PROCEED ORDER

The Journal of the Signalling Interest Group Queensland

No.20

October/December 2023



Former Petrie 'A' signal cabin, relocated to the Petrie Historical Village. The cabin was decommissioned with signalling associated with electrification and the first article this issue deals with a small part of the signalling during this transition period.

Contents

Page 26 - Signalling Petrie 1983

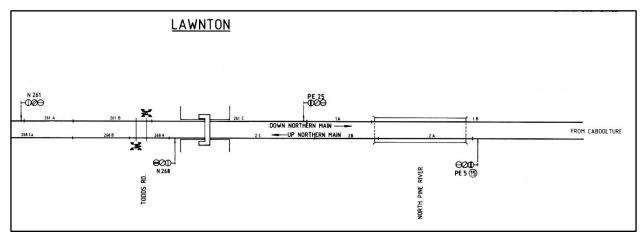
Page 28 - CTC Mimic Panel Designs (2)

Page 30 - Proposed Signalling Mitchelton-Ferny Grove 1978/79

Page 31 - Forgotten Stations (Wyberba)

Signalling Petrie 1983

The signal diagram below shows part of Petrie station (southern end) as well as the area around Lawnton and dates from 1983. The diagram may seem insignificant but as is sometimes the case these diagrams captured a short period between various stages of a re-signalling project. In this case the line to Petrie was being re-signalled for electrification with work complete as far as Lawnton, but not yet complete at Petrie. This is indicated by the signal numbers for Petrie which require some further description.



Above: Part of the signal diagram for Petrie showing Lawnton platform and the southern end Petrie yard when the signal cabins still existed and operated at Petrie.

Petrie at this time was still being operated with two signal cabins, one on the Down Platform that controlled Main Line movements and the northern end of the Refuge, and the second cabin located near the points to the Paper Mill Siding that controlled the points to that siding as well as the southern end of the Refuge and crossovers.

The signal on the diagram above numbered PE25 is the Outer Home signal operated from lever No.25 in Petrie A Cabin. The signal cabin diagram for Petrie shows this signal also numbered as N16.3 (semi-automatic) and in earlier times lever No.25 was likely the Down Distant signal.

The signal on the Up line is numbered PE5 but has 15 in a circle adjacent to it as well. Referring again to the signal cabin diagram for Petrie it shows that lever No.5 was the Up Advance Starter signal operated from Petrie A cabin. Again, the signal cabin diagram shows this signal also numbered as N16.6 (semi-automatic). To explain the number 15 in a circle adjacent to PE5 we need to look at the signal cabin diagram for Petrie B cabin where the Up Advance Starter signal is also shown. This cabin diagram shows that lever No.15 also operated the Up Advance Starter signal, but this was only when B cabin was released by A cabin.

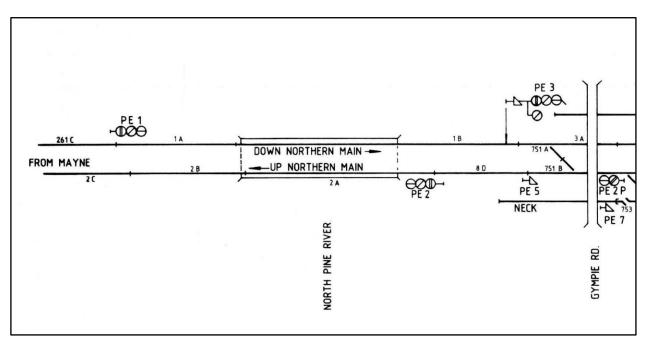
To summarise, the Up Advance Starter signal was operated by A cabin or B cabin depending on which signal cabin was in use and where the train was departing from. If the train was on the Main Line and heading towards Brisbane lever No.5 in A cabin would control the signal. If the train

was in the Refuge or Paper Mill Siding and heading towards Brisbane, lever No.15 in B cabin would control the signal. Interlocking within each signal cabin, and between the two signal cabins, prevented both signal cabins operating the signal at the same time.

