

SPIT TO PAKI PAKI

A Note on the First Railway in Hawke's Bay

By E. C. G. Fletcher, with considerable stimulation
from A. C. Bellamy

SPIT to Paki Paki? No, this is not an insult to Paki Paki. These were simply the limits of the Hawke's Bay Railway on New Years Day 1875. Why the railway was built, how it was built, and what has happened to it since make up a story about which only a little is on easily accessible record at present. Its future would appear to be very sound indeed, and for some indication of the development of passenger train services over the years, readers are referred to the article in *NZRO* No. 131, Volume 29, 1972.

Prior to 1850 there were very few European settlers in the area, but about this time reports of the fertile soil of the plains caused people in other parts of the country to become interested in settling there. In April of 1855, 640 acres of land were purchased as the site for Napier, and by 1856 about 700,000 acres were in use as sheep runs or as pasture. There were then over 130,000 sheep, 3,000 cattle, and nearly 400 horses.

Transport, however, proved to be a problem. Napier was largely built on what was then known as Scinde Island. This "island" had shingle spits extending north and south enclosing on the inland side a large expanse of water, part of which is now known as the Ahuriri Lagoon. The spit to the south, along which the railway was eventually built,

joined the mainland. The northern spit, which gave its name to the northern terminus of the railway, was divided into two parts. The western spit, now West-shore, was and still is separated from the eastern spit by the entrance to the inner harbour.

How much of this harbour was created or changed by the earthquake of 1863 is not known, but it has been suggested that this event, like that of 1931, raised the level of the ground. However, the water between Scinde Island and the mainland to the west was still deep enough in 1870-71 for Mr Charles Weber, who made the surveys for a railway during that time, to recommend that the line should not cross it. The Taradale Road, when first built, did take this route, but on a causeway that remained until the 1931

earthquake drained much of the area. This has since been used for housing.

Another natural disaster that altered the geography significantly was the flood of 1867. Before this time the Ngaruroro River, one of the three that cross the plains south of Napier, flowed in a large U-shaped course from north to south and back again. Any railway built then would have had to cross this river at least three times or to have been constructed across the northern or southern edges of the plain. A southern route would not have served the plains very well and probably would have encountered engineering difficulties when it came to leave the plain. A more northerly route would have involved a crossing of either the Ahuriri Lagoon or the land between the Ngaruroro and Tutaekuri Rivers. From notes on old maps, and from comments in Mr Weber's report, much of this land appears to have been of a rather swampy character subject to flooding.

The flood of 1867 altered the course of the Ngaruroro, which burst its banks and flowed more or less directly to the sea following the course of the Waitio and Ohiwia Streams. Its old course is now the bed of the Karamu Stream. It has been suggested that the change in course was not immediate and that a fair volume of water continued to flow down the present Karamu Stream bed for some years. This view could be supported by the fact that the bridges that cross this stream were known, when they were built, as the Ngaruroro No. 2 and Ngaruroro No. 3 bridges, but it seems certain that the flow was now down the new channel and that the present alignment of the railway became possible.

