

## Introduction

Mill Stream Walkway traverses mainly Department of Conservation land which has been extensively modified since the onset of gold mining in the district in 1875.

The base of Union Hill became the site of a massive industrial complex - the "Waihi Mill" or "Waihi Battery". Constructed by the Waihi Gold Mining Company, commencing in 1888, it started processing ore from Martha Mine in 1890. At 90 stamps in 1894 it was the largest in New Zealand.

At the time of the Waihi Mill, our modern Eastern Stream was known as "Mill Stream". The stream was dammed just below Barry Rd, then channelled and flumed, taking it at first to the Waihi Mill, then the Cassel Tailings Plant, and later back to the Waihi Mill, to provide water power. The remaining water (if any) and surface run off further down the valley, was caught in diversion channels (or cut-off drains), to keep the water out of three large impoundments which the Company had established to save their tailings. These ponds stored the valuable tailings for possible further processing.

It was from these ponds that the Cassel Tailings Plant took their tailings (1894), and subsequently the Waihi Mill as it was closing down (1913).

The cut-off drain was continuous from the top pond to Clarke Street. Sections of Mill Stream Walkway follow this drain from south of the bamboo to the boxed steps, and the walkway crosses over, or through, all three tailings pond embankments. **6, 10, 14**

Having hosted these extensive mining-related modifications and activities, and the power pylons bringing electricity to Martha Mine from Horahora on the Waikato River, the area has now become a tranquil place where the environment is nurtured.



Waihi Mill (Battery) photographed from end Baker Street, c.1909



Panorama of Mill Stream Walkway area photographed from Union Hill c.1910

## Time line

- 1887 The Waihi Gold Mining Company established.
- 1888 Waihi Mill (Battery) constructed on Union Hill in early 1888 to process ore from the Union, Rosemont, and Amaranth claims.
- c. 1888 Mill Stream dammed and the Mill Race constructed. Tailings saved in tailings impoundments.
- 1890 Martha Company's mine and plant purchased by the Waihi Gold Mining Company.
- 1894 The Cassel Tailings Plant started reprocessing WGMCo. tailings. The Union-Waihi Gold Mining Company was formed to work the Union-Rosemont-Amaranth section. Sinking of the New No.1 shaft commenced. The Waihi Mill converted to the cyanide process in May.
- 1896 The Silverton Battery commenced crushing ore; railway and locomotive installed for hauling the ore a mile and a half to the battery.
- 1898 Union-Waihi Co. acquired the Silverton claim, together with battery (renamed Union) and tramway. Tramway connecting to New No. 1 Shaft built on Union Hill soon after.
- 1900 About this time the New Central Hotel was built.
- 1902 Mining stopped on Union Hill.
- 1906 Waihi population 6,086. August 24, 1906: "The Waihi Grand Junction Gold Company's 40 stamper mill is now in full swing." Photograph shows existence of a single tennis court.
- 1909 At the Waihi Mill "two ferro-concrete agitator-vats, 13ft. diameter, 55 ft. high, have been erected" (four more in 1910).
- 1911 The Union Battery was closed down in February.
- 1912 Waihi strike.
- 1913 Waihi Mill closed, treating about 16,000 tons of sand tailings.
- 1914 Early in 1914 the company's hydro-electric power-installation at Horahora commissioned.
- 1921 The New Central Hotel was dismantled and moved to Rotorua.
- 1922 New Tennis Club formed.
- 1960s Waihi Borough tip at Kenny Street established. Mill Stream diverted into Speak's Quarry.
- Late 1970s Waihi Borough tip at Kenny Street closed.
- 1986 Mill Stream lowered under conveyor and channelled into Speak's Quarry by Waihi Gold.
- 2001 Waihi Walkways constructed first stage of Mill Stream Walkway, embarking on programme of environmental enhancement and restoration.
- 2007 Waihi Walkways extend Mill Stream Walkway.

