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Bridge No.75

By Mike Williams

Last summer Denise and I had a short holiday in the lake district, based at Keswick. I last stayed in Keswick as a (very young!) boy c1968, when the old CK&PR line to Penrith was still open, and after all these years still remember the run in a DMU because of the impressive bridges seen through the front cab windows. Many are of bow-string girder construction, some overhead, but many the less common underslung type. When we stumbled across one this year, now used as a footpath, it made me wonder about a model.

One of the great things about Gauge 3 in the garden is the almost unlimited space, and there are plenty of excuses, even necessities, for adding a bridge or two. Here are the main dimensions of bridge No.75, together with their approximate Gauge 3 equivalents. The bridge is just outside Keswick and is easily accessible for more detailed measurement and photographs. The original drawings of it have also survived, which helps a great deal.

Main span 101ft (4ft 6in). Girders 108ft long (4ft 9in) x 18ft high (9 1/2in) x 18in wide (3/4in)

Now, if that sounds large, think about a removable section for access with lawnmower, wheelbarrow etc and it is actually about right, so instead of making a fictitious bridge loosely based on a photograph, why not make the model exactly to scale? The single track bridge is on a curve, so wider than normal and being on the skew the girders either side are not in line. For added interest there is a checkrail and superelevation - wouldn't that look nice!

The main girders could be laser cut from mild or stainless steel about 2mm thick. On the real bridge they are fabricated from a large number of flat plates riveted together, and although I like representing rivets on a model as they would actually hold it together and look wonderful, the 10,000 (a pure guess!) needed here would try even my patience, so I reckon its best to forget the rivets and weld it up, maybe just using a few as location dowels for the various layers of steel; easy to do with a laser. The number pf plates forming each girder could be greatly simplified, but

several layers (maybe six or eight) would be used to give the impression of the light construction and replicate all the major features.

The high girders would look lovely with the train passing through, even making a realistic hollow sound, but they are very slender and in model form would benefit from some additional bracing. Fortunately the LMS thought the same, and added some hefty braces between the two girders, right at the top of the arc, which would help us greatly in model form where we have out of scale hands, cats, dogs etc., although their similarity to a bird perch could be a problem.
But what would such a huge structure cost? I'm not offering to make it, but depending on the level of detail I estimate between £100 and £200 for all the parts, plus the cost of a welding course at the local college!

Alas my garden line is years away, so for now this must remain a dream but I really believe that it is an achievable dream. So perhaps another member will take up the challenge and model Bridge No.75.