

Beachlands South Technical Meeting

Date: 20 April 2026

Time :2:00pm-3:00 pm

Attendees:

Watercare - Anna Jennings, Fauzeem Farhaaz, Gurneet Rehsi, Martin Ball, Maria Utting, Shabneez Hussain, Shah Morteza Nia.

Russell Group- Graeme Harvey, Khai Azizi, Chris Maday.

Meeting Summary – Wastewater Network & Pump Station Strategy

1. Network Planning Drivers

- The wastewater network layout is strongly driven by topography and the spine road alignment.
- All catchments generally fall away from the spine road, influencing both gravity and pump station locations.
- The current concept proposes nine (9) pump stations (PS) across the development.

2. Catchments & Pump Station Coverage

Pump stations collect flows from the following areas:

- **Western catchment**
 - Lower contours with localised high and low points
 - PS picks up flows from apartment blocks
- **Residential areas**
 - PS collects flows from residential development through to the town centre and school

- **Village centre**
 - PS servicing town centre, connecting through a pump-and-valve arrangement
- **Coastal precinct – northern end**
 - PS driven by local topography
- **Employment zone**
- **Southern coastal area**
 - Includes a retirement village with a dedicated PS

Total proposed: **9 pump stations**

3. DUE Thresholds & Ownership

- Each pump station services a range of DUEs, which is currently under review.
- WSL advised that, in accordance with the Wastewater Code of Practice, any catchment with fewer than 50 DUE:
 - Does not qualify as a public pump station; and
 - Would remain a private pump station.
- Russell Group confirmed that only one catchment currently falls below this threshold, servicing 35 units.

4. Gravity Network & Depth Constraints

- Gravity sewer depths are generally:
 - ~4 m deep, occasionally up to 5 m
- Key discussion point:
 - Cost and practical trade-off between:
 - Numerous pump stations, or
 - Fewer PS with deeper gravity manholes
- WSL to review and advise on “how deep is too deep”, noting these assets are expected to remain in service for approx. 100 years.

5. Pump Station & Rising Main Strategy

- **Key questions raised:**
 - Are there viable alternatives to having 9 PS?
 - Could longer rising mains or fewer, more centralised PS be used?
- **Current strategy proposed:**
 - Consideration of centralised pumping with discharge to:
 - A private WWTP, or
 - Beachlands WWTP
 - Dedicated rising main to Beachlands WWTP
- **Interim staging approach:**
 - Over the next 3–5 years, 2–3 PS to be designed with 24-hour emergency storage
 - Interim PS and rising mains to manage lower initial flows

6. EOPs, Storage & Operational Considerations

- WSL advised that Engineered Overflow Points (EOPs) are a critical design consideration affecting both network layout and discharge consenting outcomes.
- The WSL Operations team noted the following considerations:
 - Long-term operational and maintenance implications associated with a higher number of pump stations; and
 - Whether deeper gravity sewer solutions could reduce reliance on pump stations and improve overall operational resilience.
- WSL to review this option and provide feedback on its acceptability, including any operational, design, or compliance implications.

7. Placement, Corridors & JOALs

- Code of Practice requirements (front-of-lot servicing and gravity lines in road corridors) are challenging to meet.
- JOALs (Joint Ownership Access Lots):

- Many lots front onto JOALs on both sides
- Running gravity mains within JOALs is often more practical
- Asset placement considerations:
 - Majority of PS located on public ways
 - Gravity mains generally located in public roads or common accessways
 - Preferred PS locations:
 - Berms and footpaths
 - Often end up in front yards due to utility congestion

8. Existing Easements & Asset Relocation

- The existing wastewater rising main is currently routed through an easement, limiting the efficient utilisation of developable land.
- Option under consideration: Realignment of the existing wastewater rising main into the road corridor to minimise constraints on developable land.
- WSL Requirement: Hydraulic Grade Line (HGL) assessment to confirm hydraulic feasibility and compliance with performance requirements.

9. Next Steps & Actions

- Catch-up meeting scheduled with Auckland Council Planning and Infrastructure teams next Wednesday.
 - Consider whether Watercare should be invited (possible attendee: **Helen Shaw**).
- Russell Group: Issue electronic copies of all relevant plans, drawings, and design information to WSL for review. (Post meeting Notes: Actioned)
- WSL to:
 - Review gravity depth profile vs PS trade-offs
 - Provide feedback on optimal long-term network strategy
 - Advise on PS numbers, depths, and EOP/storage implications