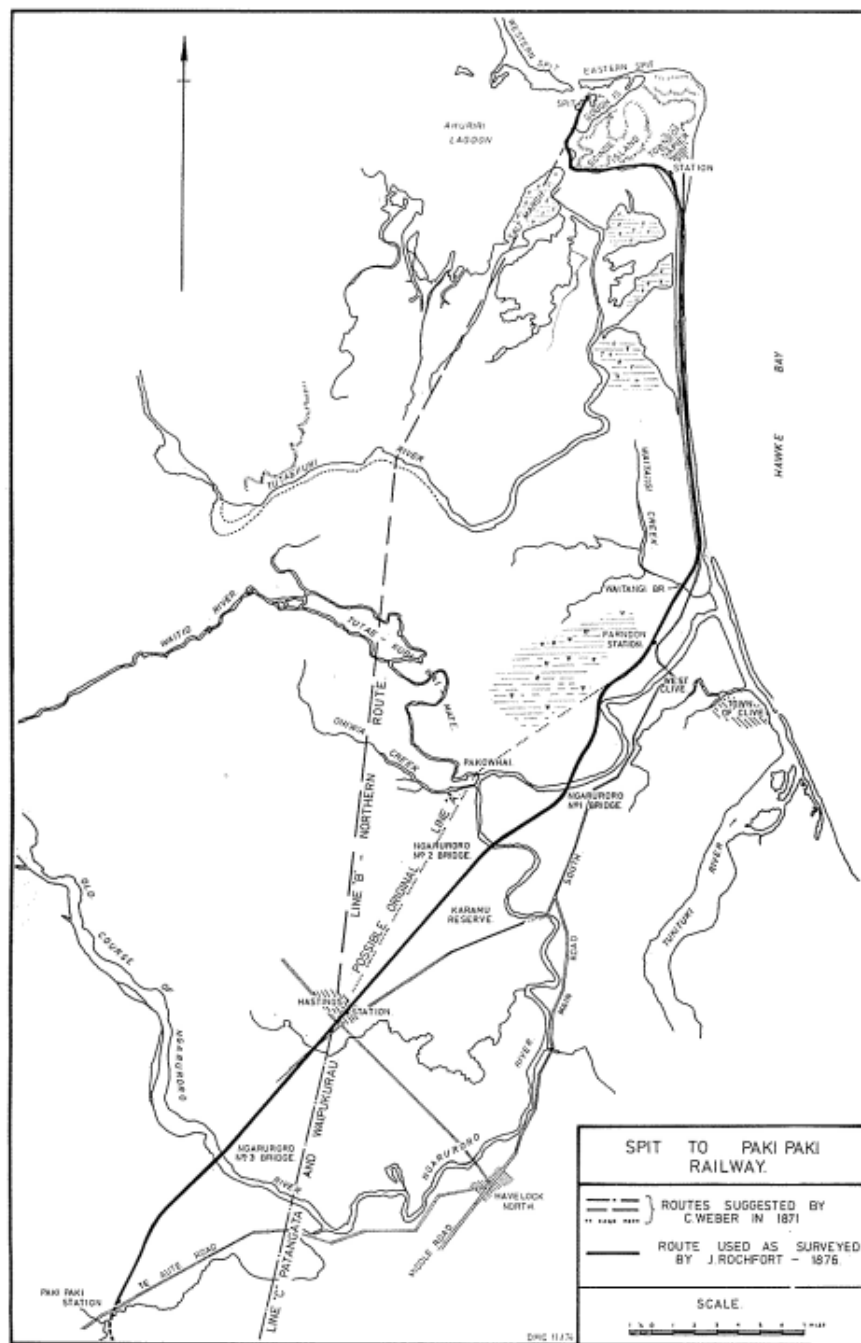
The problem of transport then was that the plains provided a fertile area capable of growing large quantities of produce but with very difficult access across low-lying swampy ground to what appeared to be the only likely deep-water port. The Clive Grange Estates Prospectus of the late 1870s notes a sheltered anchorage nearer the southern end of Hawke Bay and how this had been used in all weathers by the Maori population for years. It seems, however, that this was essentially a shallow-water anchorage not really suitable for international shipping. After the storms of the 1974 winter the

area seems to be no more sheltered than the present port, and the continually shifting coastline that has lately been such a source of anxiety and expense to local home owners could well have posed an even greater problem for a port.

Faced with the task of finding a solution to the problem, the Provincial Council must have found Julius Vogel's immigration and public works policy of 1870 more than welcome. They certainly wasted no time in obtaining and presenting surveys of the proposed railway. By July 1871 more than £1,000 had been spent on these surveys, and in October of that year Mr Weber was able to send to the Provincial Superintendent, Mr J. D. Ormond, his surveys of the line as far as Takapau, 56 miles to the south in the heart of the 70-Mile Bush.