Further investigation of the signal cabin diagram for Petrie B cabin shows that it too had control over the Down Outer Home signal from lever No.18. Referring back to the original diagram shown on page 26 and signal PE25, it is clear that lever No.18 is not mentioned as the number does not appear like No.15 does. One possible explanation is that the Down Outer Home signal only has one route, straight ahead, to the Home signal and it is from this point that trains are routed into the Refuge Siding or Paper Mill Siding.

It would appear that at the time of the signal diagram lever No.15 in Petrie B cabin had been decommissioned and signal PE25 did not need to be cleared from Petrie B cabin when trains entered the Refuge or Paper Mill Siding from the Brisbane end. This could have been simply achieved by trains being brought past the Outer Home signal by Petrie A Cabin, then B Cabin was released to bring the train into the Refuge or Paper Mill Siding.

When the re-signalling of Petrie was complete and both signal cabins were decommissioned, signal PE25 was renumbered PE1 and signal PE5 (PE15) was renumbered PE2 as shown in the diagram below.



Above: Signalling at Petrie as commissioned for electrification with both Petrie A and B Cabins decommissioned. Petrie A Cabin, as shown on the front cover, survived and was relocated for preservation. No internal fittings (levers or diagram) are believed to have survived. The location of Petrie B Cabin following decommissioning is unknown and it is suspected as being demolished.

CTC Mimic Panel Designs (2)

The third CTC system to be commissioned was from Port Curtis Junction to Gladstone in 1975/76. This control room mimic panel would have replaced the previous Gladstone to Yarwun mimic panel and perhaps explains why no provision for extending the original panel was provided.

Photographic evidence of the 1975 Port Curtis Junction to Gladstone mimic panel shows the following features. A large mimic panel was provided with ten tiles provided and arranged in two rows to show the indications from the 14 stations involved. One tile simply supported a clock for the Controller with the remaining nine tiles all indicating stations along the route. Again there was no provision for additional tiles to be added although the top left tile where the clock was placed could have been re-purposed if needed. Five of the tiles show indications for two stations while the remaining four tiles show the indications for one station only.

The diagram below gives an approximation of the layout of the tiles. The two centre tiles were noticably larger than the others, but both sizes of tiles had one or two stations displayed on them depending on their location. The larger tiles had more complex stations with Third Roads (Midgee & Mount Larcom) but some more complex stations had their own small tile (Bajool & Yarwun).

Clock	\		/-\ /\ /\	/\	/ /\ \-/\-/ \/	/\ /\
	PC	EA	ME	AR	BL	MR
						/-
		/-\	/\			/\ /
\/	-\/-	/\-	\/	-/	\/	-/\
\/	\-/		\/		\/	
\-/ RA	EP	AE	\-/ ML	AA	\-/ YN	MM GE(CH)

The following codes represent the stations displayed on the mimic panel above: PC-Port Curtis, EA-Edinda, ME-Midgee, AR-Archer, BL-Bajool, MR-Marmor, RA-Raglan, EP-Epala, AE-Ambrose, ML-Mount Larcom, AA-Aldoga, YN-Yarwun, MM-Mount Miller, GE-Gladstone (Callemondah)

The mimic panel again used incandescent lamps shining through plastic lozenges for indications. The Train Controller had a similar control panel to the Moura Short Line Controller with push/pull switches to his right to select a station then control points and signals at that station, and a telephone/communications panel to his left.

No remains of this mimic panel seem to exist so again no measurements are possible nor any further investigation of the construction of the mimic panel.

