

Arun Valley Railway – Stane Street

by Roger

The Stane Street section of the Arun Valley Railway

Stane Street is part of a model railway system called the Arun Valley Railway which is a fictitious light railway set in Sussex. It is a modular system, built to 00 gauge, and is used by four members of the Wellington British Railway Modellers in Wellington, New Zealand.



C Class 31592 arriving at Stane Street, A1x Class 32636 waits to depart, photo by Roger, extra effects by Nigel

Arun Valley Railway modules are each self contained with their own backscene and end boards. The system is a truly modular one because any module can be connected to any other, and the track is set at the same place at the end of each board. The system is based on a module length of 1300mm and a width of either 200mm or 300mm. Outside corner modules are based on a square of 650mm with the back corner removed, inside corners on a squashed hexagon based on a 1200mm square. Within each module the scenery is complete on its own, with the breaks between modules being concealed by the end boards.

The modules are set at a height of 1200mm from the floor to the track bed on tripod trestles. The first module assembled will use two trestles and the rest are each piggybacked onto the previous one and so need only one trestle. The baseboards are connected by M6 coach bolts through the module frame ends. The materials used in construction of the baseboards varies depending on the builders choice. 50mm x 25mm timber with softboard tops is common but MDF tops are also used and 5 of my modules are made from 4.5mm plywood. Ground contours are built up from carved polystyrene with plaster over the top.



Stane Street – A1X Class 32636 departing from Stane Street, photo by Roger

Stane Street is the terminus of the system. It is built on a plywood baseboard. The module has four electrical sections and has a double pole switch to enable a controller separate from the main line to be used for shunting. The facilities at the station consist of a platform face on the arrival line leading to a headshunt for the run round loop; off this loop are sidings for coal staithes, the goods shed and an abattoir.

The buildings are mostly scratchbuilt. The station building is built from plastic card and is based on the plans for Black Dog Halt published in the Model Railway Constructor. The water tower, buffer stops and fencing are from PECO. The coal staithes are made from two Ratio kits. The goods shed is a small freelance design from plastic card and some wagons can only just fit in ! The Southern concrete platelayers hut is a Ratio kit. The abattoir is a freelance design made of cardboard covered with brick paper; it also hides the electrical switch panel.



Stane Street and the industrial tramway, photo by Roger

Industrial Tramway

This module has a small industrial area and a tramway which disappears offstage onto a separate timber based fiddle siding. The module is a standard 1300mm x 300mm made of marine plywood girders. The above photo was taken at *Model-Wai 97*.

The industrial area can be run from a separate controller if necessary and the main area and fiddle siding have separate isolating switches. The main track runs on a 4mm MDF

raised bed to enable the ballast shoulder to be shown. The industrial area track is laid at baseboard level and has very neglected and weed choked ballast. The tramway goes over the road via an ungated crossing.

The main industrial building is used for the manufacture of electrical transformers and has a siding inside the building for loading and unloading of materials. The other siding has two Ratio oil tanks for Shell electrical oil. The buildings are made from cardboard covered with brick paper or scribed to represent concrete blocks. The hedge is made from Woodlands Scenics.

The Town of Berkloe

This module is an inside corner with a track radius at 600mm. It is built from 50mm x 25mm timber with an MDF surface and a curved front fascia of plywood.



A1X 32636 passes the town of Berkloe, photo by Roger

The track is separated from the town by fences. The foreground scenery is that of back gardens with lawns, gardens and a greenhouse. The buildings on the far side of the track are mostly from Superquick cardboard kits. The road has been narrowed by some roadworks with protective scaffold and drums. Rising at the right hand end of the module is an embankment for the road which crosses the railway by a bridge made from a Wills retaining archway. The painted brickwork is set off by the white ink pointing which was applied with a 0.35mm Rotring drawing pen.

The Bridge Over the River Arun

This module is a standard 1300mm x 300mm but has a dipped section for the river crossing.



C Class 31592 crossing the Arun, photo by Roger

The track is in a small chalk cutting at the left hand with a platelayers hut in a niche carved into the chalk. The track then runs onto the embankment before coming to the bridge. The bridge is an adaptation of an Atlas truss bridge which has been converted to a through truss. The river bed is hardboard painted a mucky green/blue/brown colour and then varnished. Once over the bridge the track enters a chalk cutting.

The polystyrene block scenic base was carved with knife, hacksaw, chisel etc. and then covered with plaster. The painted plaster is covered with lichen, ground foam and scatter material. At one point a lineside fire has occurred and the ground is still black from the flames. Fencing is PECO and serves to restrain the Preiser sheep. The farm shed is made from corrugated wallpaper and has suffered from a severe attack of rust. The Fordson Major tractor usually to be seen here is from a Springside white metal kit.



The bridge and a 650 mm module, shortcliff, with a dairy on an outside corner module are seen at *Model-Wai 97*.

Electrical

The modular system electrical supply uses a bus running the length of the layout, with an RCA socket at the right hand end of each module and a corresponding plug at the left hand end to connect each module electrically. This means that usually only one engine can be used at a time. Some modules, such as Stane Street have a separate controller

position available. To enable more controllers on longer layouts a special unit containing a double pole double throw switch and controller input can be used to create a section break.

Stane Street is powered by home made hand held controllers of the simple emitter follower type. Strips of Velcro are stuck to the controllers to enable them to be hung on corresponding strips on the layout.

Timetables

At exhibitions a timetable is used. Owing to the flexible nature of the modules a different one is usually needed each time! For our most recent appearances a flip chart system enables the public to see what is happening and this seems to be appreciated. The Arun Valley system has been seen at 6 exhibitions locally in the last 4 years.



Three long modules and two inside corners with trestles off to another show, photo by Roger

For my own use I have a number of timetables and find that this gives a purpose to the running of trains and makes it more enjoyable, though if I just want to run trains, I do.

Stock

The rolling stock used on Stane Street is generally from the Southern Region of British Railways, as would have been used from 1948 to about 1964. Steam engines are small tender or tank types, ready to run (RTR) or kit built. Diesel shunters are also used.

Passenger coaches used are selected from : Maunsell from Ian Kirk kits, Bulleid from Southern Pride kits or Bachmann RTR or BR Mk1's from Comet or Kitmaster kits and Lima or Hornby RTR

Goods workings use a variety of rolling stock both ready to run and kit built. Most makes available are represented.

The latest project involves converting all the stock to Kadee magnetic couplings from the 8 makes of tension lock couplings currently used.

The next large construction project is to be a model of Swanage in Dorset for which bigger engines will be needed. Rebuilt 'Battle of Britain' class 34059 Sir Archibald Sinclair, shown below, is a modified Hornby Dublo model.



RBB Class 34059 on the branch with Maunsell two coach set number 23, photo by Roger

A useful link for Southern modellers is the [Southern E-Group](#), this group has an electronic mailing list.