Charles Weber surveyed three alternative routes across what are now known as the Heretaunga Plains. The first crossed the centre of the plain, the second crossed the Ahuriri Lagoon to serve the more northerly section of the plain, while the third crossed to the southern boundary of the plain, ran through Patangata (then some miles from the locality that now bears this name), and made its way to Waipukurau. He strongly recommended the first route, referred to in his survey as "Line A". It appears that, at this stage, this line was intended to go over the Tutae-Kuri-Wai-Mata and Ohiwia Streams thereby avoiding a double crossing of the old bed of the Ngaruroro. When the line was actually built it was located about 1,200 yards to the south-east, avoiding the streams that had "become of late formidable through the changing of the course of the Ngaruroro". In fact Mr Weber considered that crossing these streams was the only difficulty on that section of line.

He recommended Line A because he considered that, although it would be one mile longer than the second alternative, it would be cheaper to build, provide a more stable line requiring less maintenance, be less liable to flooding, serve a larger area of the plain, and allow higher operating speeds. (His estimate of the speed allowable over the timber viaducts that would have been required across the lagoon and elsewhere was 2 m.p.h., an estimate based on current American practice. The time required to reach

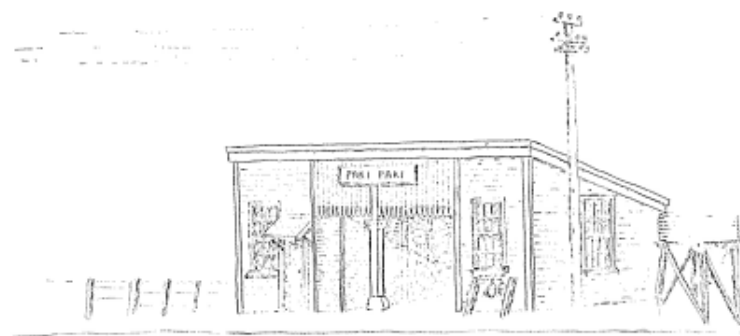


Karamu Junction from Spit, a distance of 12 miles, would have been 3 hours!)

The third route he considered impracticable because of the steep grades that would be required leaving the plain. It was described as following "generally the valley which is traversed by the line of road known in this Province as the Middle Road." This has led to a belief that the railway was intended to go through Havelock North where one of the roads is still known as Middle Road. This road and Napier Road are wider than others in the borough, lending support to the belief. Mr Weber's survey and map, however, show that the line would have joined Middle Road some distance to the south of Havelock North; the width of the two roads therefore may have been more to

cater for civic pride than to provide for a railway.

