



Charming Creek Walkway

Baseline Inspection Report GPS ID feature data

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A report prepared for the Buller Kawatiri Area Office

**Department of
Conservation**
Te Papa Atawhai

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Initially Jackie and Amy created this document as the

Charming Creek Walkway Historic Heritage Assessment and Baseline Inspection Report – some 250 pages of text and images.

After consideration it was decided to create three documents:

Charming Creek Tramway – milling, mining and walkway – a history

Charming Creek Walkway – baseline inspection report

Charming Creek Walkway – baseline inspection GPS identification data (a series of tables relating to the sections of the baseline inspection).

A bibliography is available in the history document.

All three are available as related documents on the Department of Conservation website.

Coal miners being transported from the Charming Creek mine at the end of a working day. Photograph taken in 1945 by John Pascoe. ATL 1/4-001229-F

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Charming Creek Walkway Baseline Inspection

GPS ID feature data

Table 6: Section 1 Charming Creek Coal Mine to Papa Tunnel

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
010	Boiler: Clayton and Shuttleworth (No. 8657)	This boiler is located in the Charming Creek Road end car park. It was bought to this location by the NZFS.	HF	121.00	2422943.99	5957329.38
010	State coal prospecting core sampling site	From this GPS point in the eastern car park of the walkway the site is about 60m away over the creek on a ridge. This was the last place that the state undertook core sampling. There are metal relics in the bush still.	HF	121.00	2422943.99	5957329.38
011	Air Ventilation Shaft	'Speedy' the mine horse reportedly fell in and his bones can still be found here. This air shaft is now covered with rubble on the surface.	HF	117.20	2422873.62	5957269.16
012	Bridge	GPS point marks the car park end of a modern bridge. This bridge is using old bridge abutments and the remains of the bridge can be seen to be lying beside the bathhouse.	HF/ modern	116.40	2422872.87	5957261.25
013	Charming Creek Coal Mine Bathhouse	Concrete shell and some wooden framing around windows and doors is all that remains of the bathhouse. Built in 1948.	HF	117.20	2422872.41	5957237.07
014	Bins - second Charming Creek Coal Mine	Parallel concrete foundations of the bins are still present. Believed that in 2001 the bins were dismantled by the council as they were thought a visitor safety hazard. Remains from the bins including wooden beams, trap doors, four sliding gates (for dropping coal into trucks) are now lying NE of the bins after being bulldozed into this position.	HF	119.30	2422907.62	5957240.14
014	Tramway-modification (Bulldozed)	Tramline used to run further to the NE of the bins and so this area used to be flat and was tramway formation. However due to the bulldozing and clearing of rubble on the site this area where the tramline used to pass through is now not flat. It is unclear if the tramline fabric is still present underneath.	HF	119.30	2422907.62	5957240.14
014	Upright rails	There are two long upright rails in ground just north of the bins. There are also another two on the opposite side of Charming Creek. Function is unknown but it is thought that they may have been used to support a water transport system from the bins into Charming Creek.	HF	119.30	2422907.62	5957240.14
015	Ruston Lokey	This may be the lokey that normally worked in the gorge section.	HF	119.10	2422894.80	5957237.60
N/A	Charming Creek Mine Dam	A hydro pipeline used to lead from the base of the blow up system at the Charming Creek Coal Mine to a concrete dam a mile or so up the valley. The dam is still there.	HF			
016	Tar bin	This is a horizontal bin for melting tar or pitch that was used during the hydro scheme at the mine for sealing pipes.	HF	123.90	2422922.42	5957228.76
017	Hydraulic Hoist shaft	This is the location of the shaft which contained the hydraulic hoist at the Charming Creek Mine.	HF	124.10	2422934.65	5957235.19

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
018	Charming Creek Coal Mine Entrance - second	This is the second (and last) entrance to the Charming Creek Coal Mine. It is currently walled off about 10m in. About 5m in the remains of the wooden doors used for air control are visible. 0.7 tonne trucks were used here.	HF	125.80	2422957.14	5957223.56
019	Chimney	Remains of a chimney lying horizontal on ground. Found on a southern road through the Charming Creek Coal Mine (now vegetated and overgrown).	HF	129.40	2422898.83	5957210.65
020	Blacksmith chimney	Standing metal sheet chimney is thought to mark the location of a blacksmith shop.	HF	128.00	2422895.56	5957220.87
020	Blacksmith shop remains	Associated with the chimney (a few metres over) are a number of metal items thought to be associated with the blacksmith shop, e.g. a grinder wheel cover.	HF	128.00	2422895.56	5957220.87
021	Water tank	A circular concrete water tank mounted on stone blocks and rails (possibly wood). The concrete has been set in corrugated iron. Height=620mm, Inner Diameter=1320, Outer Diameter=1510.	HF	129.20	2422895.73	5957210.54
022	Concrete foundations	Concrete foundations are felt underfoot in this area and several large blocks are visible through the vegetation. One has a very coarse matrix with 3cm large stones. The exact extent of this concrete is unknown. One block (width=400mm, length=920-1540mm, depth=600mm) has been unusually strengthened with a fire bar, which was perhaps used as a levelling device.	HF	131.10	2422897.34	5957205.51
023	Hut site	Collapsed hut with wooden beams and corrugated iron. Chimney is still standing. Hut was about 3x4m.	HF	132.80	2422897.29	5957191.87
024	Package boiler	This is a short package boiler (maybe the bathhouse boiler). Dry back. It has a short compact marine type firebox (may have started life on a ship), but there is no evidence on the boiler who built it. Fire bars are scattered around the boiler.	HF	135.20	2422854.27	5957178.22
025	Coal mine office and storeroom	This was the location of the Charming Creek Coal Mine Office and Storeroom. It was a storeroom last. This was a wooden structure which still has a standing chimney.	HF	124.40	2422868.72	5957238.24
026	Air receiver	Remains of the air receiver, which was part of the system that ran the pneumatic drills used for boring in the mine.	HF	124.60	2422863.55	5957230.93
027	Fan house	This is the fan house installed at Charming Creek Mine for air ventilation (and access for miners). Air was expelled through the vent at the top using a sirocco fan. This replaced the natural air shaft (wpt 011). This was originally driven by a diesel engine (has two mounting bolts and timber and concrete foundations). This engine was superseded by an electric motor mounted on a concrete foundation. Foundations of the engines still present beside the fan house.	HF	124.40	2422862.58	5957223.64
029	Culvert	Historic culvert drilled into cutting/bench on south side of tramway. This culvert has been modified under the current walkway in modern times.	HF	123.20	2422846.38	5957222.72
029	Tramway-formation (Benched)	From here the tramway is benched upon leaving the coal mine site as the tramway alignment follows the creek.	HF	123.20	2422846.38	5957222.72
030	Tramway-formation (Sleepers)	Visible evidence of sleepers from tramway formation in some places here	HF	122.70	2422824.38	5957222.91
031	Magazine	Store for keeping explosives for use in the mine	HF	121.30	2422820.29	5957217.29
032	1.7 tonne truck	Remains of a large 1.7 tonne truck on the side of the track.	HF	122.20	2422786.33	5957215.65

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
033	Hut site	A track leaves the tramway here, up the hill to a hut site on the side of the hill. The hut is about 1.5 x 2.5m and is in really good condition. This may have been used to store the supplies.	HF	123.70	2422771.13	5957197.86
034	Metal equipment remains	Between here and the Papa Tunnel there are a lot of historic artefacts and rusty equipment lying in the bush (especially just to the south of the track). It appears to have been collected here. For example the remains of a 1.7 tonne truck frame are here (also see GPS ID 37).	HF	120.00	2422746.17	5957211.03
035	NZFS laminated bridge anchor blocks	To the north of the walkway the remains (abutments) of a NZFS green laminated bridge can be seen by the edge of the creek. This bridge marks the junction of the old walkway alignment with the tramway alignment. When the coal mine was still operating in the 1980s the walkway from the car park was formed on the north side of the creek and lead over this bridge so as to avoid the active mine. This bridge reportedly got destroyed by a log moving downstream one day.	Modern	119.30	2422695.30	5957218.84
036	Culvert	Culvert with historic timbers still in-situ. At one point it has been washed out and newly constructed or modified.	HF/ modern	118.10	2422697.02	5957214.93
037	Boiler	6 hp dispatch boiler located in the scrub immediately to the south of the walkway and visible.	HF	118.80	2422687.76	5957211.96
037	Winch Drum	Small winch drum located in the scrub immediately to the south of the walkway and visible. From Mumm's Mill.	HF	118.80	2422687.76	5957211.96
037	Docking Saw	Circular docking saw located in the scrub immediately to the south of the walkway and visible. From Mumm's Mill.	HF	118.80	2422687.76	5957211.96
038	Papa Tunnel - east end	This marks the east end of the Papa Tunnel. This tunnel is currently closed to the public. An alternative route leaves the tramway alignment here and curves around the tunnel to the north of it to a major junction. (Tech Id 024923)	HF	119.60	2422680.09	5957216.80

