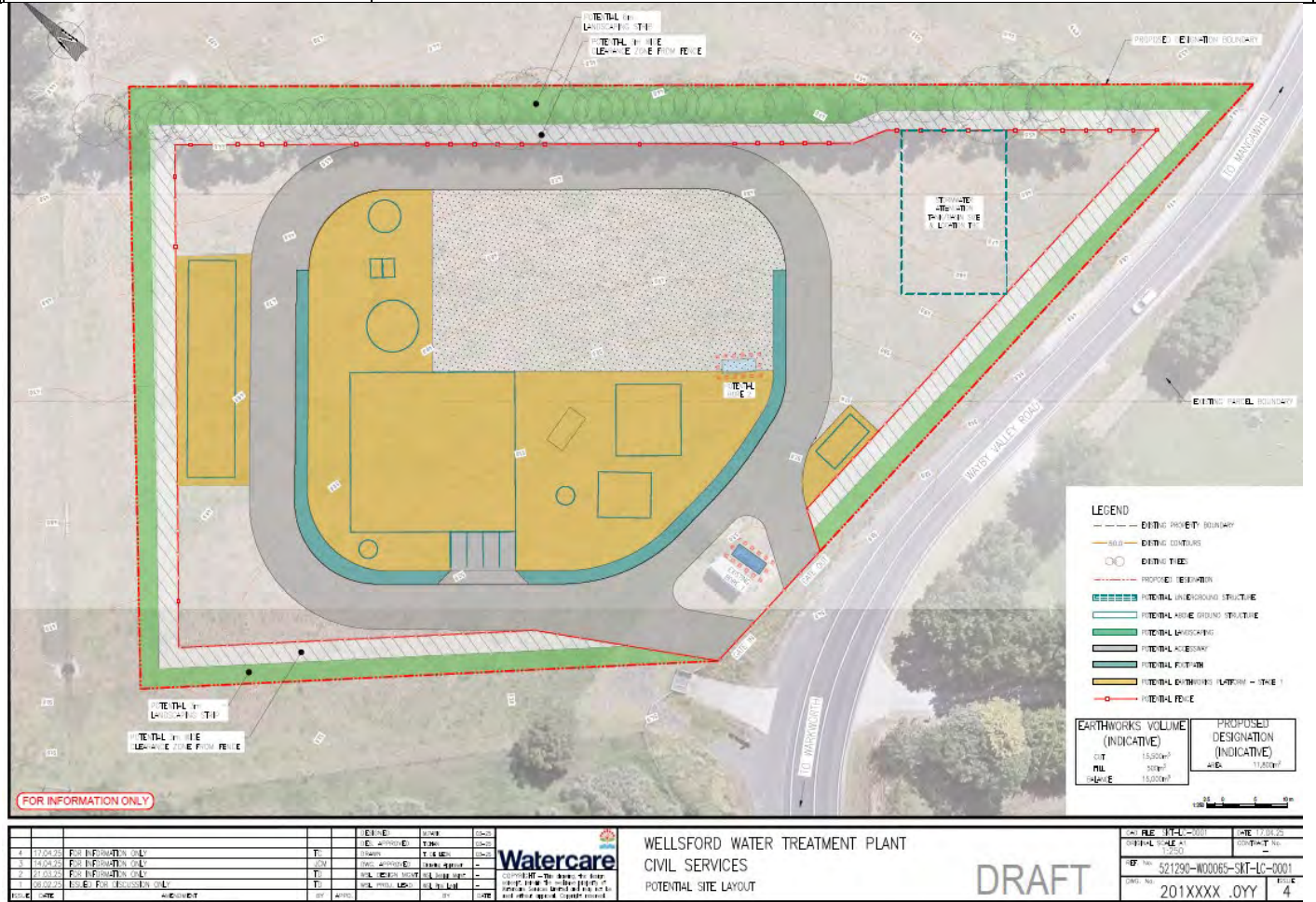
Please try access via below link:

☐ [NoR Wellsford WTP Relodged](#)

Memo - Development Engineering Assessment

Application # D.002401.01 Title: Wellsford Water treatment Plant NOR (411 Wayby Valley)

To	Planner Kris Lian
From	Engineer Steve Cavanagh
Date	Friday, 16 September 2024, updated 24th of Sept-25.
Proposal & description	Watercare Services Limited (WSL) require a new treatment plant to satisfy water supply demands in the Wellsford township. Note new proposed layout plan below - site increased in size from 3500m ² to 11,800m ² :
Site address	411 Wayby Valley Rd
Applicant's name	Watercare Services Limited (WSL)
Reports and Information	<ul style="list-style-type: none">Transportation assessment Report by Jacobs, reference IA312400-002;Updated Traffic report by Jacobs ref IS529800 revision 2 dated the 24th of June 2025SW Memo by Aurecon reference 521290-065, dated the 17th of April 2025Wellsford Water Treatment Plant Notice of Requirement by Aurecon, reference 521290-097, dated the 24th of May 2024.
Asset Groups	Auckland Transport – limited to access and SW discharge.
Site Visit	19 th of August 2025



New proposed Layout Plan

Engineering suitability for proposed use:

Transport	Summary of effects
Parking	For construction vehicles only – to be part of the construction management plan condition which will require the safe working operation of construction and operational vehicles and the collection and treatment of contaminated water.
Access/ egress/ Traffic Effects	<p>Access is directly from/to Wayby Valley road. The construction traffic has been estimated as 80 Vehicle movements per day. A report has been provided by Jacobs which assesses these effects. It recommends a Construction Traffic Management Plan to mitigate these effects. The report provided states that the operational traffic <i>“is anticipated to include up to two daily site visits (light vehicles) associated with operation and maintenance, and one materials delivery per month (heavy vehicle). Any such deliveries will be pre-arranged, and staff will be on site to open and close (and lock) the double gateway. This small traffic volume will have a little effect on the surrounding transport network.”</i></p> <p>It also covers off the geometry in terms of entering and exiting the site. I note it has an unusually large shoulder fronting the site and Jacobs have demonstrated adequate sightlines for egress. <i>The site will require the approval of auckland Transport for a commercial vehicle crossing.</i></p>
Earthworks	Silt sedimentation controls, Geotechnical, contamination
Erosion control	The applicant states measures will be provided. Standard conditions would apply with a RC. Covered by Specialist.
Extent/ Volumes	No volumes have been provided.
Geotechnical Stability, Soils	Not provided – would be covered under both RC and BC stages where applicable. The soils are allochthonous (Mahurangi Limestone) and approximately described as Moderately expansive. As the works would require a building consent, the applicant would be required to provide a report at that time.
Management	A Construction Management plan is required and should be covered by conditions.
Contamination	<p>The site is to be developed to a commercial industrial standard. During the construction phase contamination Should be covered by a suitably qualified professional. The <i>Wellsford Water Treatment Plant Notice of Requirement</i> by Aurecon, reference 521290-097, dated the 24th of May 2024, states:</p> <p><i>It is recommended that a PSI or a DSI is prepared for the site to confirm whether the soil on site is contaminated or not.</i></p> <p>However there is no mention in their proposed Designation conditions. This should be included. Any remediation recommended by those reports needs to be undertaken.</p>
Noise	As above Noise has been covered in the proposed and the applicant states they are to remain within the National standards for both construction and operational phases. The applicant has advised that they have an ongoing consultation process with affected landowners.
Services	Stormwater, wastewater, water supply, power
Stormwater & Flooding	The site is 3500m ² and the majority of the area is to be paved and roofed. <i>[This has now been increased to 11,800m² due to land acquisition by WSL]</i> There was some discussion around the direct discharge (i.e. no attenuation) to the Auckland Transport(AT) water table in the road reserve frontage. This matter has been covered off by the Specialist by Jacobs. Any RC or BC would require AT's approval and as the RCA, the applicant would be required to comply with any conditions they applied.
Wastewater	<p>The NOR documentation refers to “backwash waste tanks and sludge holding tank” and “a staff kitchen and bathroom”. Clarification was sought from the applicant and this is the response:</p> <p><i>The wastewater details will be determined during detailed design, which will not commence until the site has been designated and will be confirmed in the OPW. These matters will be addressed through regional resource consents, if required.</i></p> <p>Conclusion: to be dealt with at RC and/or BC where applicable.</p>
Water Supply	WSL have established supply on site.
Coastal inundation	NA