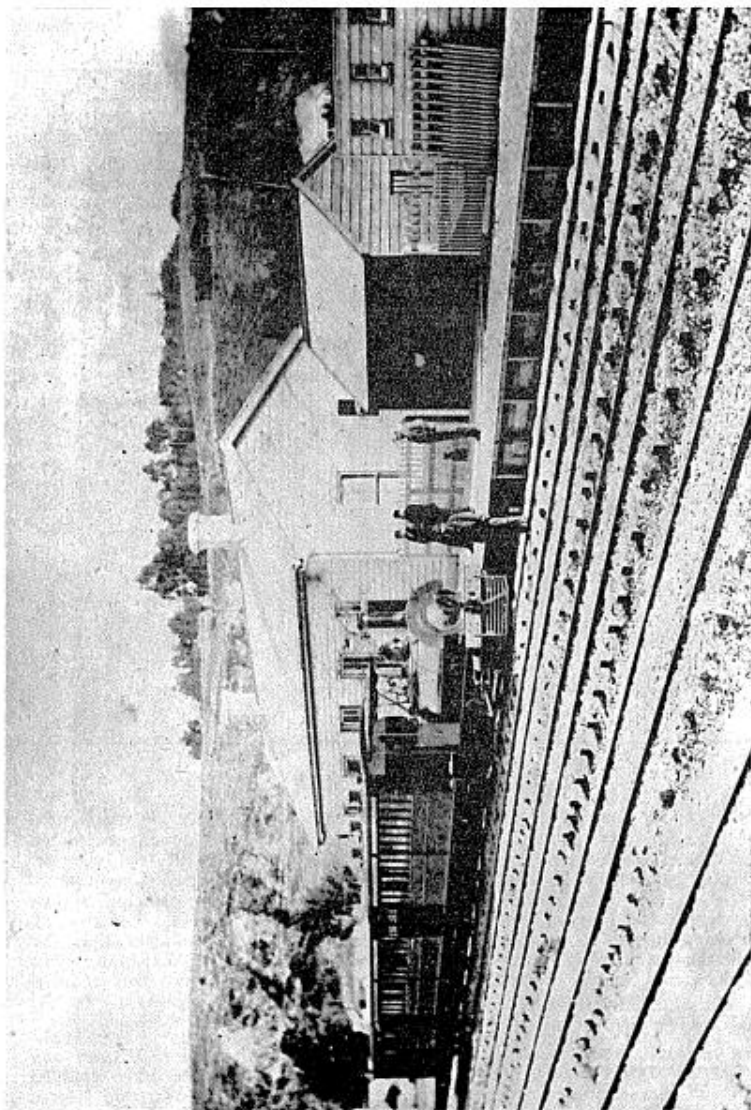
Construction of a railway from Napier to Ruataniwha, 57 miles, was authorised at an estimated cost of £171,000 (£3,000 per mile) in the Railways Act-1871 passed by the General Government on 16 November of that year. The Railways Act 1872 included this railway as Napier-Waipukurau at a revised estimated cost of £200,000. A contract for construction of the line as far as Paki Paki, 18 miles 13 chains, was awarded to John Brogden and Sons for a sum shown in one contemporary source as £51,667, but £49,345 in other places. Brogden's local agent was James Dunbar, and numerous advertisements inviting tenders for the supply of sleepers and ballast, and for the construc-



A NOTE ON THE MAP

WE have been fortunate in having access to maps and copies of maps held in the Hawke's Bay Museum, in particular a copy of one signed and dated by Charles Weber on 7 October 1871. This was "Enclosure No. 9" to his report and appears to be a map made about 1864 with his proposed lines superimposed upon it. The original is held in the National Archives. The other principal source is a map drawn by James Rochford about 1876 showing the line constructed. Numerous spot heights are shown on this map and these indicate that the Ohiwia stream was slightly lower than the adjacent Tutae-Kuri-Wai-Mate. This no doubt accounts for the Ngaruroro River breaking through into this channel from the Waitio rather than the Tutae-Kuri-Wai-Mate which appears to be the more direct connection.

Recent research, books such as J. D. H. Buchanan's *The Maori History and Place Names of Hawke's Bay*, and access to the maps mentioned have enabled the position of the proposed lines to be determined with a reasonable degree of accuracy. The Hawke's Bay Branch of the New Zealand Railway and Locomotive Society expresses its thanks to those people who made the material available for use.



From an old print courtesy N.Z. Railways Publicity.

One of the first trains about to leave the Napier railway station, in 1874 for Hastings. Even by June 1875, when the railway was open between Spit and Paki, rolling stock available for use on this section was confined to three small locomotives, three 6-wheel passenger cars, two 4-wheel "passenger brakes", and 55 4-wheel wagons.

FROM A REPORT ON CONSTRUCTED RAILWAYS DATED 20 JULY 1875 BY THE SUPERINTENDING ENGINEER, FRANK B. PASSMORE, TO THE ENGINEER-IN-CHIEF OF THE NEW ZEALAND PUBLIC WORKS DEPARTMENT:

The portion of this line, Napier to Hastings, was opened 13th October, 1874; Spit to Napier, 26th November, 1874; Hastings to Pakipaki, 1st January, 1875.