Table 7: Section 2 — Papa Tunnel to the First Mine Portal

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
039	Tramway-formation (embankment sleepers)	This point is on the old tramway alignment, not on the current walkway (it is about 5m south of the walkway on the alternative route). Sleepers are visible.	HF	109.70	2422507.80	5957208.77
040	Papa Tunnel - west end	This marks the west end of the Papa Tunnel which is currently closed to the public. An alternative route leaves the tramway alignment at the east entrance and curves around to the north of the tunnel to a major junction. Sleepers and rail (about 20m) visible within tunnel. Centre rail brake (2) is present for about 10m across the tunnel entrance. There are displaced rails visible in the tunnel.	HF	115.50	2422604.74	5957211.72
040	Cutting	A cutting has been constructed on the west entrance to the Papa Tunnel before the tramway line enters the tunnel proper. It extends from here (at the tunnel entrance proper) to 042.	HF	115.50	2422604.74	5957211.72
041	Centre Rail Brake (1)	More centre rail brake is visible running west until 042. There are also sleepers visible in a ditch dug on the side of the walkway.	HF	114.80	2422586.89	5957214.56
GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
042	Centre Rail Brake (1)	More centre rail brake is visible running east until 041. There are also sleepers visible in a ditch dug on the side of the walkway. At 042 a boardwalk has been constructed and marks the end of the cutting that runs from the tunnel entrance.	HF	114.00	2422569.02	5957211.70
044	Cornes Hill Junction	This point is the junction of the mine road (to the settling ponds) with the walkway. Up until this point the walkway follows the road, but from here it leaves the road and heads south, crossing the tramway embankment that leads to Papa Tunnel. Then the walkway turns southwest crossing over the top of the older tramway alignment that leads to the first mine entrance. This older tramway alignment is now a creek (Wearne Creek).	HF/ Modern	108.00	2422475.80	5957207.26
045	Tramway-formation (tunnel/ sleepers)	At this point the track passes over a tunnel that leads to the first mine entrance. Water currently flows from the mine entrance under the walkway and into the creek (which was the tramway formation to the mine where large trucks were used).The line of the tramway from the mine entrance is visible across the walkway surface (sleepers are visible), which marks the first tramway alignment to the mine where small trucks were used.	HF	105.60	2422477.55	5957194.96
046	Coal mine first entrance	This is the first mine entrance. Small and large trucks were used to bring coal out of this mine.	HF	106.10	2422486.58	5957198.45
047	Tramway-formation	From the mine entrance (at 047) to the junction with the walkway (at 045), the tramway still has rails and sleepers.	HF	106.10	2422486.58	5957198.45
048	Bins from first Charming Creek Coal Mine	The remains of the old bins are reportedly about 20m from here up the creek. There are still old beams in the creek. These remains were not viewed during this fieldwork.	HF	104.20	2422437.52	5957184.78
049	Engine head	The head off an early engine is on the side of the walkway.	HF	104.20	2422437.52	5957184.78

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
049	Vertical Boiler	This is the site of a vertical boiler from the mine. It has been protected with black guard in the past. The remains of a winch are also here too (this may be from the winch site from the mine which was near here).	HF	103.20	2422422.57	5957196.58
050	Settling Ponds	This marks a point where the settling ponds become visible to the immediate north of the walkway. The settling ponds are tens of metres across (visible from old aerials) and visible to about 053 (where the photos were taken from). They have dried up and contain coal fines.	HF	104.20	2422296.42	5957232.36
050	Plate layers hut site	The plate layers hut site is reportedly south of the walkway from this point.	HF	104.20	2422296.42	5957232.36
052	New Zealand Walkway Commission Sign	Old New Zealand Walkways Commission marker/post with their 'w' walkway emblem on the top.	Modern	104.40	2422252.03	5957286.13
053	Settling Ponds	A point on the walkway alongside the settling ponds (see 050)	HF	104.70	2422227.10	5957303.48
054	Tramway-formation	The walkway joins the old tramway alignment again. Before this point it is believed that the settling ponds destroyed or modified the tramway back towards the coal mine during operations after the tramway closed. Sleepers are visible in places and displaced in others. The walkway is about 4m wide here following the tramway alignment.	HF	101.80	2422205.07	5957322.19
056	Tramway-formation	The walkway leaves the tramway alignment and makes its way towards Mumm's Mill. The tramway continues straight, following the south side of Wearne Creek down past Mumm's Mill until about 10m past 058 where the tramway has been undercut by the creek. Past the creek the tramway joins up with the timber lines that pass through Mumm's Mill.	HF	100.10	2422165.34	5957350.65
057	Metal equipment remains	Metal remains are present in the bush along the tramway alignment.	HF	98.90	2422137.98	5957355.57
058	Tramway-modification	About 10 m NW from here the tramway formation is undercut by Wearne Creek.	HF	98.70	2422119.92	5957360.57

Table 8: Section 3 — first mine Portal to Mumm’s Mill

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
049	Engine head	The head off an early engine is on the side of the walkway.	HF	104.20	2422437.52	5957184.78
049	Vertical boiler	This is the site of a vertical boiler from the Charming Creek Coal Mine. It has been protected with black guard in the past. The remains of a winch are also here too (this may be from the winch site from the mine which was near here).	HF	103.20	2422422.57	5957196.58
050	Settling ponds	This marks a point on the walkway where the settling ponds become visible just immediately to the north of the walkway. The settlings ponds are tens of metres across (visible from old aerials) and visible to about 053 (where the photos were taken from). The settling ponds have dried up and contain coal fines.	HF	104.20	2422296.42	5957232.36
050	Plate-layers hut site	The location of the plate layers hut site is reportedly south of the walkway from this point.	HF	104.20	2422296.42	5957232.36
052	New Zealand Walkway Commission Sign	This point marks an old New Zealand Walkways Commission walkway marker/post with their 'w' walkway emblem on the top.	Modern	104.40	2422252.03	5957286.13
053	Settling ponds	This is a point on the walkway alongside the settling ponds (see 050)	HF	104.70	2422227.10	5957303.48
054	Tramway-formation	The walkway joins the old tramway alignment again here. Before this point it is thought that the settling ponds largely destroyed or modified the tramway back towards the coal mine during the more recent operations after the tramway closed. The sleepers are visible in places and displaced in some places. The walkway is about 4m wide here following the alignment.	HF	101.80	2422205.07	5957322.19
056	Tramway-formation	At this point the walkway leaves the tramway alignment and makes its way towards Mumm's Mill. The tramway continues straight, following the south side of Wearne Creek down past Mumm's Mill site until about 10m past 058 where the tramway has been undercut by the creek. Past the creek the tramway joins up with the timber lines that pass through Mumm's Mill.	HF	100.10	2422165.34	5957350.65
057	Metal equipment remains	Metal remains are present in the bush along the tramway alignment here.	HF	98.90	2422137.98	5957355.57
058	Tramway-modification	About 10 m NW from here the tramway formation is undercut by Wearne Creek	HF	98.70	2422119.92	5957360.57

Table 9: Section 4 Mumm's Mill

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
060	Boiler	Dispatch logging winch—6hp. This has been restored with additional parts from Ray Faulkner of Faulkner & Anderson Sawmill (Omoto). The winch was moved here in 1987. The additional parts represent exactly what would have been here.	HF	100.60	2422154.14	5957232.36
061	Log Bogies	Two log bogies have been reconstructed and are situated here on rails. All the metal components used to restore the bogies were found near the bins at the top mine site. The timber was built in the workshop at Westport (not to the original specifications). The wheels are broad and flat indicating that they may have been used back in Watson's time when the tramway had wooden rails. The sleepers and rail were found at the Mumm's Mill site itself and are repositioned on the actual alignment of a timber tramway which brought logs down the valley to the log skids at the mill.	HF	97.00	2422147.64	5957286.13
	Mumm's Mill Shelter	This shelter houses the boiler that drove the mill				5957303.48
	Mumm's Mill	There are upright timbers in the ground that were part of the mill building.	HF			5957322.19
	Mumm's Mill Boiler	The portable boiler that drove Mumm's sawmill (in its original position). It has a Marshall marine type fire box and is 21hp. It is housed in Mumm's Mill Shelter.	HF			5957350.65
	Metal equipment remains	The Mumm's Mill Shelter also houses other equipment from Mumm's sawmill gathered into a pile beside the boiler. This includes a No.5 Weir feed water pump, governor valves, expansion valves and a breast bench gauge.	HF			5957355.57
062	Sawn timber trolley	The remains (wheels) of a sawn timber trolley can be seen in the clearing here.	HF	96.50	2422098.73	5957360.57
063	Mumm's Mill	The walkway exits the Mumm's Mill Site clearing to the NW of the site not on the tramway alignment. Apart from the recorded historic fabric remaining on this site it is likely there are subsurface remains. It is understood that rubbish (remains of structures and equipment) was cleared with a digger from the site to the side of the clearing at one point.	HF	96.30	2422099.41	
063	Truck	Large 1.7 tonne coal truck lies to the north of the walkway here.	HF	96.30	2422099.41	
064	Tramway-formation	The alignment of the walkway joins the tramway alignment at this point. Original sleepers are visible, some with dog spikes (see photo 41).	HF	96.70	2422064.77	
064	Last Coal Train	This is the site of the 'last coal train' on the tramway where remains of large coal trucks can be seen. Two are very complete (minus the timbers) and visible and there may be 5 to 7 of them.	HF	96.70	2422064.77	

