

# SAR 1600 mm broad gauge track – secondary mainline measured near Moonta, 1985

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Dimensions shown are millimetres, full size. (Measurements were taken in inches, with a tolerance of about ± half an inch; the mm figures shown are simply the result of metric conversion without rounding.)

## Features of this drawing

The track was secondary mainline. Rail was in 12.2 metre lengths. Joints were staggered.

Because of the short rail lengths and staggered joints there was an almost 50–50 mix of large and small gaps between sleepers. Sleepers adjacent to each of the three joints shown had gaps of 229 to 303 mm (two of them at the ends, lying beyond the limits of the drawing, were likewise) except for the one near the top of the drawing: 546 mm. Apart from the one severely skewed sleeper shown, there was very little skewing (including beyond the measured section). Sleepers protruded  $410 \pm 50$  mm from the base of the rail. Rail was on baseplates.

Sleeper size (timber): 2590 mm x 254 mm x 127 mm thick.

Rail weight: 60 pounds/yard (= 30 kg/m = code 55 in HO).

Ballast was well topped and lined, comprising mainly 10–15 mm cream-coloured limestone chips and larger (50–100 mm) limestone rocks, plus darker limestone ballast (about 10% of the total) throughout. Rich rust stains on tops of the sleepers, but not top of ballast, extend 200 mm either side of rails.

## Ensure this drawing is the right size

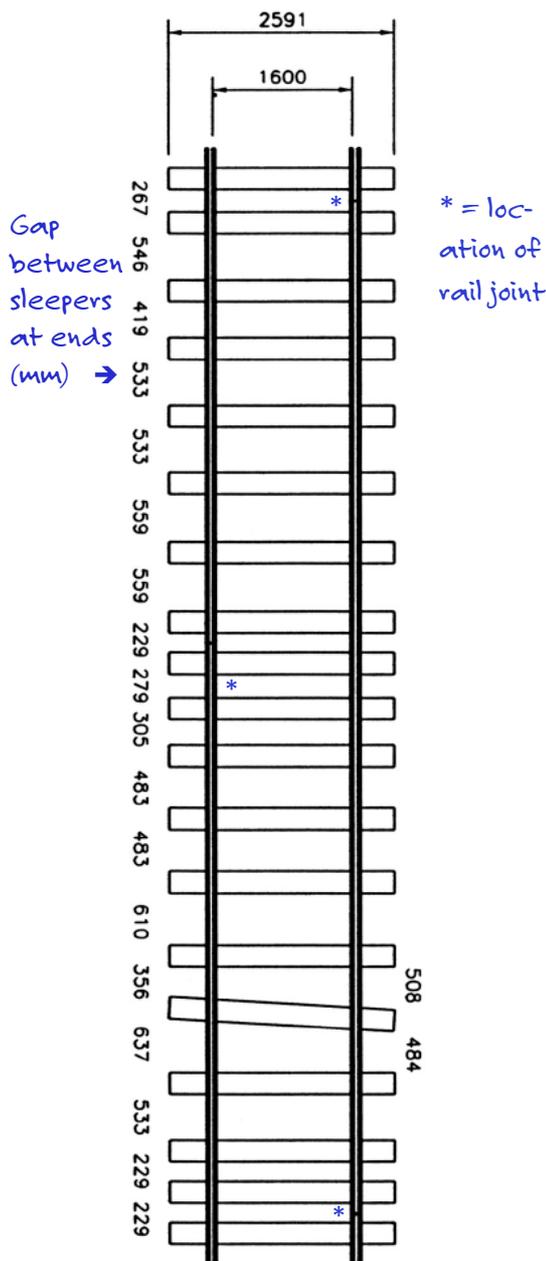
Having an exact-scale drawing is especially useful when making a jig to ensure accuracy of sleeper spacing. The original was drawn to HO scale (1:87.1). However, your computer and printer may not reproduce it at this scale exactly. You can easily correct this.

After printing this page, measure the actual length of the line labelled “2591”. It should be 29.75 mm long at 1:87.1 scale. Calculate the percentage setting needed to correct it and reprint or photocopy the page at this new setting.

## Simulating broad gauge at 16.5 mm

This drawing is for 1600 mm broad gauge track. In HO scale that equates to a gauge of 18.37 mm. If you want to retain a gauge of 16.5 mm but give the impression of broad gauge, simply set your printer or photocopier to 90% (i.e.,  $16.5 \div 18.37$ ). Modelling your track at 90% of HO scale in all components will ensure it has broad gauge proportions, which the eye picks up far more readily than actual sizes. If you do that, however, remember to write new values ( $\times 0.9$ ) for all HO dimensions.

Broad gauge can also be simulated by reproducing this sheet in N scale at 49% and O scale at 174%.



Excluding sleepers adjacent to rail joints: average gap between sleepers 520 mm; average sleeper centre lines 775 mm.