Summary:

The effects for consideration by Regulatory Engineering are limited to: Geotechnical, Flooding, Stormwater, wastewater, earthworks and traffic. They would require detail for any Resource Consent application and would be assessed accordingly. In brief:

Geotechnical: It is concluded that any BC would require a report to cover the Allochthon and expansive soils.

Flooding: There are no immediate flood concerns for the site. There is downstream flooding however the Specialists have concluded the effects are less than minor.

Stormwater: The proposal is to discharge stormwater directly to an AT water table. Permission is required from AT as the Road controlling authority to implement this. It is likely conditions would be proposed. I note the SW has been covered by Jacobs.

Wastewater: This will be covered by building consent. The applicant has advised this will likely be by cartaway methods.

Earthworks: As volumes are likely to exceed 1,000 m³ a RC should applied for.

Suggested conditions:

I support this application provided the following conditions are applied:

1. Conditions and related advice notes (where duplicate with other specialists please delete)

1.1. All works to comply with the Plans and reports provided with the application; Planner to list.

2. Vehicle Crossing

The consent holder must provide a new vehicle crossing or crossings to serve the site adjoining the roading network. The crossing(s) must be designed and formed in accordance with the requirements of Auckland Transport "Road layout and geometric design; Rural Vehicle Crossing" (Sheet 1 to 4),; GD020. The new crossing(s) must maintain an at-grade (level) pedestrian footpath across the length of the crossing, using the same materials, kerbing, pavings, patterns and finish as the footpath on each side of the crossing. Certification that works have been satisfactorily undertaken must be provided when applying for a certificate under section 224(c) of the RMA.

3. A Geotechnical Completion Report from a geo-professional responsible for supervising the works shall be provided to the Team Leader, Compliance Monitoring Orewa, within ten (10) working days following completion, confirming that the works have been completed in accordance with the plans, reports and specifications provided, and The Engineering Standards, within ten (10) working days following completion. The Geotechnical Completion Report shall contain the required information as specified in NZS4404:2010 section 2.6.

4. 12. (Conditions provided by Auckland Councils Transportation Engineer):

5. Construction Traffic Management Plan :

Prior to the commencement of earthworks or construction a finalised Construction Traffic Management Plan (CTMP) prepared in accordance the Council's requirements for CTMPs and New Zealand Transport Authority's Code of Practice for Temporary Traffic Management must be submitted to Council. No construction activity must commence until confirmation is provided from the Council that the CTMP satisfactorily meets the requirements of the Council's requirements for CTMPs and New Zealand Transport Authority's Code of Practice for Temporary Traffic Management, and all measures identified in that plan as needing to be put in place prior to commencement of works have been implemented.

- a. Measures to be adopted to maintain areas of the site that are visible from public spaces and private property in a tidy condition in terms of rubbish disposal, storage and unloading of materials, etc.
- b. Plans showing areas where stockpiles, equipment (including contractor parking) will occur so that there is no obstruction of public spaces (e.g. roads).
- c. Plans showing the location of any site offices, staff facilities and staff car parking required during the construction period.

- d. An overview of measures that will be adopted to prevent unauthorised public access during the construction period.
- e. Location of traffic signs on surrounding streets and proposed signage for traffic management purposes during construction.
- f. Measures to ensure satisfactory vehicle and pedestrian access is maintained to adjacent properties at all times.
- g. Procedures for controlling dust, and the removal/ introduction of soil, debris, and materials.
- h. Temporary protection measures that will be installed to avoid damage to public roads, footpaths, berms, kerbs, drains, reserves or other public assets as a result of the earthworks and construction activities.

The Construction Management Plan should contain include specific details relating to avoiding, remedying or mitigating adverse effects on the environment from earthworks, construction and management of all works associated with this development as follows:

Advice note:

Prior to carrying out any work in the road corridor, the applicant is required to submit to Auckland Transport a Corridor Access Request (CAR) and construction traffic management plan (CTMP), work must not commence until such time as the applicant has approval in the form of a Works Access Permit (WAP). The application may be made through <http://www.beforeudig.co.nz/> and 15 working days should be allowed for approval. More information is available on Auckland Transport's website <https://at.govt.nz/about-us/working-on-the-road/corridor-access-requests/>

6. Damage to public roading assets

Any carriageway, footpath, kerb, crossings, or other Auckland Transport assets damaged as a result of the construction or earthworks activity must be repaired, reinstated or reconstructed in accordance with relevant Auckland Transport design guidelines at the time. An Engineering Completion Certification certifying that the above condition has been met must be provided in support of 224 application.

7. Engineering Plan Approval

All roading assets to be vested to Auckland Transport will require engineering approval(s) to be obtained from the council prior to the commencement of any construction work or prior to the lodgement of the survey plan pursuant to s223 of the RMA, whichever comes first. All assets to be vested to Auckland Transport must be constructed in accordance with Auckland Transport standards.

7.1. Advice notes:

See the council's website (www.aucklandcouncil.govt.nz) for more information on the engineering approval process, or call (09) 301 0101 and ask to speak to a Development Engineer from your local service centre.

Prior to the construction of any road signage, road markings or traffic control devices within the legal road the consent holder is required to submit a Resolution report for approval by Auckland Transport Traffic Control Committee to legalise the proposed traffic control devices (e.g. traffic signs, road marking and traffic calming devices). The resolutions, prepared by a qualified traffic engineer, will need to be approved so that the changes to the road reserve can be legally implemented and enforced. The resolution process may require public consultation to be undertaken in accordance with Auckland Transport's standard procedures. It is the responsibility of the consent holder to prepare and submit a permanent Traffic and Parking Changes report to Auckland Transport for review and approval. It is recommended that the resolution process be initiated at least 8 weeks prior to the installation permanent traffic and parking controls. No installation of any road markings will be permitted before the resolution is approved by the Auckland Transport Traffic Control Committee (TCC).