Table 10: Section 5 — Mumm’s Mill to Charming Creek Bridge

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
064	Tramway-formation	The walkway joins the tramway alignment at this point. Original sleepers are visible, some with dog spikes (see photo 41).	HF	96.70	2422064.77	5957398.28
065	Union Foundries Shelter	This shelter was built about 10 years ago to house the lokey.	Modern	96.70	2422001.17	5957388.54
065	Union Foundries Lokey	This is the Union Foundries Lokey (nick named the 'Red Terror'). It has a reconstructed truck attached.	HF	96.70	2422001.17	5957388.54
065	Brake	Brake for gripping the centre rail is here leaning against the shelter.	HF	96.70	2422001.17	5957388.54
065	Engine	There is a spare engine to the south of the track in the bush. (International Harvester)	HF	96.70	2422001.17	5957388.54
065	Tramway-modification	The tramway beneath the Union Foundries Lokey has been reconstructed and follows the original alignment.	HF/modern	96.70	2422001.17	5957388.54
066	Paddock	Once a fenced off paddock where cows grazed to the north of the walkway.	HF	96.50	2421951.03	5957383.54
066	Hut site	There may have been a hut site associated with the grazing paddock.	HF	96.50	2421951.03	5957383.54
067	Tramway-formation	Sleepers are exposed here, some with dogs.	HF	97.90	2421930.37	5957366.66
068	Tramway-formation	Embankment one end	HF	98.40	2421915.81	5957269.51
069	Tramway-formation	Embankment one end	HF	98.40	2421909.47	5957231.10
069	1.7 tonne coal truck	A large coal truck is immediately to the north of the walkway	HF	98.40	2421909.47	5957231.10
070	Tramway-formation	Side Benched formation one end	HF	98.40	2421903.13	5957176.54
070	Tramway-modification	Slumped section one end (It appears that a long section of the tramway here may have been subjected to slumping, with the original alignment originally further south a couple of metres up the bank. Sleepers are visible in some places)	HF/modified	98.40	2421903.13	5957176.54
071	Tramway-formation	Sleepers are visible here	HF	96.70	2421896.80	5957158.19
073	Culvert-wooden	Looks like a wooden pigsty culvert	HF	96.70	2421889.94	5957105.05
074	Tramway-modification	Slumped section one end. TThe original alignment was originally further south, a couple of metres up the bank. Sleepers are visible in some places.	HF/modified	97.00	2421889.42	5957099.23
075	Tramway-modification	Slip section one. A slip over the tramway formation has obscured the historic fabric, making the walkway narrow (about 1 metre wide).	HF/modified	96.00	2421860.26	5957070.00
076	Tramway-modification	Slip section one. A slip over the tramway formation has obscured the historic fabric here, making the walkway narrow (about 1 metre wide). Sleepers are evident but mostly buried.	HF/modified	96.70	2421835.38	5957053.63
077	Tramway-formation?	Two logs (maybe cedar or totara) are lying parallel from the tramway/walkway formation over the southern side drain. Their origin and function are unknown.	Unknown	94.60	2421711.63	5957044.51

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
078	Tramway-formation	Good section of exposed sleepers with dog spikes.	HF	94.30	2421661.64	5957004.96
079	Bridge	Original bridge on tramway	HF	94.10	2421643.34	5956906.90
080	Trolley	Remains of a trolley immediately adjacent to the track	HF	94.60	2421642.04	5956904.11
080	Tramway-formation	Side benched formation one end	HF	94.60	2421642.04	5956904.11
080	Tramway-formation	Cutting one. South side of walkway 2-3m high, north side 1m high, about 10-15m long.	HF	94.60	2421642.04	5956904.11
081	Tramway-formation	Cutting one. South side of walkway 2-3m high, north side 1m high, about 10-15m long.	HF	93.60	2421649.91	5956892.50
081	Tramway-formation	Side benched formation second end. Rail is also exposed on the north side of the walkway.	HF	93.60	2421649.91	5956892.50
082	Tramway-modification	Slumped section two for 20m on the north edge by the creek	HF/ modified	94.60	2421664.67	5956875.43
082	Tramway usage	There is coal along the sides of the tramway – spilled from the trucks. Especially noticeable at this end of the tramway probably due to: 1) the trucks would have been full close to the mine increasing the chance of spillage, 2) slumping and slips may have made the journey bumpier increasing the likelihood of spillage, and 3) there is room on the side of the tramway for coal to accumulate, i.e. there is no steep drop to the creek etc.	HF	94.60	2421664.67	5956875.43
083	Tramway-formation	Side benched formation second end (ends at modern bridge over Rod Stream)	HF	93.40	2421703.40	5956770.44
083	Tramway-formation	Embankment two end (starts after Rod Stream Bridge)	HF	93.40	2421703.40	5956770.44
084	Tramway-formation	Embankment two end (starts after Rod Stream Bridge)	HF	93.90	2421666.55	5956725.08
084	Tramway-formation	Side benched formation three end	HF	93.90	2421666.55	5956725.08
086	Tramway-formation	Side benched formation three end	HF	93.40	2421594.16	5956700.92
086	Tramway-formation	Cutting two end (has side drains)	HF	93.40	2421594.16	5956700.92
087	Tramway-formation	Rail exposed on south side of tramway	HF	92.90	2421556.21	5956713.87
088	Culvert	Original culvert	HF	91.90	2421533.08	5956721.30
089	Culvert	Original culvert	HF	92.70	2421515.53	5956725.05
090	Bridge	Original bridge with a modern plastic culvert pushed through	HF	93.10	2421439.77	5956750.81
090	Tramway-formation	Cutting 2 end (has side drains)	HF	93.10	2421439.77	5956750.81
090	Tramway-formation	Embankment 3 end	HF	93.10	2421439.77	5956750.81
091	Culvert	Original culvert (can see the beams)	HF	92.70	2421372.64	5956772.79
092	Tramway-formation	Embankment three end	HF	92.40	2421312.29	5956791.56
092	Tramway-formation	Side benched formation four	HF	92.40	2421312.29	5956791.56

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
093	Tramway-modification	Slumped section three. A large slumped section which has been repaired with a modern bridge. Marks the end of the benched section with an embankment.	HF/modified	93.10	2421258.56	5956813.15
093	Tramway-formation	Side benched formation 4	HF	93.10	2421258.56	5956813.15
093	Tramway-formation	Embankment 4 end	HF	93.10	2421258.56	5956813.15
094	Tramway-formation	Embankment 4 end	HF	93.60	2421159.93	5956811.10
094	Tramway-formation	Side benched formation 5	HF	93.60	2421159.93	5956811.10
094	Tramway-formation	Rail exposed on north side of tramway for about 10m	HF	93.60	2421159.93	5956811.10
095	Tramway-formation	Side benched formation 5	HF	92.90	2421108.52	5956795.46
095	Tramway-formation	Cutting 3 end (sleepers visible)	HF	92.90	2421108.52	5956795.46
096	Tramway-formation	Cutting 3 end (sleepers visible)	HF	93.40	2421120.20	5956751.29
096	Tramway-formation	Side benched formation 6	HF	93.40	2421120.20	5956751.29
097	Culvert	Original culvert	HF	93.10	2421161.61	5956716.05
098	Tramway-formation	Side benched formation 6	HF	93.40	2421206.50	5956667.64
098	Bridge	Small bridge about 1.5m long, made with sleepers. Unsure if this is original or constructed later.	HF	93.40	2421206.50	5956667.64
098	Tramway-formation	Cutting 4 end (about 10m long altogether)	HF	93.40	2421206.50	5956667.64
099	Tramway-formation	Cutting 4 end (about 10m long altogether)	HF	93.60	2421225.43	5956658.96
100	Tramway-modification	Slumped section 4. Large slump on the creek side of the track about 10m long. The sleepers may be gone.	HF/modified	93.60	2421237.98	5956650.16
101	Tramway-modification	Slumped section 4. Large slump on the creek side of the track about 10m long. The sleepers may be gone.	HF/modified	93.60	2421245.54	5956643.89
101	Tramway-formation	Side benched formation 7	HF	93.60	2421245.54	5956643.89
102	Tramway-modification	Slumped section 5. No evidence of sleepers in this benched section that has slumped away.	HF/modified	94.60	2421288.30	5956627.07
103	Tramway-formation	Side benched formation 7	HF	94.30	2421280.48	5956612.98
103	Tramway-formation	Cutting 5 end. Well defined with sleepers.	HF	94.30	2421280.48	5956612.98
104	Tramway-formation	Cutting 5 end. Well defined with sleepers.	HF	94.80	2421300.80	5956573.16
104	Tramway-formation	Side benched formation 8 end	HF	94.80	2421300.80	5956573.16

