

beset with difficulties as it was necessary to maintain a straight north-easterly course for a distance of some two and three-quarter miles, crossing enroute a high precipitous outspur of Airly Mountain.

The steam-driven winding engine and its boiler unit was installed against the eastern side of the shale-loading staith at the company's siding at Torbane, a nearby creek being dammed to serve as an engine pond for boiler water supply. The mechanical details associated with the winding-drum, its pulleys and circulating haulage cable would be interesting to elucidate but unfortunately at this late date information appears to be lacking. It is surmised, judging by the narrow width of the surviving timbered floor of the staith, that the inbye and outbye tracks of the haulage way came together as a single line as they approached the staith. Here the skips were emptied of their shale content into the waiting Departmental wagons marshalled on the standard gauge siding at the lower level.

From the staith the two haulage tracks, side by side, descended a gradual slope of a grassed hill-side to eventually reach bottom level at Airly Creek. Crossing this small waterway the lines ascended another grassy slope to make a level crossing over the Capertee to New Hartley township private road at a distance of about one mile from the staith. Conditions at the road crossing were complicated by the two haulage cables, the movements and height of which were not appreciated by horses. To overcome the difficulty the skips, travelling in either direction, were detached from their respective cables, trundled across the roadway by man power, and then recoupled to the cable to continue their journey. The haulage cables each passed through their separate conduit sunk across and below the surface of the road. It was an unique arrangement but when the labour costs involved are considered it is remarkable that a low-level bridge was not constructed over the haulage-way.

From the road crossing the haulage-way, for the next half mile, passed over slightly undulating grass lands to the base of a steep-walled out-thrust of Airly Mountain, some six-hundred feet in height. Without any preliminary easing of an approach grade the two adjacent skip-way tracks angled, bent would be the better word, upwards and at an approximate grade of one in one ascended the talus slope and escarpment of the mountain to reach a

tunnel portal located a short distance below the crest, the upper-most section crossing over a steeply inclined trestle bridge spanning a vertical sided depression in the sandstone walls of the escarpment. The tunnel floor followed a vertical curve throughout its length of one hundred and thirty yards where the corresponding steep descent of the eastern side of the mountain was reached, the tracks passing over several packed rubble embankments to maintain an even grade.

Leaving the bank-foot of the eastern incline of Airly Ridge the straight course of the tramway passed over several undulating suprs falling away at a steep angle from the base of the huge rock wall that forms the escarpment of the southern face of Airly Mountain. The equally numerous intervening gullies, scoured out by mountain torrents in the wet season, support a luxuriant growth of trees and ferns intermixed with fallen rocks and unstable screen washings. The first gully was spanned by an up-graded trestle bridge some 300 feet in length, beyond which the up-grade continued to the crest of a hillock where a siding was met. Then down the opposite slope to reach a 60 foot trestle over the creek at its base, followed by another upward climb for about a quarter of a mile passing over in succession a 300 feet, a 200 feet, and a 100 feet range of trestles to gain a cutting on the top of the ridge. The gully ahead was spanned near its base level by a 200 foot trestle and a cutting also led through the crest of the following ridge. The now descending tracks passed over a 15 feet span log bridge approached on both sides by an embankment, then through a lengthy earth cutting and across a second embankment leading to an 80 foot trestle. The course then traversed comparatively level fern-covered ground to terminate beneath the loading staith at the bankfoot of the former Genowlan Shale Company's self-acting inclined way at Airly. Just beyond the staith was the strongly mounted double-flanged pulley, horizontally placed and fitted with a cable tensioning device, in use for the reversal of the direction of the haulage cable, the appurtenance being housed inside a low shed for safety reasons. The gauge of the surface skipway was twenty-two inches.

It is interesting to note that originally the haulage calbe was designed to pass beneath the axles of the skips but this arrangement had serious disadvantages when the vehicles passed up and down

**Opposite:**

**Australian Kerosene and Oil Company's incline at Genowlan, passing over the crest at Airly Mountain, Eastern aspect.  
Note the cable above the skips.**

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