

# Western Springs College, Auckland New Zealand



## Client

The Ministry of Education.

## Project overview

Western Springs College was built on a closed landfill in the 1960s. Prior to the construction of the school, the site, and the surrounding area had a chequered history of basalt quarrying and landfilling.

As a result, the school sits atop a variable thickness of historical refuse materials, which are overlaid on basalt flows that potentially originated from Mount St John (also known as Te Kōpuke or Tītīkōpuke), a volcanic scoria cone in Epsom, Auckland.

The Ministry of Education is committed to a major redevelopment of the site that will see extensive modernisation of the school, enhancing its value to both students and the wider community.

Since 2012, Tonkin + Taylor (T+T) has worked with the Ministry’s project lead and the design team to outline and communicate key project constraints (i.e. the challenges posed by ground conditions), while also identifying opportunities to create an effective design solution.

Construction of the redevelopment project is now underway. T+T’s input has ensured that the main new buildings are to be constructed on the shallowest part of the waste. Our experts also supported the design of multi-storey buildings to minimise the school’s building footprint and to enable a “dig out and replace” foundation option.

T+T has been involved with the Western Springs College redevelopment project since the masterplanning stage.

## Expertise provided

- Landfill gas investigations, risk assessments and design of landfill gas control measures
- Geotechnical investigation and foundation design
- Contaminated land investigations, consenting and management plans
- Support during construction, including contaminated land and landfill gas advice to manage potential effects on site users during ground works, geotechnical supervision and advice based on encountered ground conditions, and liaison between the project team and contractor
- Technical support for the resource consent process including preparation of management plans, liaison with council and validation reporting
- Construction of Commercial Bay commenced in July 2016 and completion of ground works is programmed for late 2017

### We also:

- Designed landfill gas control measures for new and existing buildings

**Exceptional thinking together**

[www.tonkintaylor.com.au](http://www.tonkintaylor.com.au)