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
105	Tramway-modification	Slipped section 2. No evidence of sleepers but some rail exposed.	HF/ modified	95.50	2421305.31	5956555.25
106	Tramway-formation	Side benched formation 8. This particularly a nice benched section with sleepers and rails exposed, surviving in a slip prone area. Monitor this example of benched track formation in a slip prone area.	HF	93.40	2421306.98	5956523.10
107	Tramway Quarry	Location of a large quarry on the south side of the track. It is about 20-30m across.	HF	95.10	2421313.84	5956508.64
108	Tramway-formation	Side benched formation 8 end	HF	97.00	2421319.11	5956495.34
108	Tramway-formation	Cutting 6 end. Well defined with sleepers.	HF	97.00	2421319.11	5956495.34
109	Tramway-formation	Cutting 6 end. Well defined with sleepers.	HF	95.30	2421342.38	5956461.09
109	Tramway-formation	Rail is visible for 20m on the north side of the tramway	HF	95.30	2421342.38	5956461.09
110	Tramway-formation	Embankment 5 end. This section of embankment has intact clearly visible sleepers. Photo is from the start of the embankment section looking north back up the track past a modern bridge.	HF	94.30	2421355.66	5956443.41
111	Culvert	Original culvert	HF	93.60	2421364.21	5956382.97
112	Culvert	Original culvert	HF	94.60	2421351.99	5956351.46
112	Tramway-formation	Filled section 1 end. This section of embankment clearly has a section of fill visible on the north edge of the track. Fill uses rocks and it has a reasonably straight edge.	HF	94.60	2421351.99	5956351.46
113	Log Bogies	Remains of a log bogie is located immediately to the north of the track	HF	93.40	2421345.36	5956346.02
114	Tramway-formation	Filled section 1 end/Embankment 5 end. This section of embankment clearly has fill visible on the north edge of the track. Fill uses rocks and it has a reasonably straight edge.	HF	92.90	2421338.69	5956338.68
114	Tramway-formation	Side benched formation 9 end	HF	92.90	2421338.69	5956338.68
115	Tramway-formation	Side benched formation 9 end	HF	95.10	2421332.86	5956330.70
115	Tramway-formation	Cutting 7 end	HF	95.10	2421332.86	5956330.70
116	Tramway-formation	Cutting 7 end	HF	94.80	2421306.16	5956294.84
116	Tramway-formation	Side benched formation 10 end	HF	94.80	2421306.16	5956294.84
117	Bridge	Old bridge beams are visible lying to the north side of a modern board walked bridge.	HF	95.30	2421285.96	5956264.32
118	Tramway-formation	Side benched formation 10 end	HF	95.50	2421258.81	5956239.99
118	Tramway-formation	Cutting 8 end (This is a very small cutting and may be actually just coal spoil on the edge of the tramway)	HF	95.50	2421258.81	5956239.99
119	Culvert	Original culvert	HF	94.10	2421253.00	5956234.90

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
120	Bridge	At this modern bridge there is evidence of a previous bridge. There are logs across the gap which have been in filled and have a deck across the top. Logs on the side of the bridge are probably from another, perhaps earlier construction.	HF	94.30	2421210.68	5956205.49
120	Tramway-formation	Cutting 8 end (This is a very small cutting and may be actually just coal spoil on the edge of the tramway)	HF	94.30	2421210.68	5956205.49
120	Tramway-formation	Side benched formation 11 end	HF	94.30	2421210.68	5956205.49
121	Culvert	Original culvert	HF	94.30	2421129.42	5956189.99
122	Culvert	Original culvert	HF	94.60	2421121.32	5956190.74
123	Culvert	Original culvert	HF	95.30	2421113.34	5956189.08
124	Culvert	Original culvert	HF	94.10	2421100.40	5956182.50
125	Bridge	Remains of an old bridge can be found to the side of the walkway.	HF	93.40	2421052.60	5956167.17
126	Culvert	Original culvert	HF	93.10	2421030.06	5956162.23
127	Culvert	Original culvert	HF	93.60	2421016.57	5956158.63
128	Tramway-formation	Side benched formation 11 end	HF	93.40	2420972.98	5956155.27
128	Tramway-formation	Filled section 2 end. Built up on north side about 2m high with rocks.	HF	93.40	2420972.98	5956155.27
129	Tramway-formation	Filled section 2 end (built up on north side about 2m high with rocks)	HF	92.90	2420943.33	5956155.66
129	Tramway-formation	Side benched formation 12 end (sleepers visible)	HF	92.90	2420943.33	5956155.66
130	Bridge	Modern bridge constructed over old bridge with old beams still left in-situ	HF	91.90	2420869.36	5956151.59
131	Tramway-formation	Side benched formation 12 end (sleepers visible)	HF	91.70	2420810.08	5956143.39
131	Tramway-formation	Tramway alignment followed (1 end)- no evidence of earth modification as the tramway alignment moves through open land.	HF	91.70	2420810.08	5956143.39
132	Tramway-formation	Tramway alignment followed (1 end)- no evidence of earth modification as the tramway alignment moves through open land.	HF	91.20	2420773.43	5956144.10
132	Tramway-formation	Filled section 3/Embankment 6 end	HF	91.20	2420773.43	5956144.10
134	Tramway-formation	Filled section 3/Embankment 6 end	HF	91.70	2420707.85	5956161.58
134	Tramway-formation	Side benched formation 13 end	HF	91.70	2420707.85	5956161.58
135	Tramway-formation	Side benched formation 13 end	HF	92.20	2420694.92	5956169.84
135	Tramway-formation	Cutting 9 end	HF	92.20	2420694.92	5956169.84
136	Tramway-formation	Cutting 9 end	HF	91.50	2420663.90	5956178.30
136	Tramway-formation	Side benched formation 14 end	HF	91.50	2420663.90	5956178.30

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
137	Tramway-formation	Side benched formation 14 end	HF	90.70	2420607.01	5956192.36
137	Tramway-formation	Filled section 4 end. Built up for about 10m. The side of the track is slumping a little and it looks like some sleepers may have fallen over the side.	HF	90.70	2420607.01	5956192.36
138	Tramway-formation	Filled section 4 end. Built up for about 10m. The side of the track is slumping a little and it looks like some sleepers may have fallen over the side.	HF	90.50	2420604.92	5956203.74
138	Tramway-formation	Side benched formation 15 end	HF	90.50	2420604.92	5956203.74
139	Tramway-formation	Side benched formation 15 end	HF	90.00	2420563.49	5956219.66
139	Tramway-formation	Tramway alignment followed (2 end)- no evidence of earth modification as the tramway alignment moves through open land.	HF	90.00	2420563.49	5956219.66
140	Log Bogies	The remains of a log bogie with wide wheels lies immediately adjacent to the walkway here.	HF	88.60	2420529.63	5956205.31
141	Tramway-formation	Tramway alignment followed (2 end)- no evidence of earth modification as the tramway alignment moves through open land.	HF	88.60	2420507.05	5956174.97
141	Tramway-formation	Embankment 6 end (This section of embankment runs until the bridge just after the sulphur spring)	HF	88.60	2420507.05	5956174.97
142	Sulphur Spring	A natural sulphur spring which trickles from the rock adjacent to the north side of the walkway.	HF	87.80	2420490.46	5956155.05
143	Tramway-formation	Tramway alignment followed (3 end)- no evidence of earth modification as the tramway alignment moves through open land.	HF	87.10	2420474.79	5956134.57
143	Culvert	Original culvert	HF	87.10	2420474.79	5956134.57
144	Tramway-formation	Tramway alignment followed (3 end)- no evidence of earth modification as the tramway alignment moves through open land.	HF	86.90	2420463.33	5956123.87
144	Tramway-formation	Cutting 10 end (This marks the end of a really shallow cutting with sleepers evident)	HF	86.90	2420463.33	5956123.87
145	Tramway-formation	Cutting 10 end (This marks the end of a really shallow cutting with sleepers evident)	HF	87.40	2420398.61	5956075.36
145	Tramway-formation	Tramway alignment followed (4 end)- no evidence of earth modification as the tramway alignment moves through open land away from the creek.	HF	87.40	2420398.61	5956075.36
146	Tramway-formation	Tramway alignment followed (4 end) - no evidence of earth modification as the tramway alignment moves through open land away from the creek.	HF	87.60	2420338.52	5956048.36
146	Tramway-formation	Cutting 11 end. This cutting is relatively long and quite boggy underfoot. Sleepers are clearly evident. Cutting ends at the Charming Creek Bridge (Hayward)). Drainage needs to be fixed in a way to keep historic fabric intact and in-situ.	HF	87.60	2420338.52	5956048.36
147	Tramway-formation	Cutting 11 end (This cutting is relatively long and quite boggy underfoot. Sleepers are clearly evident. Cutting ends at the Charming Creek Bridge (Hayward)). Drainage needs to be fixed in a way to keep historic fabric intact and in-situ	HF	85.00	2420276.16	5955932.77
147	Charming Creek Bridge	This is the site of the modern Charming Creek suspension bridge. The remains of old bridge timbers are still present here from a 12x12 normal bridge.	HF	85.00	2420276.16	5955932.77