This line has been kept in very good repair; and in addition to the ordinary repairs to permanent way, the banks have, in many cases, been widened.

The rolling stock has been kept in good repair. The expenses on this line have been smaller than at Auckland, owing to its being nearly level the whole way, there has consequently been less wear and tear on the rolling stock, and the cost of haulage has been less; but, on the other hand, coals and all stores are higher.

The result of the income and expenditure for the portion of the half-year ending 31st December, 1874, showed expenditure at 35.99 per cent. of revenue, but this satisfactory result was occasioned by the fact that the maintenance formed no portion of the expense, the contractor having to maintain the line, as usual, at his own cost.

The expenditure up to 30th June, 1875, shows 65 per cent. of receipts; and considering the great cost of labour and stores, and the smallness of the traffic I consider the result very satisfactory. It must be borne in mind that we carried very little wool last season, owing to the fact that during the greater portion of the wool season the line only extended to Hastings, which is two miles from the public road, without a good road leading to it; and also, in some measure, to the want of goods sheds wherein to store it. In fact, the goods sheds are not yet all complete, owing to the want of labour and timber, which latterly has chiefly to be imported from Auckland.

A siding has been put in for the convenience of the Gasworks at Napier.

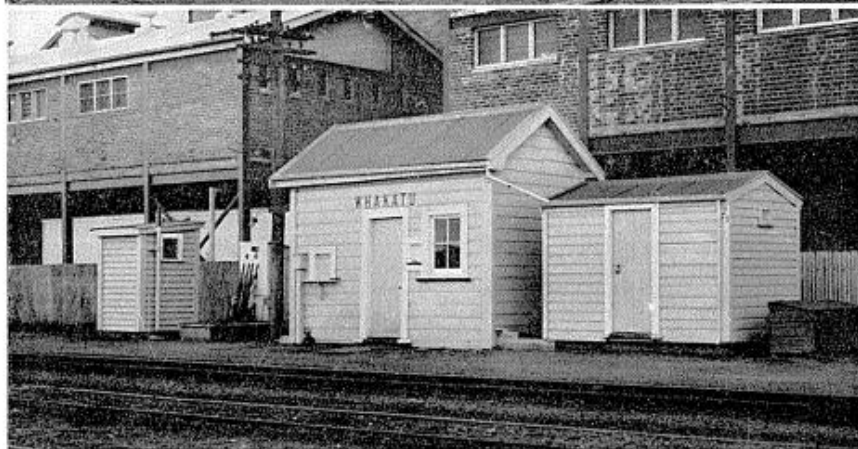
There have been no accidents on the line during the year.

The traffic appears steady.

tion of bridges and buildings, appeared over the signatures of J. Brogden and James Dunbar in the early 1870s. Many of these appeared in the *Hawkes Bay Times*, which also carried fairly regular reports of the progress being made.

Actual construction of the line began between Napier and Spit (the present Ahuriri) in 1872. The start apparently was rather premature, but this was done to provide employment for men who were temporarily out of work. The contract called for completion of the line to Paki Paki by 1 December 1873 but, like so many, this one fell behind

schedule. By Tuesday 1 July 1874, however, the rails had reached Waitangi, 5 miles to the south of Napier, apparently adequate excuse for the usual "opening festivities" so much a part of the social scene of the period. All the essential items were present, according to an article that appeared on 3 July in the *Hawkes Bay Times*. There were over one hundred people present, including the Provincial Representative, Mr Dunbar, and Mr Weber. The Superintendent was "conspicuous by his absence." There were the usual toasts, speeches, food, and other refreshments. Transport was provided in



Photograph: E. C. G. Fletcher.

The railway station at Clive in 1972, a relatively new building.

ordinary wagons with seats specially fitted for the occasion. Afterwards it was declared to be most satisfactory by all concerned.

