



Review of Gauge 3 Track and Lineside Structure Clearances

By Alan Marsden

*First Published in
Newsletter 49
June 2002*

After questions at the February 2001 AGM and discussion at committee meetings last year, perhaps a few words on the above subject would be of interest to Members, especially those building or planning a Garden Railway or those who wish take their locomotives and stock to run on other Members lines. We all look forward to having a good days, trouble-free running at Get-togethers and a little thought beforehand could ensure this happens. The following information and advice is offered after several years of operating a garden railway, running not only my own loco's and rolling stock but also a considerable variety of Members stock.

The dimensions given in Gordon Nightscale's diagram in Newsletter No 22, September 1995 are perfectly satisfactory to work to but I have taken the subject further to include curved track and variations in model rolling stock dimensions, plus the important item of available space in the garden to fit in near prototype track formations, which usually cannot be achieved. It requires a very large garden to to accommodate minimum curves of 18ft, which scaled up to prototype dimensions becomes the British Railways recommended minimum radius of 6 chains (400ft) for Mark 1 coaches.

Our Gauge 3 locomotives and coaches are usually built to 17/32" scale to achieve prototypical dimensions but on a track radius of say, 14ft, the end and side overhang on a model coach is much greater than it should be and this must be allowed for on a garden line with stations, bridges and cross-overs etc, all constructed in a relatively small area.

Station Platforms

These present no problems if positioned on a straight length of track but on a curved section or a double track cross-over the above mentioned overhang must be taken into consideration. Checks on my own railway with a BR Mark 1 coach (67ft over buffers) show that on a 15ft radius curve or cross-over, the overhang or "throw" is 2.5/8" from the track centre to the outside corners of the coach and 3" from the track centre to the side of the coach, inside track radius. Platforms and other structures should be built to ensure clearance at these points (see Fig. 1)

Curved Track and Crossovers

The distance between the centres of double track should allow for clearance of passing trains on curves. A distance of 6.1/2" to 7" will give a safe clearance between the end and centre throw and looks about right when the track is set out in the garden, giving 4" to 4.1/2" for the "six foot" area between the rails (see Fig. 2). These dimensions also allow for items such as shunt signals or "dollies" to be placed between the tracks.

Figure 3 shows the position coaches take when using a cross-over and allowance should be made for this on straight and curved track with platforms.

Structures

All lineside structures, such as signal boxes, bridges etc should be placed with the above

mentioned clearances in mind. Signal box walkways and even point levers and signals must also be allowed for.

A Reminder to Drivers

When you have steam up and are ready for the road, make sure tender hand-pump handles and shovels are safely stowed away on the tender and that blowers, batteries and meths bottles etc are removed from the trackside and platforms. A tidy railway is a safer railway for your valuable models.

