

St Mary's Church, Brixham (circa 1900)

With its 104ft tower (the second highest in Devon), St Mary's Church dominates the landscape of Higher Brixham. Dedicated to St Mary the Virgin, it is in the area of Brixham Churchtown (referred to in the Domesday Book as 'The Manor of Briseham'). The Parish Church is thought to be the third on this site of a Celtic burial ground. It is believed that Christian Saxons settled here shortly after AD 926, their wooden church being subsequently replaced by a Norman church (the foundations of which were discovered during excavation work in 1892).

While the date of the building of the present church is not recorded, the pillars are similar in design to those found in Totnes Church (known to have been in the course of construction in 1432), leading to the assumption that the two churches had the same architect. However, St Mary's is built in a slightly earlier style, which suggests that work was commenced around 1425. The sandstone of which St Mary's is built almost certainly came from the local Berry Head seams, and the stone for the arches and supporting piers from quarries at Beer in East Devon.

Back in 2016, I was invited to be part of the Heritage Lottery funded project that was to research the history of St Mary's Church and Graveyard, specifically focusing on the period 1850-1900. Given my experience as a miniature modeller, it was clear that my input would be something along these lines ... what better than a scale model of the church and the surrounding graveyard, as it would have appeared circa 1900.

Before embarking on the task, there were several practical considerations: the optimum scale for the model (an important factor, since construction would be carried out entirely at my home, and the completed piece transported from there to the church); the choice of materials; and an understanding of how the church and its surroundings would have looked at that particular time.

The chosen scale was 1/152 (2mm:1ft), which would provide scope for incorporating sufficient detail, while allowing me to keep the area to a manageable size. In terms of construction, I opted for plastic, metal and resin, satisfied that these materials would survive the inevitable damp and changing temperature inside the church (particularly during the winter months). Since the aim was to create a historically accurate model, my next job was to gather reliable references (both written information and images) relating to the subject; simply replicating the present-day version would not be appropriate, as certain features have changed dramatically over the years. In theory, much of the information would have been found in the

Diocesan Records Office in Exeter, but since these were destroyed during the 1942 Blitz, I had to rely on a small number of period photographs and maps, and relevant paragraphs in the church's visitors guide book. Having no architectural plans of the building, the only option was to take measurements of each exterior wall, and convert these to create a 1/152-scale plan. Having then photographed the building from various aspects, and knowing the height of the tower, I was able to generate a series of elevation drawings as the basis for construction. By comparing my own photographs with the earlier images, I concluded that certain features were indeed later additions to the building: notably, the vestries extending below the East window; the clock faces on the North, South and East sides of the tower; and the centrally mounted flag pole on the top of the tower. It was also clear that many of the windows had been replaced, evidenced by the different tracery designs.

And now for a spot of detective work ... evidently, there had been an area in the South Transept where people from 'Fishtown' would have sat during the services. Referred to as the 'Quay Gallery', this was in the upper part of the transept (above where the organ is now located), and would have been reached via an outside staircase and door (no longer present). Amazingly, one of my period photographs showed (albeit faintly) an outer staircase leading to an arched door, with what appeared to be a figure standing on the top step. Intrigued, I checked the rendering on the wall, and was able to make out a vague shape that corresponded with the position of the elusive doorway.

With my scale plans and photographs at hand, I was ready to make a start on the church construction. The framework was built from plastic sheet, and supported on the inside by a structure of Lego bricks (to ensure maximum strength and stability). Aware of the difficulty of cutting out the many complex window designs, I made a series of drawings, and had each one reproduced by the 3D Printing process (compliments of a friend, Richard White). Once I had completed the basic construction, I applied a layer of PVA white glue to each wall section, and followed with a sieving of fine sand to replicate the rough-cast render. Any excess sand was then removed, and a suitable shade of matt emulsion paint applied to these areas. Although the present church has had large portions of the rendering taken away to combat the problem of damp within the walls, only small areas of the underlying stonework are visible in the older photographs; clearly, most of this restorative work was carried out post-1900.