At this stage the rails may not have been laid over the Waitangi bridge, because these celebrations had been held on the Napier side. They were certainly in place a month later, however, for Mr C. Laws wrote in his diary on 10 August that he travelled by train to Farndon (now called Clive), a station that is south of the Waitangi bridge. He then walked to the Ngaruroro No. 2 bridge and was there engaged by Mr Day, a sub-contractor who was building the bridge.

By 12 October 1874 this bridge had been completed and the rails laid into Hastings. This day saw the official opening of this section of the line and the occasion for yet another "opening cele-

bration." How often must this type of function have occurred in early New Zealand history, and what type of citizen was able to attend? Mr Laws was certainly not among those present. He was working that day and was nearly blown off the bridge at Ahuriri in the gale that had blown up. He recorded in his diary the difficult and uncomfortable manner in which he and his fellow workmen made their way home, walking backwards so that the sand and small stones whipped up by the wind did not get into their eyes.

As for the opening celebrations at Hastings, the *Hawkes Bay Times* reported that a "stiff breeze was blowing during the time, which gradually freshened into a gale, the severest felt on the plains for seven years. The greater number of the excursionists took shelter from the wind in the hotel." Apparently they showed good sense in doing this as the wind blew away not only many hats (which were "captured with the utmost difficulty") but also half the roof of the station-master's house.

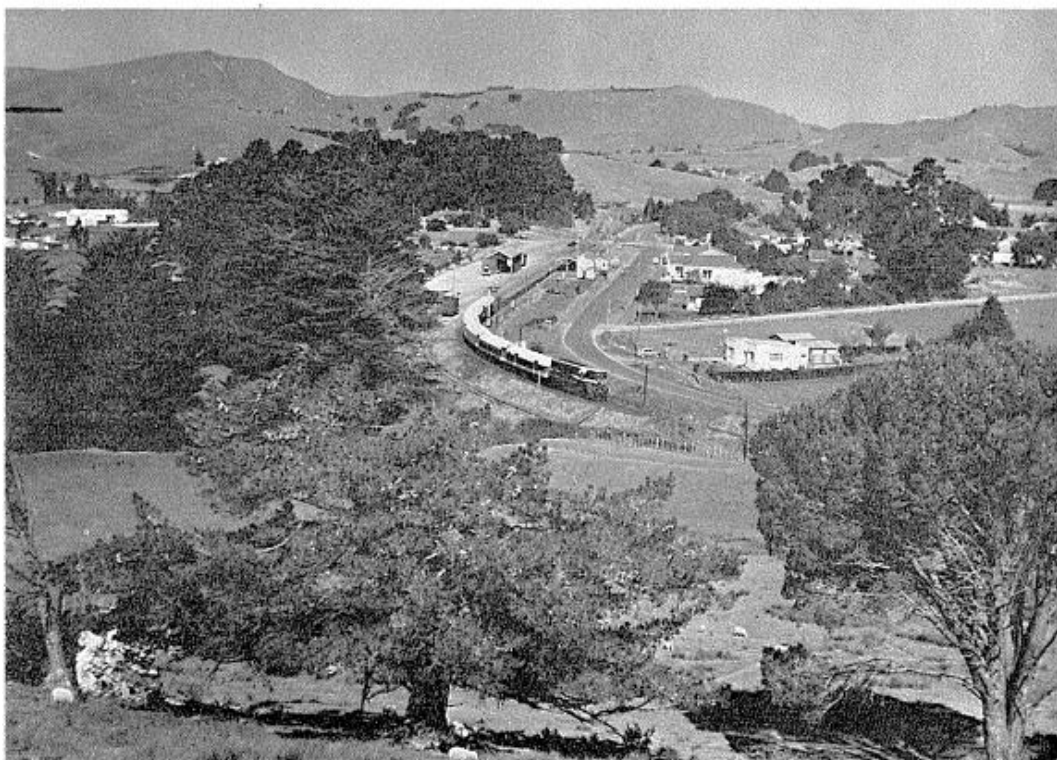
The two miles of line from Napier northwards to Spit were opened about six weeks later, on 25 November 1874. It seems that two picnics and a great wind were enough for the good citizens of Napier, for this section opened without

OPPOSITE, UPPER: The goods office at Ahuriri, photographed in August 1974, is believed to be the original Spit station building, moved from its original site.