Table 11: Section 6 — Charming Creek Bridge to Watson’s Mill – GPS Data

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
147	Charming Creek Bridge	This is the site of the modern Charming Creek suspension bridge. The remains of old bridge timbers are still present here from a 12x12 normal bridge.	HF/modern	85.00	2420276.16	5955932.77
148	Tramway-formation	Embankment 7 end. Embankment formation starts at the south end of the Charming Creek Bridge.	HF	84.50	2420282.09	5955890.98
149	Bridge	The concrete remains of the southern abutment or anchor block (from the old Charming Creek Bridge) are visible on the east side of the walkway. The running beams would have started from this point.	HF/modern	84.50	2420282.09	5955887.43
150	Tramway-formation	Embankment 7 end. Embankment formation starts at the south end of the Charming Creek Bridge.	HF	84.70	2420278.41	5955879.17
150	Tramway-formation	Tramway alignment followed (5 end) – no evidence of earth modification as the tramway alignment moves through open land. Sleepers clearly visible.	HF	84.70	2420278.41	5955879.17
151	Telephone pole	To the immediate east of the track is a 3x4 square post in the ground standing about 2.5m above the ground.	HF	85.20	2420284.72	5955848.91
152	Tramway-formation	Tramway alignment followed (5 end)- no evidence of earth modification as the tramway alignment moves through open land. Sleepers clearly visible.	HF	82.30	2420208.29	5955727.26
152	Tramway-formation	Embankment 8 end	HF	82.30	2420208.29	5955727.26
153	Tramway-formation	Embankment 8 end	HF	82.60	2420145.00	5955686.37
153	Tramway-formation	Tramway alignment followed (6 end) - no evidence of earth modification as the tramway alignment moves through open land. There is a side drain on the northern side of the tramway alignment.	HF	82.60	2420145.00	5955686.37
154	Tramway-formation	Tramway alignment followed (6 end) - no evidence of earth modification as the tramway moves through open land. There is a side drain on the northern side of the tramway.	HF	82.60	2420119.42	5955666.03
154	Bridge	A modern bridge associated with old bridge remains. This bridge is sitting on concrete abutments and has timber footings.	HF/modern	82.60	2420119.42	5955666.03
155	Tramway-formation	Embankment 9 end. Follows from the bridge (154) built up within a very boggy area. The watery bog may have been an earth quarry used to construct the embankment. There is some slumping evident on the north side.	HF	81.80	2420101.48	5955655.88
156	Tramway-formation	Embankment 9 end. Follows from the bridge (154) built up within a very boggy area. The watery bog may have been an earth quarry used to construct the embankment. There is some slumping evident on the north side.	HF	82.60	2420048.30	5955644.76
156	Tramway-formation	Cutting 12 end. With sleepers visible (see photo 41).	HF	82.60	2420048.30	5955644.76
157	Culvert	Original culvert	HF	82.30	2420035.22	5955645.84
158	Tramway-formation	Cutting 12 end with sleepers visible.	HF	81.80	2420027.51	5955650.85
158	Tramway-formation	Side benched formation 15 end. Cutting on north.	HF	81.80	2420027.51	5955650.85

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
159	Tramway-formation	Rail in-situ 1. Visibly starts here and disappears under spoil of slip.	HF	82.80	2420009.46	5955653.95
160	Tramway-formation	Rail in-situ 1. Visibly starts here and disappears under spoil of slip.	HF	83.30	2419998.32	5955636.73
160	Tramway-formation	Slipped section 3. About 10m long.	HF	83.30	2419998.32	5955636.73
161	Tramway-formation	Slipped section 3. About 10m long and in-situ rail appears to be under the slip.	HF	83.30	2419985.19	5955650.59
161	Tramway-formation	Rail in-situ 2. Visibly starts here after slip.	HF	83.30	2419985.19	5955650.59
162	Culvert	Original culvert	HF	83.30	2419981.34	5955650.26
163	Culvert	Original culvert	HF	83.50	2419972.16	5955631.53
164	Tramway-formation	Sleepers are in-situ and the walkway skirts around to the side blocked by a fence. The rail formation here is being undermined.	HF	82.60	2419969.63	5955627.48
165	Tramway-formation	Side benched formation 15 end (cutting on north)	HF	83.30	2419958.52	5955611.04
165	Tramway-formation	Cutting 13 end (Very tall, 3m in height, width 2.10m, plus a 30cm wide side drain on the west side of the cutting)	HF	83.30	2419958.52	5955611.04
166	Cut Out	Cut out in rock across tramway	HF	82.60	2419962.41	5955598.92
167	Tramway-formation	Cutting 13 end (Very tall, 3m in height, width 2.10m, plus a 30cm wide side drain on the west side of the cutting)	HF	83.00	2419969.98	5955592.59
167	Tramway-formation	Side benched formation 16 end (cutting on north as tramway is high above creek, not very wide. Sleepers visible)	HF	83.00	2419969.98	5955592.59
168	Culvert	Original culvert	HF	82.60	2419962.61	5955550.68
169	Tramway-formation	Side benched formation 16 end (cutting on north as tramway is high above creek, not very wide. Sleepers visible)	HF	82.30	2419963.91	5955544.37
169	Tramway-formation	Cutting 14 end (medium sized)	HF	82.30	2419963.91	5955544.37
170	Tramway-formation	Cutting 14 end (medium sized)	HF	82.10	2419962.78	5955520.58
170	Tramway-formation	Side benched formation 17 end (from about this point heading west on the walkway it is not such a steep drop down, but the track is still benched above the creek. Not such a slip prone area)	HF	82.10	2419962.78	5955520.58
171	Cut Out	Cut out in rock across tramway	HF	81.80	2419963.92	5955502.34
172	Steel rope	Steel rope visible in bank at side of track. Probably used to haul logs.	HF	82.60	2419959.19	5955466.49
173	Junction to Watson's Picnic area	This is where a small track diverges (approx. SE) from the main walkway. It leads to a picnic area, but was not followed in this baseline inspection.	HF	81.80	2419959.29	5955443.22
174	Culvert	Original culvert	HF	82.10	2419935.37	5955420.78
175	Culvert	Original culvert	HF	82.60	2419922.12	5955413.22
176	Culvert	Original culvert	HF	82.30	2419910.49	5955408.95
177	Bridge	Original bridge	HF	83.00	2419878.09	5955394.02

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
178	Tramway-formation	Side benched formation 17 end. The benched formation gradually ends as Watson's Mill is entered. Rocks are visible under foot and no sleepers can be seen. Probably following middle line to the three way point (location unknown until 180).	HF	82.80	2419821.72	5955370.67
179	Turntable	Embankment to north side of track is visible. This is where the turntable at Watson's Mill was situated	HF	83.00	2419764.35	5955369.17
180	Junction (Coal line to walkway)	The junction where the walkway leaves the coal line (top) (180) and makes its way down to the timber railway (181) at Watson's Mill.	HF / Modern	83.00	2419700.94	5955376.46
180	Boarding House	On the flat to the north was reportedly the boarding house. This was not explored during this field work.	HF	83.00	2419700.94	5955376.46
181	Junction (Walkway to timber line)	This is the junction where the walkway leaves the coal line (top) (180) and makes its way down to the timber railway (181) at Watson's Mill	HF / Modern	78.70	2419677.95	5955370.24
182	Watson's Toilet	Site of the collapsed and taped off toilet that was put in by the NZFS at Watson's Mill.	Modern	77.30	2419594.88	5955362.57
183	Modern Bridge	Modern bridge over creek which used to run under the Watson's Mill	Modern	76.10	2419585.79	5955349.85
184	Boiler	Portable boiler, possibly a Marshall as it has a marine fire box, within the wooden red pegs which mark where the mill was. This boiler has apparently always been in about this location.	HF	78.20	2419576.55	5955362.15
185	Boiler	Stationary boiler with a long fire box (useful for using slab wood). Old style. Located at the edge of the pegs. This boiler has apparently always been in about this location.	HF	78.20	2419576.42	5955351.87
186	Watson's Mill Shelter	Location of Watson's Mill Shelter with interpretation and seats for lunch.	Modern	80.20	2419563.77	5955345.60
187	Bridge	Remains of a bridge over a small stream used for drinking water at Watson's Mill. Only the rails remain across the gap. Beams are also present at one end on the coal line that passes around the mill.	HF	81.10	2419550.79	5955348.16
187	Bridge	Embankment runs from the edge of the bridge to a cutting. In-situ sleepers and rail are both present.	HF	81.10	2419550.79	5955348.16
188	Tramway	Cutting end. Rails and sleepers are both in-situ in this tall narrow cutting.	HF	77.80	2419559.98	5955360.48
190	Tramway	Cutting end. Rails and sleepers are both in-situ in this tall narrow cutting.	HF	79.00	2419566.92	5955368.99
190	Tramway	Embankment runs from the end of the cutting to the edge by the bridge. Rails and sleepers both in-situ.	HF	79.00	2419566.92	5955368.99
191	Bridge	There used to be a bridge here over the stream that ran through Watson's Mill. All that remains are rails that extend across the gap with two sleepers still attached.	HF	78.00	2419585.32	5955382.19
192	Culvert	A culvert is visible here	HF	77.30	2419577.51	5955375.87

