

Deviates from line out into Garden Railway under Bedroom No.3 to Balloon Loop under Bedroom No. 2 then returns to basement. Ideal for rainy days or hot summer days train running.



I have used 3.0m diameter curves in the past and extensively in the Garden Railway. There were excess pieces, so I decided to put in a balloon loop under house floor. There seemed to be space available to do so.



There has been a track (left side here) which runs up grade to exit the basement into the back yard Garden Railway. The presence of the piers and the white PVC sewer pipe limited the choice of where to locate the Balloon Loop.



Drawings were done of PIER locations and relative to each other, the trackwork planned was "threaded" around and between those piers and the points off the upgrade Garden Railway exit track.

The pivot point for the 3.0m diameter circle was marked and a plumb bob set for reference.



The stick with white paint ends is 1.5m long and was used to set the radius and intersection point for each track piece of 30 degrees. There are 12 pieces at 30 degrees included angle that make up the whole circle of 3.0m diameter. The chord length is 778mm at each intersection for each 787mm arc segment. A drill bit of 6mm diameter was used to make a hole drilled into the bed rock and a marker point dowel was tapped in. Then a bed of mortar was roughed in around each such dowel ready for brick piers.



The radius stick, plumb bobs and a chord length gauge were used to locate each 30 degree intersection.



Bricks were salvaged from previous house modification left overs.



Rough and ready, not always perfect and yet useable none the less.





The house was built in 1974, the previous owner of the vacant land did have a backyard shed, it needed power. He put in pole bases in the rock. While the power pole has long since been removed, this base and hole remain.

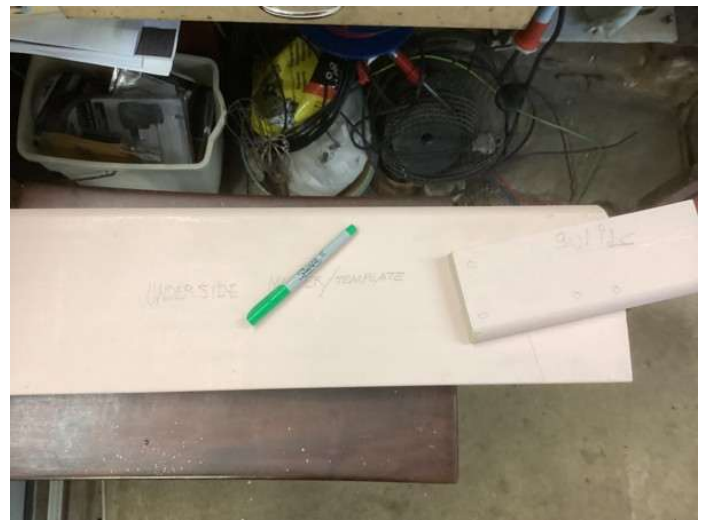
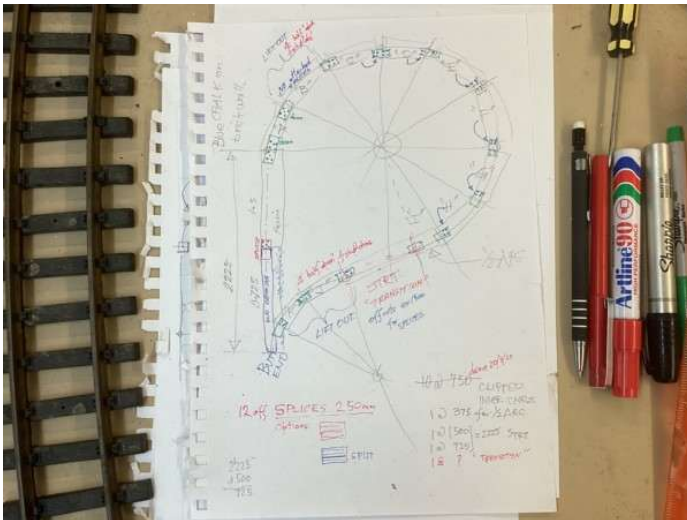


In some places the bedrock was sloping so much that the mortar bedding was done in several lifts. In other spots broken bricks were made use of.



The track at left runs out into the back yard, the track on right is part of the Balloon Loop under construction.





Track plan incorporates 30 degree segments that are screwed to 180mm wide 19mm base boards, each base board has a net length equivalent to the arc "chord" and splices are affixed to the clockwise end only.



The assembly line to attain the required Balloon Loop. Some segments are to be "Lift-Out" so no splices on them. This allows crawl space access to the very back of basement further up under the floor.



All ready for fitting to piers. Splices allow future dismantling when that day comes.





Rock was scarified and brushed free of chippings before mortar was placed.



While my brickwork is rough, it is not supporting the house, only the trackwork.



Chord length gauge of 778mm for 787mm Arc and 30 degree included angle for each track section. This made use of my old stock of Aristo-Craft track curves.

The lower stick is a go, no-go, gauge from rail base boards (underside of sleepers) to underside of house flooring above.





Allowed clearance from the white PVC sewer pipe.



Horizontal bearer to support curve and straight transition.



Once all the supports were levelled with packers, it took less than ten minutes to fit all the arc pieces.



The plastic sheet was to protect my clothing.



An infill piece has since been fitted under this point lead-in rail.

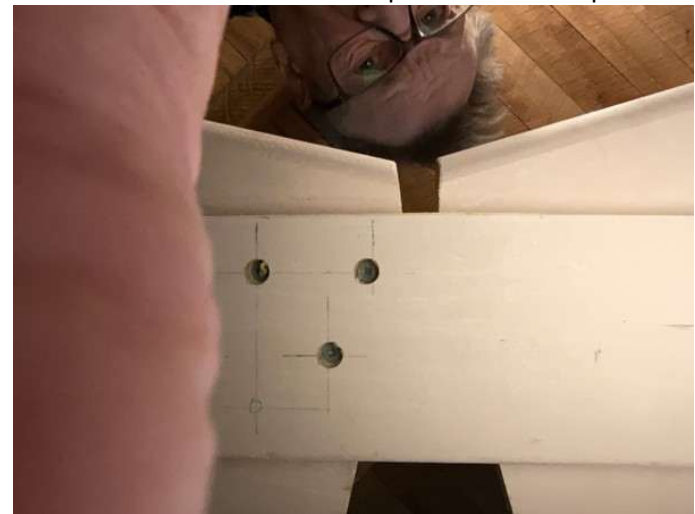




Chain is temporary until a prop can be founded below.



Chain is attached to a screw hook until a base pad can be installed and levelled below. Prop has since been placed.



Screws are under track base boards in each Splice plate and are screwed to the clockwise end of each arc only, this allows dismantling some time in the future.

There is a Youtube video of trains running on this Balloon Loop; <https://youtu.be/Es8fLSf8xMQ>