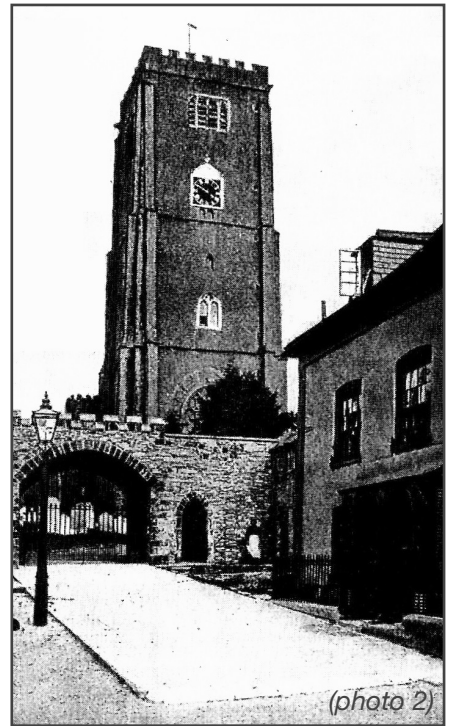
The next stage involved fitting the roof sections (made from embossed plastic sheet) along with other smaller details. Further painting was done with enamels, and appropriate weathering carried out using artist's soft pastels. The technique here was to grind each colour to a very fine powder,

and apply this with a brush to the surfaces to create tonal variation around the model. *(photo 1)*



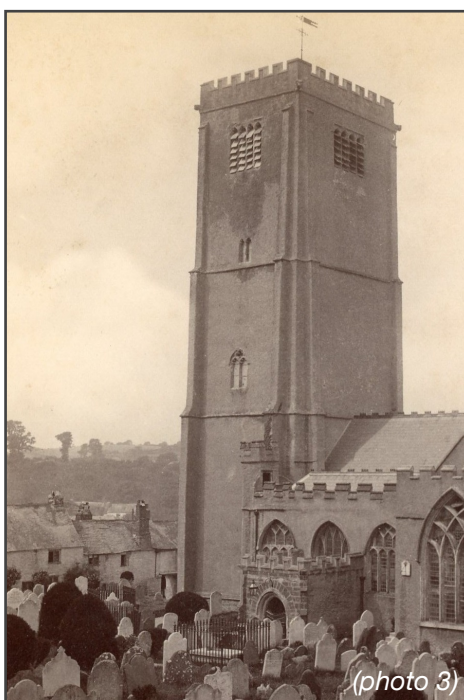
(photo 1)

Nowadays, the main access to the church grounds is via a stone-built archway beyond the West door. While this may appear to be an ancient structure, it is a relatively recent feature, built to replace a



(photo 2)

rectangular underpass that existed between a row of cottages (dating back to the 14th Century). The gates are certainly from the previous entrance, as are certain portions of the surrounding stonework, though it is thought that these have been supplemented by reclaimed stone from another location. The earliest known reference to the present archway is a photograph taken in 1905. *(photo 2)*



(photo 3)

Not surprisingly, there are very few references to the cottages themselves. As far as I am aware only two photographs exist: one dated 1889, the other 1900. *(photos 3 & 4)*



(photo 4)

Conveniently, the photographs show both the front and rear views of the buildings, so using the known height of the gate, I was able to create a series of scale drawings on which to base the construction of the cottages. Again, the walls were made from plastic sheet, and a layer of interior filler applied to replicate the characteristic texture. The windows appear to have been a combination of 'early ecclesiastical' and later 'Georgian sash' styles, so I matched these with various items from a laser-cut set provided by the scenic manufacturer, York Modelmaking. As with the church, painting was carried out using a combination of emulsion and enamels. The 'Cornish Slate' roof was added (again using items from York Modelmaking), and the exterior weathered with ground pastels. *(photo 5)*



The final building to be included in the scene was a chapel situated on the edge of the Non-Conformists' burial ground (the area designated solely for members of the non-Anglican community). Though not in use today, the chapel has retained most of its 19th century features. *(photo 6)*

With the main structures complete, the next stage was to establish the size of the baseboard in preparation for constructing the steeply contoured terrain, and mapping out the various grave plots and pathways. Having measured the entire 1850-1900 area, and noted the



relative position of key features, I was able to convert the data to a 1/152-scale plan; essential when building a model of this size.

A sheet of OSB (oriented strand board) was used as the foundation for the base, with an outer framework for the ground's contours made from MDF (medium-density fibreboard) panels. As well as deciding where the buildings would be located, it was also important to position them at their correct heights (taking into account the steep incline from the Bakers Hill side of the graveyard).

To limit the weight of the finished model, I used blocks of expanded polystyrene to create a sub-structure. The surface was then covered with several layers of papier maché, and pathways marked out before being given the PVA glue/fine sand treatment. Before 'grassing' the graveyard area, I added a low stone wall to the perimeter (a series of resin sections, compliments of the model railway scenic manufacturer, Javis).

