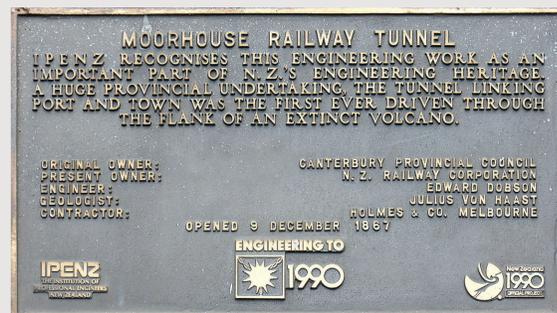


Lyttelton Railway Tunnel



This plaque – on the face of the Heathcote Valley portal to the tunnel – was installed by the then-Institution of Professional Engineers of New Zealand (now Engineering New Zealand) in recognition of this historically important contribution to the social and economic development of the Canterbury region.

A remarkable feat of engineering

The Lyttelton Railway Tunnel was a breakthrough – literally and figuratively – between the communities of the Canterbury Plains and the port of Lyttelton. It is 2.6km long and was the largest engineering project of the colonial era. It is one of the oldest and largest Victorian structures in New Zealand still in active use.

Before the rail tunnel was built, people and freight had to travel either by foot over the hills or by boat from Lyttelton for river transport into Christchurch. The rail link provided a huge boost to Canterbury's economy by improving the ability to get agricultural produce to Lyttelton for export.

The Heathcote Valley portal to the tunnel is 250 metres to the South along the rail line from this point.

For more information visit engineeringnz.org



William Sefton Moorhouse (c.1825–81) was elected Provincial Superintendent in 1857, succeeding James Edward Fitzgerald.

Political rivalry

Moorhouse (nicknamed 'Railway Billy') and Fitzgerald clashed over the tunnel project. Moorhouse wanted the tunnel to run through the volcanic Port Hills between Heathcote and Lyttelton. Fitzgerald pushed for a rail link via Sumner involving a much shorter tunnel and a tramway. It was a bitter debate over cost but Moorhouse won out and had a budget of £235,000.

The original engineers decided that the volcanic rock was so hard that it would be a much longer and much more expensive job but Moorhouse refused to offer more money. Provincial Engineer Edward Dobson brought in renowned geologist Julius von Haast who established that there were 36 types of rock within the hills, and the very hard material was only in part of the planned tunnel.

Moorhouse contracted a new, Melbourne-based firm of engineers. On his return from Melbourne, about 100 horsemen escorted his carriage from the Heathcote wharf into Christchurch amidst cheering crowds.



Tunnelers outside Lyttelton Rail Tunnel entrance, Heathcote portal, 1868. D.L. Mundy photograph, E. Dobson collection, Canterbury Museum. 1950.133.2

Cornwall St in Lyttelton is named for the many Cornish tin miners who had come out to New Zealand to work on the tunnel.

The people were all for it

The politicians may have argued but the community was all for the tunnel. In July 1861, on a very cold and wet winter day, Moorhouse turned the first sod in front of a large crowd in the Heathcote Valley. This was followed by a noisy and unruly banquet.

Tunnelling began in earnest, 24 hours a day, every day, except Sunday. Around 140 miners were employed, working in eight hour shifts, from both the Lyttelton and Heathcote sides. The two groups of miners broke through at 3am on 24 May, 1867. It was Queen Victoria's birthday. There was huge rejoicing, and celebrations were held in the tunnel and in both towns.

Construction took six years. The Lyttelton Railway Tunnel – for the first few decades often called the 'Moorhouse Tunnel' – was officially opened on 9 December 1867. There were more celebrations.

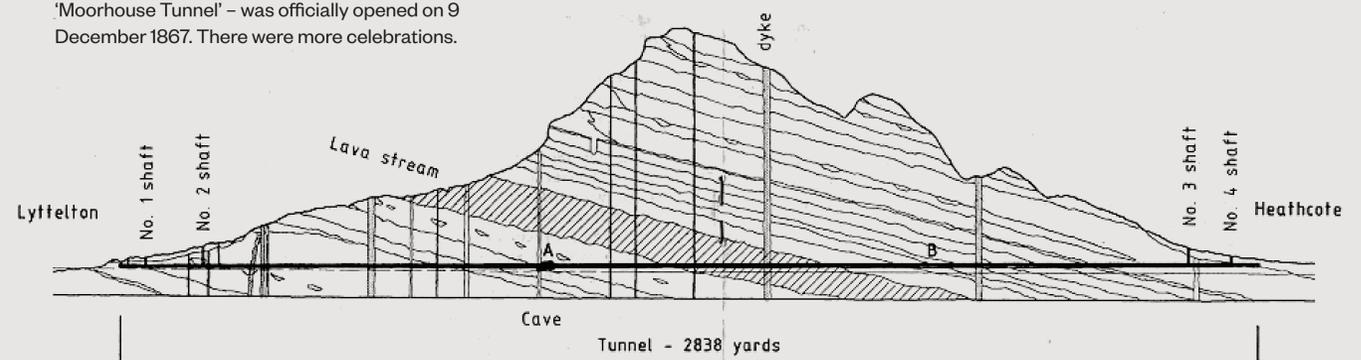


Heathcote Station about thirty years after the opening of the tunnel (cropped). 1/1-025728-G. Alexander Turnbull Library, Wellington, New Zealand.

Several members of the local militia, the Canterbury Rifle Volunteers, are among the waiting passengers in this photograph. During the building of the tunnel, No 8 Company of the 'C.R.V.' based in Heathcote were said to be almost entirely composed of tunnel workers.

Solid workmanship

On 22 February 2011, at 12.51pm, one of the most violent earthquakes on record struck Christchurch. The epicentre of the earthquake was directly below the Lyttelton Railway Tunnel but it suffered minimal damage and was able to function again as soon as the outside railway lines were restored to working order.



Lyttelton Railway Tunnel 150th Commemoration Publication