This CTC system was commissioned from Port Curtis towards Gladstone, and when complete the former mimic panel from 1971 (Yarwun to Gladstone) was decommissioned. There was other signalling work going on at this time with the control area of Gladstone increasing to include Callemondah,

South Gladstone, Parana and Toolooa. This explains why this CTC mimic panel stops at the northern end of Callemondah as that station was now controlled by Gladstone signal cabin. Modifications would also have occurred on the Moura Short Line CTC mimic panel with control of Callemondah, South Gladstone and Parana transferred to Gladstone signal cabin. Gladstone signal cabin had a 45-lever interlocking machine and was augmented with an NX style panel to operate the surrounding areas north and south of the station yard. Something similar happened at Port Curtis Junction where an Individual Function Switch type control panel was added into the signal cabin to extend control to the southern (North Coast Line) area of the yard where the CTC commenced.



Above: The additional signal panel in Gladstone signal cabin controlling the areas around Gladstone including Callemondah and Parana. The additional area controlled from Gladstone was previously part of the Moura Short Line and North Coast Line CTC systems.

The next CTC system commissioned in late 1979 through to early 1980 was from Gympie to Maryborough and this system introduced several different features in the control centre.

To be continued...

Proposed Signalling Mitchelton-Ferny Grove 1978/79

As many readers will be aware, when electrification opened to Ferny Grove in 1979, colour light signalling was provided and trains could cross at Keperra, mid-way between Mitchelton and Ferny Grove. That was not the original plan but a later decision to provide a better system both technically and operationally.

In January 1978 as plans for electrification and re-signalling were progressing the Commissioner became aware that the original proposal did not include colour light signalling between Mitchelton and Ferny Grove, and that the section would remain being worked by Ordinary Staff and Ticket. The Supplement to the Working Timetable dated 27th May 1979 shows that Mitchelton to Ferny Grove was a single section with a White Square Ordinary Staff in use.

The Commissioner was advised that the estimated cost of extending the (automatic) colour light signalling from Newmarket to Mitchelton with tokenless block working between Mitchelton and Ferny Grove, with control of the area from Newmarket to Ferny Grove from the Mayne signalling cabin was \$1,000,000. The Commissioner was advised less expensive options were available as follows:

Scheme 1 - Tokenless block working between Mitchelton and Ferny Grove with a colour light entry signal at Mitchelton and a colour light entry signal at Ferny Grove. Estimated cost \$56,000.00

- Note: This scheme provides for absolute block working between Mitchelton and Ferny Grove.
- This scheme would have had little advantage over retaining Ordinary Staff and Ticket working. Mitchelton to Ferny Grove would have been one long section and a second train could not follow until the first had cleared the full section.

Scheme 2 - Similar to Scheme 1 but included intermediate signalling at Keperra to allow two following trains on the Mitchelton to Ferny Grove section at the same time. Estimated cost \$78,500.00

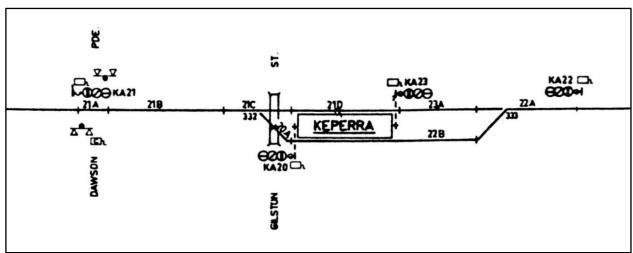
• This scheme had some advantages in that a second train travelling in the same direction could follow the first when the first had reached or cleared beyond Keperra.

Scheme 3 - Similar to Scheme 2 but with the addition of power operated crossing loop facilities at Keperra. Estimated cost \$134,000.00

This was the most operationally flexible scheme and allowed trains to follow and also cross at Keperra. All three schemes stated that operation and control of the Mitchelton to Ferny Grove section was by the Station Master at Mitchelton which implies he would have had a signal control panel for Keperra, Ferny Grove and Mitchelton, and that Mitchelton would

have to be manned for all train movements between Mitchelton and Ferny Grove.