Though there are various 'flock' materials available for recreating grass on scale models, I opted for a more realistic treatment. This involved the use of 'static grass', a fibrous material that can be applied with a special device to ensure that each strand remains vertical, once in place. Using the principle of static electricity, the fibres are deposited from a battery-powered applicator over a surface pre-coated with PVA glue. The positive/negative polarities cause each strand to fall vertically from the applicator ... with a perfect result every time! Even better, following a call to the Welsh company, WWS Scenery Manufacturer, they were happy to provide the necessary equipment (without cost), in return for me promoting their product, once the project was complete.

Of course, covering such a large area with grass proved to be fairly time-consuming, but well-worth the effort. With the addition of appropriate bushes and other low vegetation, the next consideration was the graveyard's tree population. Clearly, this would have been very different over 100 years ago. To gain a better understanding of how it would have appeared, I sought advice from local horticultural experts, Ken and Joan Davies. Having taken girth measurements, they were able to confirm that most of the trees now standing are post-1900 specimens. Identifying the trees that would have been present, I recreated each one using a combination of 'teloxys aristata' (also known as 'sea foam') and synthetic leaves (commonly used by railway modellers). Information found in early maps of the town indicated that the area on the far side of the graveyard would have originally been woodland, and the part adjoining the Non-Conformist plot most likely an orchard.

And now to the graves. Even discounting those that are post-1900, the number is quite staggering (not surprising, given that this was the main burial

area for the Victorian parish of St Mary's, including Brixham, Churston, Galmpton and Kingswear). Thankfully, our team of researchers (who were painstakingly recording the data from each headstone) were able to provide an overview of the layout, so that I could (as near as possible) recreate the appearance in miniature.

The graves were individually constructed using a combination of plastic strip and sections cut from wooden drinks-stirrers. Once painted and suitably weathered, each one was carefully positioned according to the recorded grave plots and a series of photographs. In addition to the 'standard' graves, there would have been a number of 'fenced tombs'. With the exception of two (in the Non-Conformist area), the fences were removed as part of the War Effort during the 1940s, though signs are still visible where these were cut away at the base. Again, having identified the location of the tombs, I scratch-built each one, and arranged them accordingly. An important landmark in the graveyard is the 'Great Gale Memorial', which pays tribute to the many lives lost during the devastating storm on the night of January 10th, 1866. Recreating this in miniature would again be a case of scratch-building. (*photo 7*)



Setting the scene ... 10.30 on a Sunday morning, and the Communion service has just ended. Outside the South porch, the vicar is bidding farewell to some of his congregation. Near the West door, a carriage awaits its passenger, while other parishioners make their way home ... some pausing to visit the graves of their departed loved-ones.

What I needed now was a selection of figures, suitably attired in Victorian costume. Thankfully, one of Britain's leading small-scale figure sculptors, Andrew Stadden, was able to provide what was required. Cast in pewter (each around 11mm in height), these were outstanding pieces. Once painted, they would add the finishing touch to the scene. And with that, my two-year project was complete ... well almost.

With the model due to be re-located to St Mary's Church, I arranged for a local craftsman, Paul Thompson, to build a Perspex case (a wise decision, to protect it from dust ... and inquisitive fingers). And finally, the perfect accompaniment to the scene, 'Cowtown 1862 – a Map of St Mary's Inner Parish', beautifully painted in acrylics by David Brumwell. (*photo 8*)



For those who wish to view the model, St Mary's Church is open to the public on Saturday mornings from 10.00 to 12.00.

Images of the completed scene (*photos 9 – 15*)

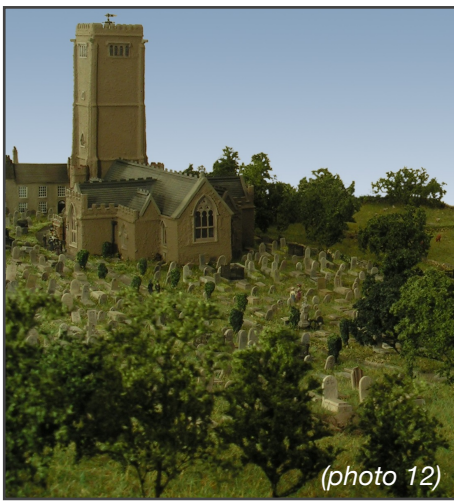




(photo 10)



(photo 11)



(photo 12)



(photo 13)



(photo 14)



(photo 15)