- 8.** At the time a resource consent (or where a resource consent is not required, building consent) application is submitted for the proposed activity. It must be demonstrated that sufficient water volume, pressure & flow will be provided in accordance with NZFS Fire Fighting Water Supplies COP SNZ 4509:2008 and that this water supply is accessible for firefighting purposes. Should the water supply be provided by way of tank storage, this storage must be located a safe distance away from any building in accordance with the aforementioned COP. If an alternative fire- fighting water supply is to be provided the written approval of that system from Fire and Emergency New Zealand must be provided with the building consent application.

From: [Naz Tavasoli](#)
To: [Kris Lian](#)
Subject: RE: Request for Ecological Advice - NoR for Replacement Wellsford WTP: WSB D.0005476
Date: Tuesday, 19 August 2025 2:25:45 pm
Attachments: [image001.png](#)
[image002.png](#)

Hi Kris,

I have reviewed the relevant documents and discussed the photos with my colleague. Based on this, it is highly unlikely that a wetland exists within the site or within approximately 100 m of the site.

As such, the proposed earthworks activity is considered to be permitted. No technical memo is required.

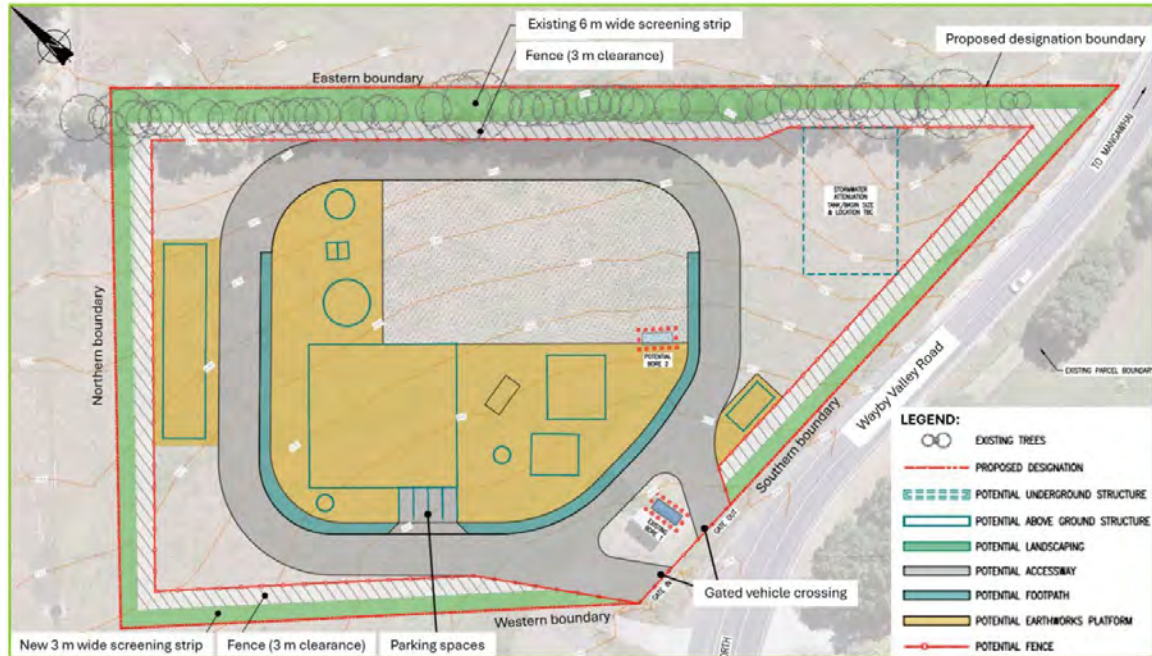


Figure 2-1: Potential WTP Layout



Ngā mihi | Kind regards

Dr Naz Tavasoli | Environmental Specialist

Earth, Streams and Trees | Specialist Unit, Planning & Resource Consents Department

Te Kaunihera o Tāmaki Makaurau / Auckland Council

Waea pūkoro / Phone 0272491558, Email: naz.tavasoli@aucklandcouncil.govt.nz

Level 6, Te Wharau o Tāmaki Auckland House, 135 Albert Street, Auckland, aucklandcouncil.govt.nz

From: Fiona Harte <Fiona.Harte@aucklandcouncil.govt.nz> **On Behalf Of** ESandTSpecialistUnit
Sent: Wednesday, 6 August 2025 1:39 pm
To: Naz Tavasoli <naz.tavasoli@aucklandcouncil.govt.nz>
Cc: Kris Lian <kris.lian@aucklandcouncil.govt.nz>
Subject: FW: Request for Ecological Advice - NoR for Replacement Wellsford WTP: WSB D.0005476

Hi Naz,

Can you please assist Kris with a check for any streams/wetlands within proximity to the proposal? For this notice of requirement for the policy team.

memo

Date: 10 October 2025

To: **Kris Lian** – Policy Planner, Te Kaunihera o Tāmaki Makaurau / Auckland Council
Policy, Planning and Governance Division, Planning and Resource Consents Department
Regional North West and Islands Unit – by email to: kris.lian@aucklandcouncil.govt.nz

From: **Peter Kensington** – Consultant Landscape Architect
KPLC Limited – by email from: peter@kplc.co.nz

Re: **Notice of Requirement (NoR) to Auckland Council from Watercare Services Limited (Watercare) to designate land for a new Water Treatment Plant at 411 Wayby Valley Road, Wellsford**
Specialist review advice (assessment of landscape and visual amenity effects)

Tēnā koe Kris

1. This memo sets out the findings from my review of the above matter, in response to your request for specialist review advice brief, dated 30 July 2025, and further to our subsequent email exchanges. I understand that the NoR is seeking to designate the property at 411 Wayby Valley Road for water supply purposes, including abstraction, treatment and storage of water; and that this new public utility facility will replace the existing water treatment infrastructure located at 362 Wayby Valley Road.
2. I have reviewed all the NoR material, concentrating on a review of following specific information:
 - i. *‘Wellsford Water Treatment Plant, Notice of Requirement, Watercare Services Limited’*, prepared by Aurecon New Zealand Limited, dated 23 June 2025; and
 - ii. *‘New Wellsford Water Treatment Plant – NoR, Landscape and Visual Effects Assessment’*, prepared by Boffa Miskell Limited, dated 30 May 2025 (**Boffa Miskell Assessment**), along with the supporting graphic supplement and Landscape Mitigation Planting Plan (LMPP) documents.
3. I have also read the response from Watercare to Auckland Council’s request for further information (as attached to your email dated 16 September 2025). This included clarification around various matters which I had raised with you following my preliminary review of the originally submitted NoR material; and included a letter from Watercare to Auckland Council, dated 15 August 2025, a memorandum from Boffa Miskell (Oliver May) to Watercare (Paul Futter), dated 8 September 2025, and an updated LMPP.
4. I have visited the site on 18 June 2024 when reviewing an earlier NoR from Watercare for this proposal. I also viewed (from the roadside) the existing Watercare Water Treatment Plant at Warkworth that day.