Table 12: Section 7 — Watson’s Mill to the Ngakawau Suspension Bridge – GPS Data

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
193	Tramway-formation	Side benched formation 18 end. Back on the walkway leaving Watson’s Mill. The tramway is very modified due to poor drainage, washout and water scouring.	HF	75.80	2419564.87	5955342.31
193	Timber trolley	Between this point and 187 beside the small stream which may have been used for drinking water at the mill, there are the remains of a timber trolley.	HF	75.80	2419564.87	5955342.31
194	Tramway-formation	This is the approximate location of the junction where the coal and timber tramways met. There used to be a set of points here. They are no longer present probably because the coal line was in use much longer than the timber line around the mill. They may have been removed.	HF	77.30	2419537.84	5955310.20
194	Tramway-formation	Side benched formation 18 end	HF	77.30	2419537.84	5955310.20
194	Tramway-formation	Side benched formation 19 end. In-situ rails and sleepers visible continuously from this point. Many curves in the tramway alignment begin from here as well.	HF	77.30	2419537.84	5955310.20
195	Check rail	Check rails are visible here. Designed to keep the train on rails at a corner.	HF	79.00	2419534.90	5955303.58
196	Tramway-formation	A waterfall flows down the bench on the west side of the tramway. The water is taken under the rails. A slab of concrete was laid between the rails and the water was transported under here and into the creek. However, the waterfall has shifted course and is now undermining the rails and sleepers to the north of the concrete slab bridge.	HF	77.30	2419561.29	5955291.23
197	Tramway-formation	Side benched formation 19 end. In-situ rails and sleepers visible continuously from this point. Many curves in the tramway alignment begin from here as well. Still in railway formation at this point but there is evidence of slumping for about 10m. Danger of eroding away	HF	79.20	2419566.63	5955229.25
198	Tramway-formation	Side benched formation 19 end. In-situ rails and sleepers visible continuously from this point. Many curves in the tramway alignment begin from here as well. Still in railway formation at this point but there is evidence of slumping for about 10m. Danger of eroding away	HF	79.70	2419576.82	5955214.37
199	Tramway-formation	Side benched formation 19 end. In-situ rails and sleepers visible continuously from this point. Many curves in the tramway alignment begin from here as well. Still in railway formation at this point but there is evidence of another slump and the edge is eroding away. It has been fenced off. Danger of eroding away	HF	80.40	2419576.23	5955207.80
199	Check rail	Check rails (2 end) are visible here on west side of rail formation	HF	80.40	2419576.23	5955207.80
200	Check rail	Check rails (2 end) are visible here on west side of rail formation	HF	81.10	2419591.80	5955173.82
200	Tramway-formation	Side benched formation 19 end (In-situ rails visible continuously with sleepers until the bridge before 'The Verandah')	HF	81.10	2419591.80	5955173.82
200	Bridge	Start of modern bridge at 'The Verandah' ends at 201.	Modern	81.10	2419591.80	5955173.82
201	The Verandah	Side benched formation 20 — 'The Verandah'. About 10m long, it is a large rock overhang which has been blasted through to form a surface for the tramway. The tramway is at its narrowest here.	HF	81.10	2419610.91	5955160.21
202	Tramway-formation	Side benched formation 21 end. A narrow side bench after the Verandah. Remaining historic fabric is high and includes rails and centre rail brake (see below).	HF	80.20	2419575.73	5955143.32

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
202	Centre Rail Brake	Centre Rail brake is visible here. Dog spikes not used to secure – they are nailed in place. Single piece of wood – top rail gone.	HF	80.20	2419575.73	5955143.32
203	Centre Rail Brake	Centre Rail brake is visible here. Two 2x3's on top of each other. Hardwood. Jim Staton believes that the condition of the centre rail brake hasn't really changed since 1975.	HF	82.30	2419585.27	5955117.84
204	Centre Rail Brake	2m gap in Centre rail brake here	HF	83.30	2419598.73	5955118.43
205	Centre Rail Brake	3m gap in double centre rail brake here. Only single wood present	HF	85.00	2419604.55	5955133.73
206	Centre Rail Brake	3m gap in double centre rail brake here. Only single wood present	HF	86.40	2419604.65	5955130.55
207	Centre Rail Brake	Centre Rail brake ends.	HF	88.10	2419586.79	5955124.12
208	Tramway-formation	Side benched formation 21. Narrow side bench, sleepers and rail present but no centre rail brake visible. Slumping occurring.	HF	87.10	2419582.37	5955108.97
209	Centre Rail Brake	Centre rail brake is visible. Two 2x3's on top of each other. Hardwood. The condition of the centre rail brake is not as good as the previous section. The wood is covered in moss and would be difficult to treat with coppers as the moss would have to be removed causing more damage to the fabric.	HF	87.60	2419570.48	5955118.34
209	Slip	West of this point, up the bank is an active looking slip high above the walkway that needs monitoring.	Slip	87.60	2419570.48	5955118.34
210	Tramway-formation	Side benched formation 21 end. Narrow side bench, sleepers and rail present.	HF	90.20	2419547.13	5955119.06
210	Tramway-formation	Cutting 15 end. This cutting starts low and gradually leads up to the tunnel.	HF	90.20	2419547.13	5955119.06
212	Cut Out	There is a culvert across the tramway and a cut out has been made through the side of the cutting to drain water.	HF	91.90	2419500.59	5955050.84
212	Tramway-formation	Cutting 15 end. This cutting starts low and gradually leads up to the tunnel.	HF	91.90	2419500.59	5955050.84
212	Mangatini Tunnel	Tunnel end here. The tunnel is board walked but it appears that the centre rail brake, sleepers and rails continue underneath. There are large beams to support the tunnel roof.	HF	91.90	2419500.59	5955050.84
214	Mangatini Tunnel	Tunnel end here. The tunnel is board walked but it appears that the centre rail brake, sleepers and rails continue underneath. There are large beams to support the tunnel roof.	HF	89.50	2419474.87	5954792.50
214	Centre Rail Brake	Centre rail brake is visible again after the tunnel. Two 2x3's on top of each other. Hardwood. The condition of the Centre rail brake is better as there is less moss.	HF	89.50	2419474.87	5954792.50
214	Tramway-modification	Slipped section 4. A large slip has taken out the fill around the edge of the tramway and is undermining the sleepers and rail. This section has been fenced off from visitors.	HF	89.50	2419474.87	5954792.50
216	Centre Rail Brake	Centre Rail brake has three gaps here where the wood is missing.	HF	90.20	2419437.60	5954788.68
217	Centre Rail Brake	Centre Rail brake continues	HF	91.70	2419423.25	5954785.70
218	Wire rope/rails	Wire rope and disturbed rails lie to the south of the walkway	HF	91.90	2419405.39	5954805.61

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
219	Check rail	Check rails (3) are visible here on south side of rail formation.	HF	92.70	2419399.31	5954824.47
220	Centre Rail Brake	Centre Rail brake ends here, just before the Ngakawau Bridge remains.	HF	96.00	2419389.47	5954837.99
221	Ngakawau Bridge	Concrete remains of the old bridge are here (abutment/anchor?).	HF	96.70	2419383.72	5954833.55
222	Ngakawau Suspension Bridge	This is the north end of the modern Ngakawau suspension bridge. This bridge is constructed on old bridge abutments	HF/ Modern	97.00	2419377.90	5954832.87
223	Ngakawau Suspension Bridge	Concrete remains (anchor blocks) of the old Ngakawau Bridge are situated about 5-10m from the end of the modern Ngakawau Bridge	HF	97.20	2419371.93	5954865.47