OPPOSITE, CENTRE: The tiny Whakatu station tucked alongside the adjacent freezing works was photographed in August 1972.

OPPOSITE, LOWER: This September 1974 photograph shows that Paki Paki station remains an interesting relic of 19th century railway architecture.

Photographs: E. C. G. Fletcher.



Photograph: R. J. Meyer.

One hundred and five kilometres south of Napier, one afternoon early in 1875, the 2.5 p.m. Napier-Wellington "Endeavour" passes through Ormondville. Readers with keen eyes will discern portion of the long Ormondville Viaduct in the background to the left of the trees.

another celebration. All that remained now to complete the railway to Paki Paki was to finish construction of the Ngaruroro No. 3 bridge. The pile-driving equipment needed for this was transferred to the site on 14 October, having completed its work at the Ahuriri bridge site.

Soon after this, Mr Laws left railway construction work and on 17 November went to Te Aute where he was to build a house for a local Chief. He travelled along the main road, which then ran through Clive, Havelock North, and Paki Paki. His diary tells us that by this time the station buildings at Paki Paki were finished; only the bridge was needed to complete the line.

Progress seems to have been very favourable on both the house that Mr Laws was building and on the railway bridge. By 30 December the house was built. Mr Laws was paid £42 for the work. He then walked into Hastings and caught the train for Napier. Had he waited another two days he could have ridden the train from Paki Paki for by New Years Day the line was complete as far as this station.

These 18 miles from Spit to Paki Paki formed only the first stage of the Hawke's Bay Railway, which was ultimately in 1891 to reach Palmerston North, but in 1875 it went a long way towards solving the transport problems of the Province.

NZR NAPIER SECTION, 1875

Distance	Stations			Week Days			Sunday
				1	3	5	1
M. ch.				a.m.	a.m.	p.m.	p.m.
	Spit	dep		—	10.50	4.05	—
1 78	Napier	arr		—	11.00	—	—
		dep		7.30	12.00	4.15	2.30
7 77	Farndon	"		7.55	12.25	4.40	2.55
13 69	Hastings	"		8.20	12.50	5.05	3.20
18 17	Paki Paki	arr		8.40	1.10	5.25	3.40

Distance	Stations			Week Days			Sunday
				2	4	6	2
M. ch.				a.m.	a.m.	p.m.	p.m.
	Paki Paki	dep		9.00	1.30	5.50	5.00
4 28	Hastings	"		9.21	1.51	6.11	5.21
10 20	Farndon	"		9.46	2.16	6.36	5.46
16 19	Napier	arr		—	2.40	7.00	6.10
		dep		10.11	3.40	—	—
18 17	Spit	arr		10.20	3.50	—	—

On 1 January, train service began between Spit and Paki Paki with three trains each way south of Napier and two each way between Napier and Spit arranged as

shown in the appended timetable. The development of train service in Hawke's Bay had begun.

FROM THE FIRST TRAFFIC RETURNS FOR THE NAPIER AND WAIPUKURAU RAILWAY

Number of Passengers—	10 Oct. 1874	1 Jan. 1875
	to 31 Dec. 1874	to 30 June 1875
1st Single	1,165	4,121
1st Return	1,688	5,420
2nd Single	2,799	11,150
2nd Return	8,018	14,336
Totals	13,670	35,027
Goods Tonnage	439	4,090
Receipts—	£	£
Ordinary Passengers	943	2,791
Season Tickets	6	25
Parcels, dogs, etc.	13	40
Advertising	—	27
Goods	151	1,508
	£1,113	£4,391
Working Expenses	£402	£3,158