Watercare assessment conclusions

5. The Boffa Miskell assessment reaches the following conclusions:
- i. Low (less than minor) adverse landscape effects will arise during construction; and very low adverse landscape effects during operation (following establishment of mitigation planting);
 - ii. Very low to low (less than minor) adverse visual effects will arise during construction and during operation when viewed from the majority of existing residential dwellings on nearby properties and from public roads; and
 - iii. Moderate (more than minor) potential adverse visual effects *may* arise during construction, if a dwelling were to be constructed on the consented building platform on the property at 437 Wayby Valley Road, or there may be no adverse effects, if no dwelling is constructed. Low (less than minor) adverse visual effects during operation would occur if viewed from a future dwelling.
6. These conclusions are reliant on the implementation and ongoing management of the proposed Landscape Mitigation Planting Plan and other proposed conditions relating to the design and materiality of buildings and structures that will be established within the designation footprint for the activity. Of relevance is the proposal to limit building heights within various parts of the site and for future buildings and structures to be no greater than 9.0m in height, with specified materials and colour controls.
7. I am also aware that Ngāti Manuhiri have provided a Cultural Impact Assessment for the proposal, which is in support (subject to various conditions and ongoing engagement), primarily because the new site will relocate the existing WTP infrastructure away from the current proximity to the Hōteao Awa / River.

Review comments

8. Following my review of the Boffa Miskell Assessment, it is my opinion that it is proportionate to the relevant issues and has been well prepared following an appropriate methodology, consistent with the NZILA¹ Aotearoa New Zealand Landscape Assessment Guidelines, Te Tangi a Te Manu (2022).
9. The assessment is supported by appropriate graphic attachments, including mapping and photographs from representative viewpoint locations. I confirm that I visited each of these viewpoints as part of my specialist review. I concur with the description of the existing environment (Section 4.0), of the visual catchment and viewing audiences (Section 5.0) and the assessment of effects (Section 6.0). The additional information that has been provided by Watercare in response to the council's request, has also been very helpful in confirming my assessment review findings.
10. I agree that there will be less than minor adverse landscape and visual effects arising from the proposal to designate the site for water supply purposes (during both construction and operation), subject to conditions. This includes less than minor adverse effects on the visual amenity values of people viewing the site and proposal from private properties in the vicinity of the site, which includes my specific consideration of the potential adverse visual effects from dwellings at 412 and 437 Wayby Valley Road.
11. I also understand that Watercare have obtained the written approval of the owners and occupiers of these two properties, as well as for the property at 487 Wayby Valley Road. As such, there are no specifically affected persons and I agree that adverse landscape and visual effects overall will be less than minor.

¹ Tuia Pito Ora New Zealand Institute of Landscape Architects

Proposed conditions

12. I have reviewed the draft conditions proposed by Watercare and agree with the intent of those conditions which aim to assist with the mitigation of potential adverse landscape and visual effects.
13. As you will be aware, my initial review of these proposed conditions for the designation highlighted that Watercare had not initially proposed to include all of the recommendations for various mitigation measures that have been suggested in the Boffa Miskell Assessment². In my opinion, those recommended mitigation measures are important to help ensure that future buildings and structures that might be associated with the water treatment plant on this site, will be appropriate and well-designed, such that they can integrate successfully into the rural landscape and not result in adverse landscape and visual effects on rural character and visual amenity values.
14. It is pleasing to see that Watercare have now provided an updated set of proposed conditions which now include these recommendations, as I had suggested. I therefore confirm that I support the version of the proposed conditions that was included with your email to me dated 9 October 2025.

I hope the above response is understandable and meets requirements to assist with the completion of your recommendation reporting. Please let me know if you require any clarification or further specialist advice.

Ngā mihi

Peter Kensington

Email: peter@kplc.co.nz

Phone: 027 227 8700



Registered

² As set out in the executive summary and at Sections 7.0 and 8.0

Attachment 2
Watercare Services Limited Decision

26 November 2025

Kris Lian

Policy Planner

Planning Regional, North, West & Islands

Plans and Places

Auckland Council

Via email: unitaryplan@aucklandcouncil.govt.nz &
kris.lian@aucklandcouncil.govt.nz

Dear Kris,

NOTICE OF REQUIREMENT FOR 411 WAYBY VALLEY ROAD, WELLSFORD – FOR WATER SUPPLY PURPOSES

The purpose of this letter is in response to Auckland Council's recommendation letter (dated 24 November 2025) in relation to the Notice of Requirement (NoR) by Watercare Services Limited ("Watercare") for a designation. The designation is for the Wellsford Water Treatment Plant at 411 Wayby Valley Road, Wellsford.

In accordance with Section 172(1) of the Resource Management Act 1991, Watercare advises Auckland Council of its decision to:

1. Accept in whole the recommendation that the NoR be confirmed.
2. Accept the conditions of the NoR as shown in Attachment C.

Please contact me if you wish to discuss any matters relating to this letter.

Yours faithfully,



Tanvir Bhamji
Resource Consenting Manager
Watercare Services Limited

Attachment 3
Watercare Services Limited Schedule and
Designation 9386 Wellsford Water Treatment Plant conditions
(Strikethrough/Underscore)

Designation Schedule - Watercare Services Ltd (1/3)

North and West

Number	Purpose	Location
9300	Water supply purposes - pump station, reservoir and associated structures	2A Sunset Road, Unsworth Heights
9301	Water supply purposes - pump station, future reservoirs and associated structures	Section 1 Survey Office Plan 555200, 53 Schnapper Rock Road, Albany
9302	Water supply purposes - reservoir, pump station and associated structures	106 Pupuke Road, Hilcrest
9303	Water supply Purposes - pump station and associated structures	39 Killarney Street and part of adjoining road reserve, Takapuna
9304	Water Supply purposes - reservoirs and associated structures	83 and 89 Waipa Street, Birkenhead
9305	Water supply purposes - reservoir and associated structures	395 Upper Harbour Drive, Greenhithe
9306	Water supply purposes - reservoir and associated structures	Section 1 Survey Office Plan 557618, 192A Browns Bay Road, Murrays Bay
9307	Water supply purposes - reservoir and associated structures	179 Kowhai Road, Mairangi Bay
9308	Water supply purposes - reservoir, pump station and associated structures	253 Forrest Hill Road, Forrest Hill
9309	Water supply purposes - existing and proposed reservoirs and associated structures	69 Corinthian Drive, Albany
9310	Wastewater purposes - wastewater treatment plant odour buffer area	Rosedale Park, and reserves, roads and motorway in the vicinity of the wastewater treatment plant
9311	Wastewater purposes - wastewater treatment plant and underground route of outfall to Mairangi Bay	Rosedale Road and Upper Harbour Highway, Albany, then via various properties and roads to Mairangi Bay
9312	Water supply purposes - pump station and associated structures	22B Easter Parade, Glen Eden
9313	Water supply purposes - pump station and associated structures	161C Colwill Road, Massey
9314	Water supply purposes - pump station and associated structures	47A Phillip Avenue, Glen Eden
9315	Water supply purposes - reservoir and associated structures	126 McEntee Road, Waitakere
9316	Water supply purposes - reservoir and associated structures	270 Don Buck Road, Massey
9317	Water supply purposes - reservoir and associated structures	893 and 895 Scenic Drive North, Swanson
9318	Water supply purposes - reservoir and associated structures	272A Scenic Drive, Titirangi
9319	Water supply purposes - reservoir and associated structures	19 Bush Road, Waiatarua