# Welcome to Mill Stream Walkway and its Historic Features



An easy grade walk  
(approx. 20 minutes)  
Assisted wheelchair access -  
Kenny Street entrance only

Numbered markers identify many historic features  
To learn more visit our website:  
[www.waihiwalkways.org.nz](http://www.waihiwalkways.org.nz)

**Waihi Walkways**  
PO Box 241 Waihi

Interpretation kindly sponsored by PowerCo and Valder Ohinemuri Charitable Trust



### Old Mill Stream Culvert and WGMCo. Cassel Water Race 1

In 1987 the stream was lowered to pass beneath the ore conveyor, and trenched in to Speak's Quarry. Previous to this, the stream passed beneath the road in this smaller culvert, falling in to the Quarry via this old water race. In heavy rain this still occurs. Originally the stream passed through the gully filled by the municipal rubbish dump.

### Old Municipal Rubbish Dump

Established in the late 1960s, and continued until the Bulltown Road tip was opened (late 1970s). A playing field covers this site now, created when spoil was spread here in the late 1970s or early 80s. The New Central Hotel, Band Rotunda and Cycle Track were important features of what was the "Rec", now Morgan Park.



### Speak's Quarry 2

This quarry was named after the Speak family who lived on Barry Road adjacent to the present Newmont conveyor. Mrs Speak is variously recorded in the Ohinemuri Regional History Journals as running a fruit shop and/or a sweet shop. The quarry is thought to have supplied early construction stone to the Waihi Mill.

Explosives Magazine Immediately downstream from the quarry, on the true left bank of the stream, a very short tunnel is carved into the bank. Debris from the river has reduced its height. This could have been the explosives magazine for the quarry.

### Old Waihi Mill (Battery) Manager's House 3

Built in 1896, this house features in many of the old photographs. The large trees and various garden plants are the remains of the extended grounds.

### WGMCo. Cassel Water Race 4

The Waihi Gold Mining Company took over the Cassel Tailings Plant water race when relinquished by the Cassel Company (c.1896) and built a prominent wooden flume from the end of Baker Street across their tailings ponds to the mill. The depression (informal roadway) in Morgan Park, beside the driveway to the old house, marks the position of this race.

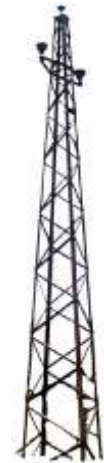
### Cut-off Drain 5, 12

The ditch (5), the boxed steps, the drain west of Charlie's seat (12) and the deep gorge are the remains of a continuous cut-off drain, designed to keep water out of the impoundments. The lower part of this cut-off drain, now a deep gorge, has become the present alignment of Mill Stream.

### Power Pylons 7, 11, 13

The remains of three power pylons can be seen beside Mill Stream Walkway. These pylons were erected 1912-13 to bring electricity from the Waihi Gold Mining Company Horahora hydro-electric plant on the Waikato River to the mine on Martha Hill. This was the first hydro-electric dam on the Waikato River.

From the book: The Horahora Power Scheme, by Stan Rowe and Barry McKey, 1997: "During this time an 80km transmission line on steel towers carrying 50,000 volts was built from Horahora to Waihi passing through the Hinuera Valley, Matamata, Turanga-o-moana and then crossing the Kaimai range through Waiorongomai and Waitawheta valleys to Waikino. Here the voltage was stepped down to 11,000 volts to be transmitted to the mines at Waihi. This was the longest transmission line in New Zealand at that time and great difficulties had to be overcome to take power over some of the rugged country across the Kaimai Range. Three solid copper wires each



about 10mm thick carried the current and these were supported on a total 469 steel towers erected between Horahora and Waikino."

### Building Sites (on west of walkway) 8

One site of several early miners' dwellings.