Table 13: Section 8 — Ngakawau Suspension Bridge to Irishman’s Tunnel

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
224	Tramway-formation	Side bench formation 22 end. Walkway meets tramway alignment after bridge. This section of tramway has no centre rail brake visible but rails and sleepers are in-situ.	HF	96.30	2419355.41	5954876.42
225	Tramway-modification	Roots growing over tramway formation.	HF	94.10	2419318.64	5954851.05
226	Tramway-modification	Slipped section 4. Major rock fall or slumping has bent the rail out of shape.	HF	94.30	2419297.60	5954843.08
227	Tramway-modification	Slipped section 4. Major rock fall or slumping has damaged the rail and the track now skirts around a barrier which blocks off this section of damaged tramway.	HF	93.60	2419252.87	5954819.02
228	Tramway-formation	Wrap over fish plates to join the rail are used here in a section near the modern structure to divert water blow over the top of the walkway.	HF	97.90	2419231.97	5954798.90
228	Water Shelter	Although we did not record any historic fabric associated with the water shelter, it may have historic anchors or tie downs. This should be field checked.	Check	97.90	2419231.97	5954798.90
229	Bridge	Remains of old bridge visible. Concrete abutments, beams and disturbed rail present. (Bridge ends at 229 and 230)	HF	101.50	2419191.61	5954769.22
230	Tramway-formation	Benched section 22. Disturbed and bent rail on outside of bench for about 6m.	HF	103.70	2419192.05	5954766.14
231	Tramway-formation	Benched section 22. Two rails and sleepers in-situ. Great section.	HF	104.70	2419176.65	5954753.85
232	Check rail	Check rail (4 end) are visible here, about 6m long, on north side of rail formation until the bridge	HF	106.40	2419168.22	5954744.27
233	Tramway-formation	Benched section 22 end	HF	104.20	2419159.65	5954742.35
233	Check rail	Check rail (4 end) are visible here, about 6m long, on north side of rail formation until the bridge.	HF	104.20	2419159.65	5954742.35
234	Bridge	Major section with two bridges - one that starts at this point and the other at 234. Modern bridge is over a major slipped section which has been washed out. Some rails and beams are still visible; the original bridge may have been a 'wooden half bridge'.	HF/ Modern	105.60	2419153.40	5954736.12
235	Bridge	Edge of second bridge (see 233). Original tramway formation has slipped and been washed out. Lots of good rail and concrete has been washed to the side of the modern bridge.	HF	106.40	2419149.24	5954746.56
236	Tramway-formation	Embankment section 10 end. Embankment starts at the end of the bridge. Two rails and sleepers in-situ on the tramway are now visible; the end of one rail bent out towards the bridge.	HF	105.10	2419136.12	5954746.95
237	Culvert	Original culvert	HF	104.40	2419136.58	5954754.28
238	Tramway-formation	Embankment section 10 end, ends approximately here.	HF	103.20	2419125.98	5954757.89
238	Tramway-formation	Benched section 23 end, starts approximately here.	HF	103.20	2419125.98	5954757.89
238	Rock fall	Large rock has fallen on the rail on the tramway here.	HF	103.20	2419125.98	5954757.89
239	Tramway-modification	Slipped section 5 end. A large slip has modified rails — now scattered about this section. The walkway follows over the top of the slip.	HF	101.80	2419089.06	5954754.71

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
240	Tramway-modification	Slipped section 5 end. A large slip has modified rails — now scattered about this section. The walkway follows over the top of the slip. Photo is looking back towards the slip.	HF	101.10	2419063.65	5954760.57
240	Tramway-formation	Benched section 24 end. Rails and sleepers in-situ. Photo looks back towards the slip.	HF	101.10	2419063.65	5954760.57
241	Rock wall	A hand stacked rock retaining wall (approximaely 6m long) is visible a couple of metres up the benched side of the tramway. It is the only visible example of its kind on the tramway.	HF	99.10	2419026.89	5954748.00
242	Tramway-modification	Several large rocks have fallen on the track covering the tramway.	HF	97.00	2419021.33	5954763.63
243	Tramway-modification	A bend in the rail is visible, probably the result of a rock fall in the past.	HF	92.70	2418957.24	5954731.81
245	Tramway-formation	Benched section 24 end. Rails and sleepers in-situ here.	HF	88.10	2418905.52	5954696.01
245	Tramway-modification	Slipped section 6 end. The tramway disappears under a rock fall, while the walkway carries on over top.	HF	88.10	2418905.52	5954696.01
246	Tramway-modification	Slipped section 6 end. The tramway disappears under a rock fall, while the walkway carries on over top.	HF	85.90	2418860.91	5954683.33
246	Tramway-formation	Benched section 25 end. Rails and sleepers in-situ.	HF	85.90	2418860.91	5954683.33
247	Tramway-modification	Slipped section 7. Rock fall for 2m.	HF	84.70	2418828.18	5954689.24
248	Tramway-modification	A broken rail is visible. It bends out due to the force of a rock fall.	HF	85.20	2418817.62	5954689.50
249	Centre Rail Brake	3m of Centre rail brake present.	HF	84.20	2418826.19	5954691.98
250	Centre Rail Brake	3m of Centre rail brake present.	HF	84.00	2418818.89	5954662.94
251	Tramway-modification	Slipped section 8. Big rock/slip about 3m long over the rail and centre rail brake on the benched side. Walkway skirts around.	HF	82.10	2418791.05	5954662.46
252	Centre Rail Brake	Centre rail brake goes under slipped section 8 and emerges intact for 4m until this point. After this point only nails in the middle of the sleepers show that the centre rail brake used to extend along here.	HF	81.40	2418788.88	5954669.74
253	Centre Rail Brake	Centre rail brake visible for 6m before extending under slip (254).	HF	76.60	2418721.57	5954682.40
254	Tramway-modification	Slipped section 9 end. Slip approximately 5m long covers rail formation and centre rail brake.	HF	75.80	2418724.13	5954694.03
255	Tramway-modification	Slipped section 9 end. Slip approximately 5m long covers rail formation and centre rail brake.	HF	75.80	2418728.88	5954715.27
255	Tramway-formation	Benched section 26 end. Rails and sleepers in-situ here. Centre rail brake is visible for 3m.	HF	75.80	2418728.88	5954715.27
256	Blasted rock fall	Slipped section 10 end. This is a large area of rock fall/slip extending for approx. 45m. There is also recent rock fall. All now leaning over the track. It has been blasted and is often considered to be an unofficial tunnel. Some in-situ rail extends into this 'tunnel'.	HF	74.90	2418722.13	5954741.60
257	Tramway-modification	From here, at the end of the 'tunnel' the walkway follows over the slipped section (10) for about 5m before re-joining the tramway.	HF	74.10	2418688.13	5954720.35

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
258	Tramway-formation	Benched section 26 continues — rails and sleepers in-situ here.	HF	73.20	2418691.12	5954739.55
259	Tramway-formation	Benched section 26 end. Rails and sleepers in-situ here.	HF	72.50	2418683.24	5954747.99
259	Tramway-modification	Slipped section 11 end. Large slip obscures the tramway. This slip happened approximately 10 years ago and the walkway over it has been board walked with rock steps formed down the west side.	HF	72.50	2418683.24	5954747.99
260	Tramway-modification	Slipped section 11 end. Large slip obscures the tramway. This slip happened approximately 10 years ago and the walkway over it has been board walked with rock steps formed down the west side.	HF	69.60	2418647.90	5954788.52
260	Tramway-formation	Benched section 27 end. Rails and sleepers in-situ here. This area is prone to slips and there is a bit of rubble over the track, but the rails are still visible.	HF	69.60	2418647.90	5954788.52
261	Tramway-formation	Benched section 27 end. Rails and sleepers in-situ here. This area is prone to slips and there is a bit of rubble over the track, but the rails are still visible.	HF	65.30	2418612.27	5954796.29
261	Tramway-modification	Slipped section 12. 3m of rails and sleepers have been blown out. The rails are over the edge.	HF	65.30	2418612.27	5954796.29
262	Bridge	Old bridge started here and led up to Irishman's Tunnel. The concrete abutments are still here and sections of rail are visible on the rocks below.	HF	66.20	2418616.71	5954873.16
262	Tramway-modification	Slipped section 12 end. An old bridge used to lead up to Irishman's Tunnel from here, but a slip washed it out. The walkway now sidles around the hill side and follows concrete steps up to the tunnel entrance.	HF	66.20	2418616.71	5954873.16
263	Irishman's tunnel	This is the east entrance of Irishman's tunnel. Rails and sleepers remain in-situ in the tunnel. (West entrance at 264)	HF	69.30	2418612.84	5954868.97
264	Bridge	Modern bridge on the west side of Irishman's Tunnel is utilising old bridge abutments.	HF	71.30	2418610.07	5954750.17
264	Bridge - ledges	There are two ledges visible here where the old bridge used to sit when the tramway went around the side of the hill before the tunnel was put in.	HF	71.30	2418610.07	5954750.17
264	Tramway-formation	Benched section 28 end. Rails and sleepers in-situ here.	HF	71.30	2418610.07	5954750.17