9320	Water supply purposes - reservoir and associated structures	1076A Huia Road, Huia
9321	Water supply purposes - water catchment headworks areas	Waitakere Ranges
9322	Water supply purposes - headworks services land	Waitakere Ranges
9323	Water supply purposes - water treatment plant and associated structures	105-121 Christian Road, Swanson and 21 Long Road, Bethells
9324	Water supply purposes - water treatment plants and associated structures	Woodlands Park Road, Manuka Road and Exhibition Drive, Titirangi
9325	Water supply purposes - reservoir and associated structures	88 Sunhill Road, Glen Eden
9326	Water supply purposes - reservoir and associated structures	166-176 Konini Road, Titirangi
9327	Wastewater purposes - storage tanks and associated structures	56 The Concourse, Henderson
9328	Water supply purposes - pump station and associated structures	143 Flanshaw Road, Te Atatu
9329	Water supply purposes - pump station and associated structures	Road Reserve on Pleasant Road / Titirangi Road Corner
9330	Water supply purposes - pump station and associated structures	Totara Road Esplanade Reserve, 9 Kelvin Crescent, Te Atatu Peninsula
9331	Water supply purposes - water treatment plant and associated structures	415A Te Atatu Road, Te Atatu
9332	Water supply purposes - water treatment plant and associated structures	Wood Bay Beach Reserve in the vicinity of 81 Wood Bay Road, Titirangi
9333	Water supply purposes - pump station and associated structures	Road Reserve, adjoining 172A Laingholm Drive, Laingholm
9334	Water supply purposes - pump station and associated structures	97B Fred Taylor Drive, Whenuapai
9335	Water supply purposes - water treatment plant	362 Wayby Valley Road, Wellsford
9336	Water supply purposes - reservoir and associated structures	Worthington Road (Lot 1 DP 57349), Wellsford
9337	Wastewater purposes - wastewater treatment plant	Between State Highway 1 and Rustbrook Road (Lot 3 DP 64870), Wellsford
9338	Withdrawn	
9340	Wastewater purposes - wastewater treatment plant	64 Jones Road, Omaha Flats
9341	Water supply purposes - reservoir and associated structures	20 View Road, Warkworth
9342	Wastewater purposes - wastewater treatment plant	6 Brown Road, Warkworth
9343	Wastewater purposes - wastewater treatment plant	55 and 55A Alnwick Street, Warkworth

9344	Water supply purposes - reservoir and associated structures	James Street, Snells Beach, and adjoining properties (Lots 1 and 2 DP 205704)
9345	Water supply purposes - reservoir and associated structures	32 Tudor Collins Drive, Warkworth
9346	Water supply purposes - water treatment plant	118 Hamilton Road, Warkworth
9347	Wastewater purposes - wastewater treatment plant	Te Whau Creek, Hamilton Road (east of 287 and 309 Hamilton Road), Snells Beach
9348	Wastewater purposes - wastewater treatment plant	Weranui Road, in the vicinity of 135 Weranui Road, Waiwera
9349	Water supply purposes - reservoir and associated structures	1002 Hibiscus Coast Highway, Waiwera
9350	Water supply purposes - reservoir and associated structures	138 West Hoe Heights, Orewa
9352	Water supply purposes - reservoir and associated structures	105 Wainui Road
9353	Water supply purposes - reservoir and associated structures	231 Whangaparaoa Road, Whangaparaoa
9354	Water supply purposes - reservoir and associated structures	104A Wade River Road, Arkles Bay
9355	Water supply purposes - reservoir and associated structures	1170 Whangaparaoa Road, Tindalls Bay
9356	Wastewater purposes - wastewater treatment plant	Kaipara Coast Highway (Sec 50 SO 47244), Helensville
9357	Water supply purposes - dams	215 Mangakura, Kiwitahi and Wishart Roads, Helensville
9358	Water supply purposes - reservoir and associated structures	Wishart Road (Sec 62 BLK XIV Kaipara Surevey District), Helensville
9359	Wastewater purposes - wastewater treatment plant	18 Oraha Road, Huapai
9360	Water supply purposes - water treatment plant	148-162 Motutara Road, Muriwai
9361	Wastewater purposes - exclusion of dwellings in the area surrounding the wastewater treatment plant	Land surrounding the wastewater treatment ponds including 106 Rustybrook Road, 1496 State Highway 1, 133 Wayby Valley Road and Lot 2 DP 171826, Wellsford
9362	Wastewater purposes - wastewater treatment plant	1535 Whangaparaoa Road, Army Bay
9363	Wastewater purposes - exclusion of dwellings in the area surrounding the wastewater treatment plant	Land surrounding the wastewater treatment ponds, Te Whau Creek, Snells Beach (including 287 and 309 Hamilton Road and 120 Hamatana Road)
9364	Wastewater purposes - exclusion of dwellings in the area surrounding the wastewater treatment plant	Land surrounding the wastewater treatment ponds, (including 135 Weranui Road and 12, 45, 83 and 105 Jarvis Road), Waiwera
9366	Water supply purposes - reservoir and associated structures	190 West Hoe Heights, Orewa
9367	Water supply purposes - reservoir and associated Structures (including power supply and telemetry)	2 Lonely Track Road, Glenvar
9368	Water supply purposes - pump station and associated structures	East Coast Road (road reserve) south of Bawden Road, Redvale

