

PROJECT UPDATE Te Whare Wai Para Nuku Moa Point Sludge Minimisation Facility

DEC 2025



Christmas Construction Progress

As 2025 draws to a close, Te Whare Wai Para Nuku is a hive of activity with more than 180 people working in different teams across the site to keep this major project on track.

A core focus is completing the external facade of the Main Process Building (shown bottom left). As each section is completed, the wrap and scaffolding comes down. This allows further works around the base of the building to proceed.

At this stage, the eastern and western sides of the building are set to be completed by early next year with the remainder in early February.

Inside the building works continue across a range of services including installing walls, HVAC and fire suppression systems as well as electrical and mechanical processes.

On level one, crews are installing pipes, service and process lines into the Thermal Hydrolysis plant (THP). The installation of the boilers and connecting pipes in the boiler room also continues.

On level two air compressors and heat exchangers, a critical part of the biogas system, are being connected.

On level three the electrical switchboards are now all in position and, with the cable bridge that carries the main cables into the building completed, crews can proceed with the complex wiring in to the main switchboards.

The internal gantry cranes are now fully operational and in use above the centrifuge hall and the thermal drier hall.

Outside the building, new pipe bridge sections, that will carry large pipes taking the treated sludges from the THP out of the main building and across to the digesters, are also now in place.

Across at the existing pump station building, the old generator and odour control facility have been decommissioned and that half of the building is being demolished.

Installation of the pipework that connects the Moa Point sludge tanks to Te Whare Wai Para Nuku is also now well advanced and will be completed in January.

Seasons greetings from the project team



Award winner

Te Whare Wai Para Nuku has been celebrated at the inaugural Green Digital Intelligent (GDI) conference that explores cutting-edge research and transformative practices shaping the future of the built environment.

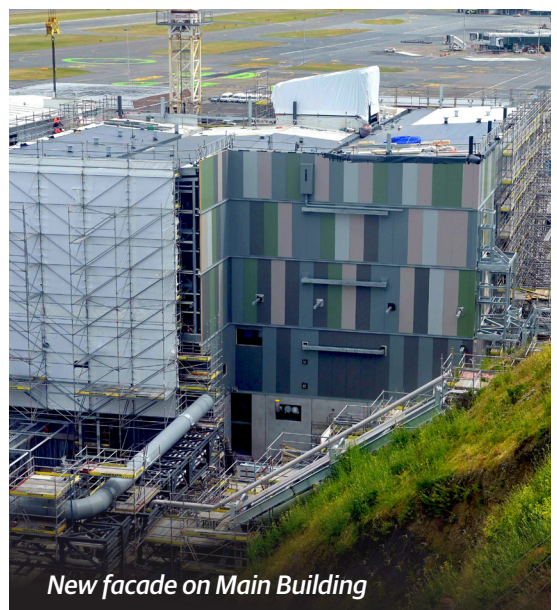
Our project team (Janet Molyneux, Wellington City Council; Jonathan Navarrete, McConnell Dowell; Lasse Vorre Damhus, HEB Construction; and David Ellis, Beca) won two awards:



the **Collaboration & Partnership Award** and



the **Community Impact Award** in the Digital Transformation category.



New facade on Main Building

**Absolutely Positively
Wellington City Council**

Me Heke Ki Pōneke

**McCONNELL
DOWELL**
CREATIVE CONSTRUCTION™

 **HEB**
construction
together @ VINCI

 **Beca**

2025



Overall, despite some wild weather, 2025 has seen works progress well.

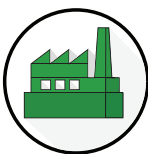
The team has achieved major milestones such as:

- installing the THP,
- completing the odour treatment plant
- and advancing the digesters to near completion.

All equipment ordered from around New Zealand and internationally is now on site.

In 2026, we'll see completion of the external works and the mechanical and electrical installation.

Then the focus will switch to the complex commissioning. All the different systems will be thoroughly tested as the team proves the new facility prior to handover.



Digesting Sludges

Early next year, the all-important digester site will be completed.

Crews are now finishing off installing multiple pumps and prefabricated pipes and laying final areas of concrete around the base of the two tanks.

The digesters house microorganisms that further break down organic matter in the sludges that have been pressure cooked in the Thermal Hydrolysis Plant (THP) to create a more digestible, stable and sterile product.

The anaerobic (oxygen-free) digestion process reduces sludge volumes, odours and produces a pathogen-free biosolid ready for dewatering and drying.

Biogas produced by the bugs during anaerobic digestion is captured and reused to create heat and produce electricity to help run the plant.

The bugs need a regular, stable diet of consistent quality sludge at

the right temperature to operate optimally.

Sludges come out of THP at around 160C and are cooled in heat exchangers where cool sludges are mixed in to reach the preferred 38-40C for anaerobic digestion to occur.

Inside the digester tanks, pumps are constantly recirculating the sludge to ensure a stable consistency and mix of organic matter.

Post digestion, sludges move to large stainless steel tanks for degassing before entering the centrifuges that spin at a high speed to dewater the sludges prior to entering the thermal drier.

Work on the digester site will be finished by early 2026. Mid-year, bugs will be seeded into the tanks and feeding will start, kicking off the digester commissioning process.



New pipes and valves (far left) are connected to the digester tanks (below).



See how work is progressing onsite in our latest video.

Christmas Holiday Hours: Everyone will take a break on Christmas Day. However, over the Christmas and New Year period a smaller team will be working on site progressing a range of essential activities. **The site will reopen and work restart on 5 January 2026.**

**Absolutely Positively
Wellington City Council**

Me Heke Ki Pōneke

**MCCONNELL
DOWELL**
CREATIVE CONSTRUCTION™

HEB
construction
together @ VINCI

Beca