Table 14: Section 9 — Irishmans Tunnel to the Ngakawau Bins Siding – GPS Data

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
264	Tramway-formation	Benched section 28 end. Rails and sleepers in-situ here.	HF	2418610.07	5954750.17	5954876.42
265	Tramway-formation	Benched section 28. Wider than previous tramway sections with a retaining wall built up along the north side by the creek. Great section	HF	2418438.20	5954947.36	5954851.05
267	Tramway-formation	Benched section 28. Retaining ends here.	HF	2418296.07	5954876.53	5954843.08
268	Tramway-formation	Benched section 28 end. Rails and sleepers in-situ.	HF	2418220.19	5954823.72	5954819.02
268	Tramway-formation	Embankment section 11 end. In great condition with rails and sleepers.	HF	2418220.19	5954823.72	5954798.90
269	Tramway-formation	Embankment section 11 end. In great condition with rails and sleepers.	HF	2418189.81	5954806.03	5954798.90
269	Tramway-formation	Benched section 29 end. Rails and sleepers in-situ. It appears that the original bench was a few metres to the south and the bench is quite wide here. The tramway may have been realigned a couple of metres over to the north at some point.	HF	2418189.81	5954806.03	5954769.22
270	Tramway-formation	Benched section 29. Rails and sleepers in-situ here. Tramway bench narrows again back to normal.	HF	2418130.86	5954790.46	5954766.14
271	Tramway-formation	Benched section 29 end	HF	2418119.94	5954787.71	5954753.85
271	Tramway-modification	Slipped section 13 end. Rails and sleepers disappear under a rock fall here and through an empty stream.	HF	2418119.94	5954787.71	5954744.27
273	Tramway-modification	Slipped section 13 end. Rails and sleepers disappear under a rock fall here and through an empty stream.	HF	2418078.76	5954776.52	5954742.35
273	Tramway-formation	Benched section 30 end. Rails and sleepers are visible again here.	HF	2418078.76	5954776.52	
274	Tramway-modification	Kinked rail visible here, as a result of rock fall.	HF	2418003.85	5954709.87	
275	Tramway-modification	Centre rail brake was here, but now it is either gone or buried under fill	HF?	2417957.21	5954703.18	
277	Tramway-formation	Benched section 30 end. Rails and sleepers are visible again here.	HF	2417881.35	5954694.61	
277	Tramway-modification	Slipped section 13 end. Rails and sleepers are visible again here.	HF	2417881.35	5954694.61	
278	Tramway-modification	Slipped section 13 end. Rails and sleepers are visible again here.	HF	2417871.60	5954685.99	
278	Tramway-formation	Benched section 31. About 3m of rails and sleepers exposed here before another slip covers the tramway.	HF	2417871.60	5954685.99	
278	Tramway-modification	Slipped section 14 end. Rails and sleepers disappear under a slip.	HF	2417871.60	5954685.99	
279	Tramway-modification	Slipped section 14 end. Rails and sleepers disappear under a slip.	HF	2417843.55	5954714.33	
279	Tramway-formation	Benched section 32. Rail and sleepers are exposed for about 5m before disappearing under another large slip.	HF	2417843.55	5954714.33	
279	Tramway-modification	Slipped section 15 end. There is a very large slip here over the tramway formation)	HF	2417843.55	5954714.33	

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
280	Tramway-modification	Slipped section 15 end (There is a very large slip over the tramway.	HF	2417799.30	5954719.79	
280	Tramway-formation	Benched section 33 end. There are only sleepers visible here and no rails after a major slip. The track has been filled with coal fines.	HF	2417799.30	5954719.79	

Table 15: Section 10 — Ngakawau Bins Siding to the Ngakawau Car Park – GPS Data

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
281	Run off rail	Here there was a run off rail for a runaway to spread gauge from tram to run off onto ground	HF	2417521.46	5954876.15	5954876.42
282	Point set	The set of points that split the coal line from the timber line were thought to have been located here. There are no remains now etc a 'frog'?	HF	2417521.56	5954884.79	5954851.05
282	Tramway-formation	Benched section 33 (from the points the walkway follows the coal line (top) and the bottom line (which we did not follow). The top line is benched about 1m above the other and a few sleepers are exposed but no rail is visible)	HF	2417521.56	5954884.79	5954843.08
283	Turntable	This is the site where the turntable at the Bins was situated. There is a big square cut in the ground here now.	HF	2417361.82	5954780.92	5954819.02
284	Point set	The set of points that split the coal line, upper line (for full trucks) from the lower line (empty trucks). These points are not present here now but their location can be assumed as the bench widens here	HF	2417371.21	5954786.82	5954798.90
285	Steel frame	The steel frame of a building lies to the immediate north of the walkway. This may have been from the sand sheds.	HF	2417352.12	5954776.50	5954798.90
286	Ruston Lokey	This Lokey has a VRH1 engine and used to work up the top end of the line. It was moved here during a joy ride on the last day the tramway was used. It is covered by a shelter.	HF	2417345.80	5954764.59	5954769.22
287	Tramway-formation	From the Lokey (wpt 286) the full coal line can be followed to the trestles.	HF	2417324.95	5954736.24	5954766.14
287	Trestles	This was the location of the trestles	HF	2417324.95	5954736.24	5954753.85
288	Tramway-formation	From the Lokey (wpt 286) a foot track can be followed from the coal line to the timber line.	HF	2417337.38	5954757.12	5954744.27
288	Tramway-formation	The walkway then follows the alignment of the timber line.	HF	2417337.38	5954757.12	
289	Junction-NZR backshunt	This point marks the junction of the NZR backshunt (rails still in-situ). Possibly where the timber was loaded into NZR wagons.	HF	2417332.46	5954762.62	
291	Point set	This is the set of points that split the line to go to the two pits at the workshop	HF	2417298.11	5954717.00	
292	Tramway-formation	Benched section 33 end. At the bins there is a clearing and the walkway is undefined across this site. There is no visible evidence of rails and sleepers.	HF	2417290.96	5954707.87	
292	Ngakawau Bins Shelter	On the west side of the bins this modern shelter covers historic fabric of concrete, concrete fireplace and veranda.	HF/ Modern	2417290.96	5954707.87	
293	Ngakawau Bins	This is the site of the bins at Ngakawau. Concrete from the shelter (wpt 292) extends along to the bins.	HF	2417300.20	5954702.92	
294	Ngakawau workshop	A chimney with bellow holes marks the forge, there is a crane pedistal, concrete foundations, pits and a lathe bed.	HF	2417277.78	5954700.54	
295	Smoke box	This is the location of a smoke box off a NZR lokey.	HF	2417295.51	5954691.64	
296	Lokey cab	Location of the cab of an 'F' Lokey.	HF	2417284.05	5954679.27	
296	Shaker plate	Location of shaker plate from the bins screens.	HF	2417284.05	5954679.27	

GPS ID	NAME	DESCRIPTION	HISTORIC FABRIC	ALT	EASTING	NORTHING
297	Tramway-formation	From the clearing at the bins the walkway follows the tramway (possibly the south line that ran NZR wagons). The formation is flat with no evidence of benching or embankment.	HF	2417278.86	5954673.61	
297	Tramway-formation	Rail is visible from here on the north side of the tramway.	HF	2417278.86	5954673.61	
298	Point set	Two rails are visible from here towards Ngakawau	HF	2417269.8	5954658.6	
299	Culvert	Original culvert	HF	2417239.83	5954628.61	
300	Point set	Points here	HF	2417197.67	5954587.09	
301	Mine Creek Bridge/ De la Cartes Bridge	Modern bridge. Rail stops either side of it.	HF	2417158.50	5954551.51	
302	Tramway-formation	Visibility of rails becomes sporadic at this point. Visible for only a few metres.	HF	2417108.72	5954515.30	
303	Tramway-modification	Rails have been reconstructed here to display trucks, they are not quite on tramway alignment. However, these trucks shouldn't be here, only NZR Q wagons should be on this portion of the tramway after the bins. The original alignment was probably a metre or so towards the river and there are no rails visible.	HF/ Modern	2417062.16	5954522.12	
304	Tramway-formation	Walkway is back on the tramway alignment here and two rails are visible. No sleepers are visible.	HF	2416966.19	5954568.06	
305	Tramway-formation	Sleepers are visible here as well. Rail screws are noted to be from the 1960s.	HF	2416837.99	5954598.99	
306	Rail signal post	Location of railway signal post	HF	2416755.17	5954640.93	
307	Tramway-formation	Rails disappear under fill at this point, but are believed to still be in-situ.	HF	2416694.49	5954651.91	
308	Tramway-formation	Rails reappear from under fill at the walkway sign. The fill has been cleared from the rails for modern use of the line – the train is back running here today.	HF	2416677.45	5954656.95	
309	Ngakawau car park	This marks the Ngakawau end of the Charming Creek Walkway by the DOC walkway sign.	Modern	2416650.75	5954651.43	