9369	Water supply purposes - reservoir and associated structures	125 Scott Road, Wade Heads
9370	Wastewater purposes - pump station, constructed overflow and associated structures	228 Millwater Parkway, Silverdale
9371	Water supply purposes - pump station and associated structures	2-12 Lincoln Park Avenue, Massey
9372	Wastewater purposes	Section 1 and Section 2 SO 467484
9373	Water supply purposes	403 Old North Road, Huapai
9374	Water supply purposes	86 Hudson Road, Warkworth
9375	Wastewater purposes – Northern Interceptor wastewater pipelines, pumping stations, and associated infrastructure.	From 56 The Concourse, Henderson to 4 – 6 Hobsonville Road, West Harbour ; and from 15 The Knoll, Greenhithe to Rosedale Wastewater Treatment Plant
9376	Water supply purposes – pipelines and associated infrastructure	From 114 Scenic Drive, Titirangi to Albany Reservoir, Corinthian Drive, Albany
9377	Water supply and wastewater purposes – pipelines, pumping stations and associated infrastructure	From eastern end Fred Taylor Drive to western end Greenhithe Bridge causeway
9378	Water supply purposes – pump station and associated structures	157 Oteha Valley Road, Fairview Heights
9379	Wastewater purposes – to construct, operate and maintain a pump station, gravity main and associated infrastructure.	32 Mamari Road, 8 Spedding Road, Spedding Road road reserve, 23A Brigham Creek Road, 23-27 Brigham Creek Road, Brigham Creek Road road reserve, 20-22 Brigham Creek Road, 26 Brigham Creek, 28 Brigham Creek Road, Tamiro Road and Roundal Crescent
9380	Wastewater purposes – pump station and associated structures	19 and 21 Kahika Road, Birkdale, R240 Beach Haven Road, Birkenhead (Hellyers Creek Reserve), and road reserve (Kahika Road cul-de-sac)
9381	Water Supply – including abstraction, treatment and storage of water.	3 Audrey Luckens Lane, Helensville, 0800
9382	Wastewater purposes – wastewater treatment plant, disposal and associated structures	3 & 4 Denehurst Drive, Waimauku
9383	Wastewater purposes – pump station and associated structures	R21 Alma Road, Milford (Lot 6 DP 46541)
9384	Wastewater purposes – pump station and associated structures	1 Te Oneroa Way, Long Bay (Lot 98 DP 457552)
9385	Wastewater purposes – pump station and associated structures	161 Brigham Creek Road, Whenuapai (SEC 14 SO 421598)
9386	<u>Water supply purposes, including abstraction, treatment and storage of water at the new Wellsford Water Treatment Plant (WTP).</u>	<u>411 Wayby Valley Road and part of 254 Whangaripo Valley Road, Wellsford, Auckland</u>

9386 Wellsford Water Treatment Plant

<u>Designation Number</u>	<u>9386</u>
<u>Requiring Authority</u>	<u>Watercare Services Limited</u>
<u>Location</u>	<u>411 Wayby Valley Road and part of 254 Whangaripo Valley Road, Wellsford, Auckland</u>
<u>Lapse Date</u>	<u>10 years from the date on which it is included in the Auckland Unitary Plan (Operative in Part)</u>

Purpose

Water supply purposes, including abstraction, treatment and storage of water at the new Wellsford Water Treatment Plant (WTP).

Conditions

General Conditions

1. Except as provided for in the conditions below, and subject to final design and Outline Plan(s), works within the designation must be undertaken in general accordance with the Project Description in Section 2.1.1 of the Notice of Requirement document dated 23 June 2025.

Lapse Period

2. In accordance with section 184(1)(c) of the Resource Management Act 1991 (RMA), this designation will lapse if not given effect to within 10 years from the date on which it is included in the Auckland Unitary Plan (Operative in Part) (AUP).

Outline Plan of Works

3. An Outline Plan of Works (or Outline Plans) must be prepared in accordance with section 176A of the RMA. An Outline Plan (or Plans) must include the following management plans and plans:
 - a) Construction Management Plan (CMP) (required by Condition5);
 - b) Construction Noise Management Plan (CNMP) (if required by Condition 9);
 - c) Construction Traffic Management Plan (CTMP) (required by Condition 11); and
 - d) Final Landscape Mitigation Planting Plan (LMPP) (required by Condition 14).
4. All management plans prepared as part of the Outline Plan of Works (or Plans) must be prepared by a suitably qualified person.

Advice note:

The requiring authority is advised that they shall provide confirmation of Engineering Plan Approval from the relevant Road Controlling Authority for:

- a) The design and construction of the permanent vehicle entrance to the operational site; and
- b) Any new stormwater discharge to the road network.

Where separate approvals or consents are required under the Auckland Unitary Plan or other relevant bylaws, these must be obtained prior to construction.

Construction Management Plan

5. The Requiring Authority must prepare a CMP for construction of the WTP and associated infrastructure. The purpose of the CMP is to set out the management procedures and construction

methods to be undertaken in order to avoid, remedy or mitigate potential adverse effects arising from construction activities. The CMP must include:

- a) Contact details of the site or project manager;
- b) An outline construction programme;
- c) The proposed hours of work;
- d) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/storage of rubbish, storage and unloading of construction materials and similar construction activities;
- e) Procedures for controlling sediment run-off, dust and the removal of soil, debris, demolition and construction materials (if any) to public roads or places adjacent to the work site;
- f) Procedures for ensuring that residents, road users and businesses in the immediate vicinity of construction are given prior notice of the commencement of construction activities and are informed about the expected duration and effects of the works;
- g) Means of providing for the health and safety of the general public;
- h) Procedures for responding to complaints about construction activities;
- i) Procedures for the management of noise and vibration; and
- j) actions to respond to warnings of heavy rain periods.

Operational noise

6. Noise from the operation of the WTP must meet the following noise limits at the notional boundary of rural zone receivers existing as at the date on which this designation is included in the AUP:

<u>Receiving Zone</u>	<u>Daytime (7am – 10pm Mon – Sat, 9am – 6pm Sunday)</u>	<u>Night-time (All other times)</u>	<u>Assessment Position</u>
Rural – Rural Production Zone	55 dB LAeq	45 dB LAeq 75 dB LAfmax	Notional boundary of receiver

Operational noise levels are to be measured in accordance with New Zealand Standard NZS 6801:2008 *Acoustics – Measurement of environmental sound* and assessed in accordance with New Zealand Standard NZS 6802:2008 *Acoustics – Environmental Noise*.

7. The WTP must be designed and operated to meet the operational noise limits in Condition 6.

Construction Noise

8. Noise from the construction of the WTP must be measured and assessed in accordance with the provisions of New Zealand Standard NZS 6803:1999 *Acoustics – Construction Noise* and comply with the limits in the following table.

<u>Time</u>	<u>Weekdays (dBA)</u>		<u>Saturdays (dBA)</u>		<u>Sundays and Public Holidays (dBA)</u>	
	<u>L_{eq}</u>	<u>L_{max}</u>	<u>L_{eq}</u>	<u>L_{max}</u>	<u>L_{eq}</u>	<u>L_{max}</u>
0630 – 0730	55	75	45	75	45	75
0730 – 1800	70	85	70	85	55	85
1800 – 2000	65	80	45	75	45	75
2000 – 0630	45	75	45	75	45	75

9. If concrete pours are to be undertaken between 10pm to 7am, a CNMP must be prepared for the proposed works as part of the Outline Plan of Works under Condition 3 prior to construction

commencing. The purpose of the CNMP is to identify the best practicable option for management and mitigation of temporary construction noise effects.

10. The CNMP must include, but not be limited to, the following information:

- a) Construction noise criteria;
- b) Identification of the most affected premises where there exists the potential for noise effects;
- c) Description and duration of the works, anticipated equipment and the processes to be undertaken;
- d) Hours of operation, including specific times and days when construction activities causing noise would occur;
- e) Mitigation options where noise levels are predicted or demonstrated to approach or exceed the relevant limits. Specific noise mitigation measures must be implemented which may include, but are not limited to, the temporary relocation of receivers;
- f) The erection of temporary construction noise barriers where appropriate; and
- g) Methods for monitoring and reporting on construction noise.