There was obviously more correspondence between all concerned as what was actually commissioned in 1979 was similar to Scheme 3 but with remote control from Mayne Control Centre. The signalling at Keperra was minimal and generally provided for trains to follow each other or cross each other. A Home signal and a Starter signal were provided in each direction with Up and Down Road running applied. No facility to overtake a failed train was readily available. Emergency Push Buttons were provided in the event of loss of control from Mayne and allowed signals to be cleared by traincrew provided all the usual conditions were met.



Above: The signalling arrangement at Keperra when electrification was commissioned provided for a crossing loop with Up and Down Roads and simple three-aspect colour light signals.

Signalling at Ferny Grove was also minimal (refer *Proceed Order Jan/Mar* 2023) with a controlled departure signal, ground frame, and flashing signage to convey instructions to train crew. Remote control of the signalling from Mayne was also provided.

Forgotten Stations

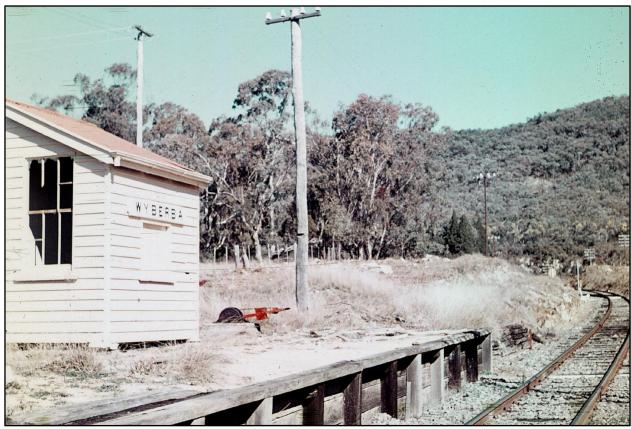
Wyberba is located between Stanthorpe and Wallangarra on the Southern Line and had opened as a Stopping Place by 1910. A siding was provided in 1914 and by 1916 the place was being worked as a Gate. The siding was a dead-end siding with points facing Stanthorpe. No signalling was mentioned at that time however a signal was probably provided then. By September 1914 the signal at Wyberba had been shifted out 130 yards and placed on the right-hand side of the line. It was then 324 yards from the siding points and 412 yards from the level crossing. In October 1914 the Weekly Notice confirmed that the signal would be placed at 'stop' when trains were at the station and placed at 'proceed' when the train departed. By early 1916 the crossing gates had been removed from Wyberba and it became an open level crossing. During the following year the dead-end siding was converted into a loop siding.

A station yard diagram from October 1929 shows the siding as a loop siding and the Down signal is shown as still being 412 yards from the level crossing. Between the signal and the level crossing, on the Stanthorpe side of the siding and adjacent to the level crossing there was a short timber-faced platform, fruit shed, office and the signal lever is shown as being placed on the platform.

A railway telephone was not provided at Wyberba until 1941 and 10 years later the Station Mistress was withdrawn. From 1951 Wyberba was worked as an Isolated Siding.

By mid-1975 flashing lights were installed at the level crossing due to poor visibility in the hilly terrain. A semaphore Down Stop signal was provided adjacent to level crossing to stop the flashing lights flashing when trains were stopped or shunting at Wyberba. A WI (wrought iron) type lever was provided near the siding points at the Stanthorpe end.

By January 1989 the points at the Stanthorpe end of the siding had been removed making the siding a dead-end one once again. By February 2005 the dead-end siding had been totally removed.



Above: Wyberba showing the short timber faced platform and pull-over signal lever for the Down Stop signal protecting the siding. The lever is a Saxby & Farmer type imported from London. One of the small buildings is shown to be vandalised and obviously out of use at this time. The lever for the Stanthorpe end siding points can be seen in the distance which dates the image to before 1989 and is said to be 1970's.

Image: Leonard J Matthews

https://www.flickr.com/photos/mythoto/2388680702/