### Waihi Gold Mining Company Water Race By-wash 9

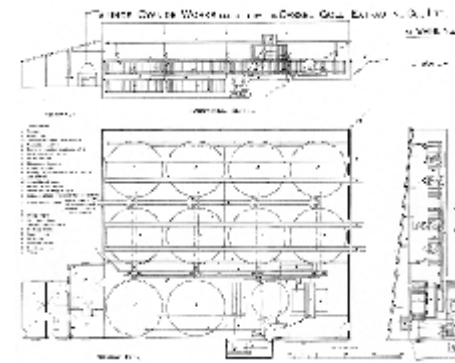
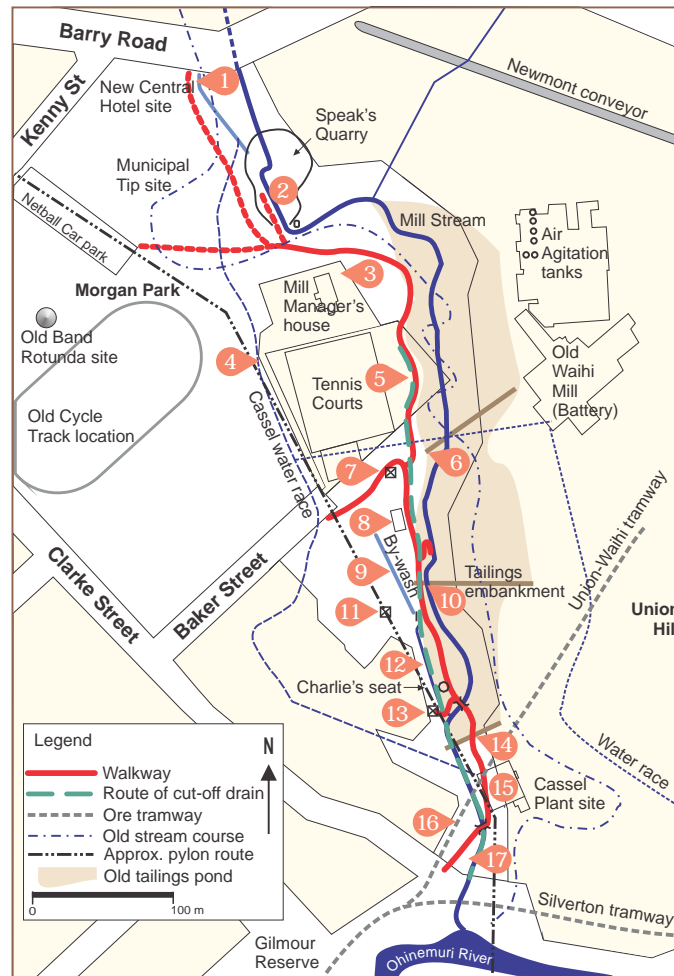
A by-wash for the race (1, 4) was created across the end of Baker Street, and down the hill. The top section of the by-wash was constrained within a wooden flume, but further down in an open ditch which still exists. It took excess or unused water from the water race, to stop it over flowing.

The by-wash discharged into the drain behind Charlie's seat (part of the cut-off drain system).

### Cassel's Tailings Plant 15

The Cassel's Tailings Plant was established in 1894 (closed c.1896) to treat, by the cyanide process, the accumulated tailings from the Waihi Mill.

Their water race collected water from Mill Stream and the Martha mine water discharge, went past the end of Baker Street, and into the residential sections towards Clarke Street. Pressure pipes then took the water towards the lower tailings embankment.



1894 Mines Statement: "Cassel's Company's Works.-- This company has erected a suitable plant for treatment of the tailings and slimes which have accumulated at the Waihi Company's works. These tailings, estimated at from 25,000 to 30,000 tons, were purchased from the Waihi

Company for £5,000 early in last year. Advantage was taken of the fine weather to get the materials on the ground and erect the buildings and necessary vats and machinery. The plant is situated near the river, and below the place where the tailings are deposited." Cassels recovered £25,000 in bullion.

### Union-Waihi Tramway from New No.1 Shaft, Union Hill. 16

Built by the Union-Waihi Company (1899, ceased 1902) to transport their ore from the New No.1 Shaft (on Union Hill) to their newly acquired mill on the Ohinemuri River (this was the old Silverton Battery, renamed the Union Battery).



This tramway exited a tunnel below the Union tiphead, and negotiated a steep section as a self-acting incline. The present roadway (on Union Hill) makes use of part of this formation. This section joined the Silverton tramway at the wetland area of the Heritage Walk. The alignment is still visible at the bottom end of Mill Stream Walkway; the flat area between Clarke Street and the lower bridge.

### View of HP Barry's House Site (look east) 17

The house and extensive gardens of Mr HP Barry, Mining Superintendent, Waihi Gold Mining Company, stood where the present house stands. It was lost to fire. Many of the original landscape features remain.

Note water race on hillside, it brought water to the Waihi Mill. Note also the masonry retaining work at both ends of the culvert under Clarke Street.