Construction Traffic Management Plan

11. A CTMP must be prepared for the proposed works as part of the Outline Plan of Works under Condition 3 in consultation with Auckland Transport. The purpose of the CTMP is to:

- a) Manage the impacts of construction traffic on the road transport network for the duration of construction to minimise delays to road users;
- b) Inform the public about traffic management on the road transport network for the duration of construction;
- c) Protect staff and public safety;
- d) Minimise damage to private and public property including roads;
- e) Maintain vehicle access to, and manage traffic from, surrounding private properties adjacent to the construction site.

12. The CTMP must describe the measures that will be taken to avoid, remedy or mitigate the traffic effects associated with construction of the proposed works. In particular, the CTMP must describe:

- a) Construction programme with a detailed schedule of the various work stages, deliveries and associated delivery routes;
- b) Driver protocols;
- c) Temporary traffic management controls:
 - i. to manage the effects of the delivery of construction material, plant and machinery;
 - ii. to maintain traffic capacity or minimise the impact on traffic capacity during weekdays and weekends; and
 - iii. to safely manage and maintain local property access.
- d) Monitoring schedule of the traffic generation levels and the safety and effectiveness of the temporary traffic management controls during construction; and
- e) Procedures for communicating with local residents along the primary route, Auckland Transport, Auckland Council, emergency services, and / or any other affected person(s) including provision of prior notice of traffic arrangements and any road closures.

13. Any damage in the road corridor directly caused by heavy vehicles entering or exiting the construction site must be repaired as soon as practicable or within a timeframe agreed with Auckland Transport.

Landscape and Visual Effects Mitigation

14. A final Landscape Mitigation Planting Plan (LMPP) must be prepared for the proposed works as part of the Outline Plan of Works under Condition 3. The final LMPP must be in general accordance with the conceptual LMPP drawings (dated September 2025) which were provided alongside the Landscape and Visual Effects Assessment (dated 30 May 2025) and subsequent Boffa Miskell landscape memo (dated 8 September 2025). The purpose of the final detailed LMPP is to demonstrate how the planting undertaken and proposed planting on the site is the best practicable option for the mitigation of landscape and visual effects on surrounding visual audiences and provide details on the management regime for the implementation, maintenance and establishment of the required mitigation measures.
15. The final LMPP must contain, but not be limited to, the following:
 - a) A plan of the planted area detailing the finished soil levels, plant species, plant sourcing, plant sizes at time of planting, plant locations, density of planting, and timing of planting; and
 - b) A programme of post establishment planting protection and maintenance with clear objectives as to what the planting is to achieve and how the planting is to be managed to achieve these objectives.
16. The final LMPP must be implemented as soon as practicable following completion of earthworks on the site, in order to establish planting as early as possible, and thereafter the planting is to be maintained for the life of the WTP to achieve the agreed planting establishment objectives.

Exterior finishing of buildings and structures

17. To ensure that buildings and structures within the WTP site integrate with the surrounding rural landscape, the materiality and form of the buildings and structures must be designed and constructed with rural aesthetics and features, including (where practical):
 - a) Using natural materials and natural finishes that reflect the character of rural development and structures;
 - b) Design buildings with steel roofs in a dark/neutral/recessive colour;
 - c) Using neutral / low reflectivity finishes to the proposed structures to reduce glare and contrast with the surrounding rural landscape;
 - d) Not using bright yellow or red standard non safety elements of the structures to neutral or recessive colours;
 - e) Materials used for the retaining structures will be timber, timber clad or be finished with a dark or neutral colour that will appear recessive in the rural landscape; and
 - f) Fencing surrounding the WTP will use approved Watercare fencing using materials and finishes that are recessive in colour and use materials that are in keeping with the rural landscape aesthetic. This includes the 'high security' boundary fencing.

External lighting

18. Any external lighting within the WTP site must utilise the following mitigation measures to reduce the potential adverse effects on the rural amenity of people within adjacent properties to the site at during the hours of darkness:
 - a) Limit the duration that lighting is used by timers;
 - b) Use directional cones to limit and focus the light downwards and reduce effects related to light spill, glare and sky glow; and
 - c) Use LED bulbs where possible to focus the light to a narrow area and reduce the amount of light spill.

or otherwise demonstrate compliance with Lighting category 3 (medium brightness) from Table E24.6.1.1 of the AUP.

Archaeology and Heritage

19. Should works result in the identification of any previously unknown sensitive materials (i.e., archaeological sites), the requirements of land disturbance – Accidental Discovery Rule (E12.6.1) set out in the AUP in part must be complied with.

Attachments

No attachments.

Attachment 4

Watercare Services Limited Schedule and

Designation 9386 Wellsford Water Treatment Plant conditions

(Clean)

Designation Schedule - Watercare Services Ltd (1/3)

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9386 Wellsford Water Treatment Plant

Designation Number	9386
Requiring Authority	Watercare Services Limited
Location	411 Wayby Valley Road and part of 254 Whangaripo Valley Road, Wellsford, Auckland
Lapse Date	10 years from the date on which it is included in the Auckland Unitary Plan (Operative in Part)

Purpose

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Conditions

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 - c) Construction Traffic Management Plan (CTMP) (required by Condition 11); and
 - d) Final Landscape Mitigation Planting Plan (LMPP) (required by Condition 14).
4. All management plans prepared as part of the Outline Plan of Works (or Plans) must be prepared by a suitably qualified person.

Advice note:

The requiring authority is advised that they shall provide confirmation of Engineering Plan Approval from the relevant Road Controlling Authority for:

- a) The design and construction of the permanent vehicle entrance to the operational site; and
- b) Any new stormwater discharge to the road network.

Where separate approvals or consents are required under the Auckland Unitary Plan or other relevant bylaws, these must be obtained prior to construction.

Construction Management Plan

5. The Requiring Authority must prepare a CMP for construction of the WTP and associated infrastructure. The purpose of the CMP is to set out the management procedures and construction

methods to be undertaken in order to avoid, remedy or mitigate potential adverse effects arising from construction activities. The CMP must include:

- a) Contact details of the site or project manager;
- b) An outline construction programme;
- c) The proposed hours of work;
- d) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/storage of rubbish, storage and unloading of construction materials and similar construction activities;
- e) Procedures for controlling sediment run-off, dust and the removal of soil, debris, demolition and construction materials (if any) to public roads or places adjacent to the work site;
- f) Procedures for ensuring that residents, road users and businesses in the immediate vicinity of construction are given prior notice of the commencement of construction activities and are informed about the expected duration and effects of the works;
- g) Means of providing for the health and safety of the general public;
- h) Procedures for responding to complaints about construction activities;
- i) Procedures for the management of noise and vibration; and
- j) actions to respond to warnings of heavy rain periods.

Operational noise

6. Noise from the operation of the WTP must meet the following noise limits at the notional boundary of rural zone receivers existing as at the date on which this designation is included in the AUP:

Receiving Zone	Daytime (7am – 10pm Mon – Sat, 9am – 6pm Sunday)	Night-time (All other times)	Assessment Position
Rural – Rural Production Zone	55 dB LAeq	45 dB LAeq 75 dB LAFmax	Notional boundary of receiver

Operational noise levels are to be measured in accordance with New Zealand Standard NZS 6801:2008 *Acoustics – Measurement of environmental sound* and assessed in accordance with New Zealand Standard NZS 6802:2008 *Acoustics – Environmental Noise*.

7. The WTP must be designed and operated to meet the operational noise limits in Condition 6.

Construction Noise

8. Noise from the construction of the WTP must be measured and assessed in accordance with the provisions of New Zealand Standard NZS 6803:1999 *Acoustics – Construction Noise* and comply with the limits in the following table.

Time	Weekdays (dBA)		Saturdays (dBA)		Sundays and Public Holidays (dBA)	
	L _{eq}	L _{max}	L _{eq}	L _{max}	L _{eq}	L _{max}
0630 – 0730	55	75	45	75	45	75
0730 – 1800	70	85	70	85	55	85
1800 – 2000	65	80	45	75	45	75
2000 – 0630	45	75	45	75	45	75

9. If concrete pours are to be undertaken between 10pm to 7am, a CNMP must be prepared for the proposed works as part of the Outline Plan of Works under Condition 3 prior to construction

commencing. The purpose of the CNMP is to identify the best practicable option for management and mitigation of temporary construction noise effects.

10. The CNMP must include, but not be limited to, the following information:

- a) Construction noise criteria;
- b) Identification of the most affected premises where there exists the potential for noise effects;
- c) Description and duration of the works, anticipated equipment and the processes to be undertaken;
- d) Hours of operation, including specific times and days when construction activities causing noise would occur;
- e) Mitigation options where noise levels are predicted or demonstrated to approach or exceed the relevant limits. Specific noise mitigation measures must be implemented which may include, but are not limited to, the temporary relocation of receivers;
- f) The erection of temporary construction noise barriers where appropriate; and
- g) Methods for monitoring and reporting on construction noise.

Construction Traffic Management Plan

11. A CTMP must be prepared for the proposed works as part of the Outline Plan of Works under Condition 3 in consultation with Auckland Transport. The purpose of the CTMP is to:

- a) Manage the impacts of construction traffic on the road transport network for the duration of construction to minimise delays to road users;
- b) Inform the public about traffic management on the road transport network for the duration of construction;
- c) Protect staff and public safety;
- d) Minimise damage to private and public property including roads;
- e) Maintain vehicle access to, and manage traffic from, surrounding private properties adjacent to the construction site.

12. The CTMP must describe the measures that will be taken to avoid, remedy or mitigate the traffic effects associated with construction of the proposed works. In particular, the CTMP must describe:

- a) Construction programme with a detailed schedule of the various work stages, deliveries and associated delivery routes;
- b) Driver protocols;
- c) Temporary traffic management controls:
 - i. to manage the effects of the delivery of construction material, plant and machinery;
 - ii. to maintain traffic capacity or minimise the impact on traffic capacity during weekdays and weekends; and
 - iii. to safely manage and maintain local property access.
- d) Monitoring schedule of the traffic generation levels and the safety and effectiveness of the temporary traffic management controls during construction; and
- e) Procedures for communicating with local residents along the primary route, Auckland Transport, Auckland Council, emergency services, and / or any other affected person(s) including provision of prior notice of traffic arrangements and any road closures.

13. Any damage in the road corridor directly caused by heavy vehicles entering or exiting the construction site must be repaired as soon as practicable or within a timeframe agreed with Auckland Transport.

Landscape and Visual Effects Mitigation

14. A final Landscape Mitigation Planting Plan (LMPP) must be prepared for the proposed works as part of the Outline Plan of Works under Condition 3. The final LMPP must be in general accordance with the conceptual LMPP drawings (dated September 2025) which were provided alongside the Landscape and Visual Effects Assessment (dated 30 May 2025) and subsequent Boffa Miskell landscape memo (dated 8 September 2025). The purpose of the final detailed LMPP is to demonstrate how the planting undertaken and proposed planting on the site is the best practicable option for the mitigation of landscape and visual effects on surrounding visual audiences and provide details on the management regime for the implementation, maintenance and establishment of the required mitigation measures.
15. The final LMPP must contain, but not be limited to, the following:
 - a) A plan of the planted area detailing the finished soil levels, plant species, plant sourcing, plant sizes at time of planting, plant locations, density of planting, and timing of planting; and
 - b) A programme of post establishment planting protection and maintenance with clear objectives as to what the planting is to achieve and how the planting is to be managed to achieve these objectives.
16. The final LMPP must be implemented as soon as practicable following completion of earthworks on the site, in order to establish planting as early as possible, and thereafter the planting is to be maintained for the life of the WTP to achieve the agreed planting establishment objectives.

Exterior finishing of buildings and structures

17. To ensure that buildings and structures within the WTP site integrate with the surrounding rural landscape, the materiality and form of the buildings and structures must be designed and constructed with rural aesthetics and features, including (where practical):
 - a) Using natural materials and natural finishes that reflect the character of rural development and structures;
 - b) Design buildings with steel roofs in a dark/neutral/recessive colour;
 - c) Using neutral / low reflectivity finishes to the proposed structures to reduce glare and contrast with the surrounding rural landscape;
 - d) Not using bright yellow or red standard non safety elements of the structures to neutral or recessive colours;
 - e) Materials used for the retaining structures will be timber, timber clad or be finished with a dark or neutral colour that will appear recessive in the rural landscape; and
 - f) Fencing surrounding the WTP will use approved Watercare fencing using materials and finishes that are recessive in colour and use materials that are in keeping with the rural landscape aesthetic. This includes the 'high security' boundary fencing.

External lighting

18. Any external lighting within the WTP site must utilise the following mitigation measures to reduce the potential adverse effects on the rural amenity of people within adjacent properties to the site at during the hours of darkness:
 - a) Limit the duration that lighting is used by timers;
 - b) Use directional cones to limit and focus the light downwards and reduce effects related to light spill, glare and sky glow; and
 - c) Use LED bulbs where possible to focus the light to a narrow area and reduce the amount of light spill.

or otherwise demonstrate compliance with Lighting category 3 (medium brightness) from Table E24.6.1.1 of the AUP.

Archaeology and Heritage

19. Should works result in the identification of any previously unknown sensitive materials (i.e., archaeological sites), the requirements of land disturbance – Accidental Discovery Rule (E12.6.1) set out in the AUP in part must be complied with.

Attachments

No attachments.

Attachment 5
Designation 9386 Wellsford Water Treatment Plant
In the AUP (OIP) GIS Viewer
(Before/After)

BEFORE



Notice of Requirement

public

AFTER



Designation

public

0 12.5 25 50 M

Whilst due care has been taken, Auckland Council gives no warranty as to the accuracy and completeness of any information on this map/plan and accepts no liability for any error, omission or use of the information.

Date: 2/12/2025

Designations: 9386
Water supply purposes, including abstraction,
treatment and storage of water at the new
Wellsford Water Treatment Plant (WTP)
Watercare Services Limited

Auckland Council
Te Kaunihera o Tāmaki Makaurau
Plans and Places