

APPENDIX 2

ROYAL WORCESTER PORCELAIN WORKS, HISTORICAL AND INDUSTRIAL RESEARCH OF THE GROUP COMPOSED OF BUILDINGS Q, U and V

John van Laun Associates

Text by John van Laun and Wendy Cook

Edited by Julie Phillips and Jerry Newby-Vincent

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The group at the south-west of the factory – Q, U and V

Building Q: Aerographic Block

Outline history

This building is an example of the final expansion of the Victorian factory to the design of Thomas Sutton who also built the Severn Street front in 1891. Building Q was completed in 1888 and follows in style that set by George B Ford in the 1870s but its detailing is less elaborate. Nevertheless, it is a significant element within the complex.

The plot of land on which Building Q was to lie was purchased by Royal Worcester from Henry Fincher in January 1875.¹ At that time there were 11 tenements and gardens. By 1884 (Figure 1) the number had been reduced to three cottages with a garden. It may be that this reduction was a forerunner to the developments which were to take place here with the construction of Building Q four years later.

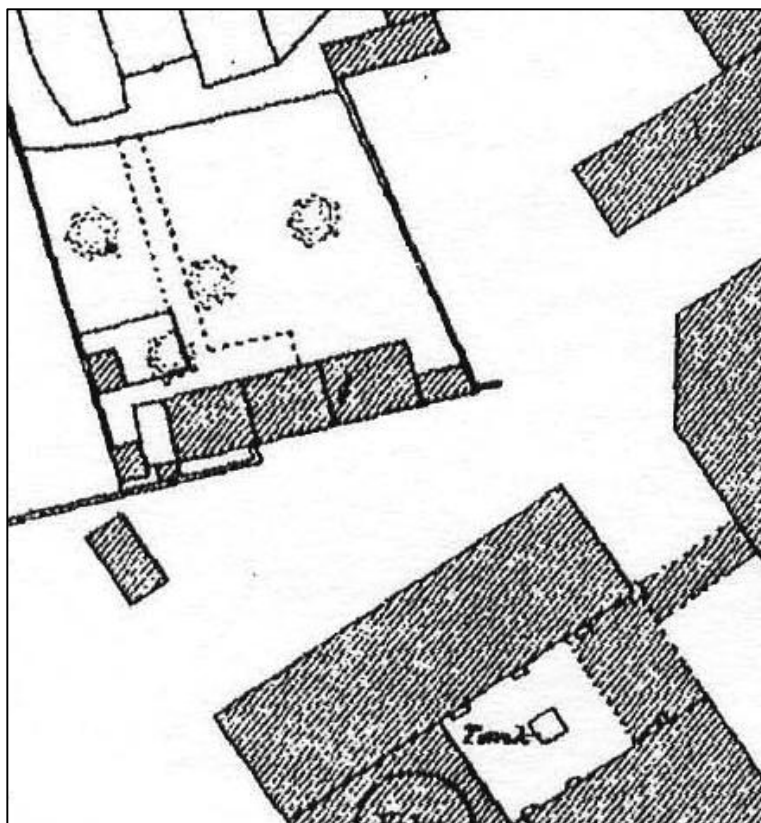


Figure 1: The site of Building Q in 1884 (source: Ordnance Survey Map 1st Edition 25in to 1 mile)

In September 1887 the Board was notified of a need for new potting shops and mould stores. It was agreed that a two storey building 56ft by 27ft was to be constructed, but by the following month they had changed their minds and decided it would be more useful to erect a three storey building instead to be new printing, painting and burnishing rooms (Figures 2 and 3). Construction started on the 'New Printing House' in October 1887 and by April 1888 the building was occupied by '24 printers and the necessary transferers'.

¹ Company Minute Book, Minutes 3704, 3716 and 3787 (Worcester Porcelain Museum) hereafter shortened to 'Minute' (Worcester Porcelain Museum)

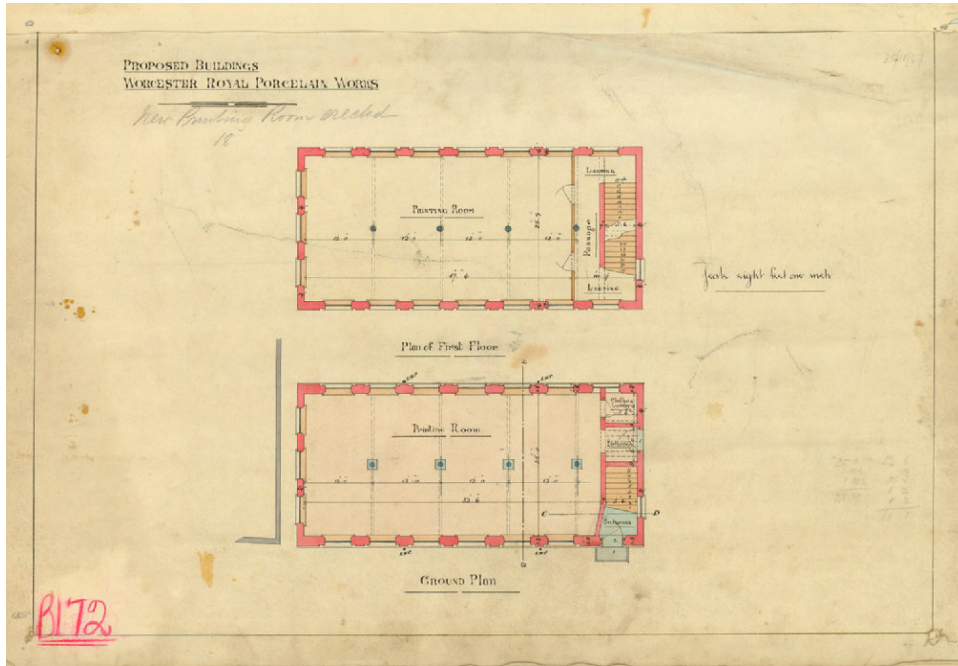


Figure 2: The ground and first floors of Building Q as planned in October 1888 by Thomas Sutton (source: Worcester Porcelain Museum)

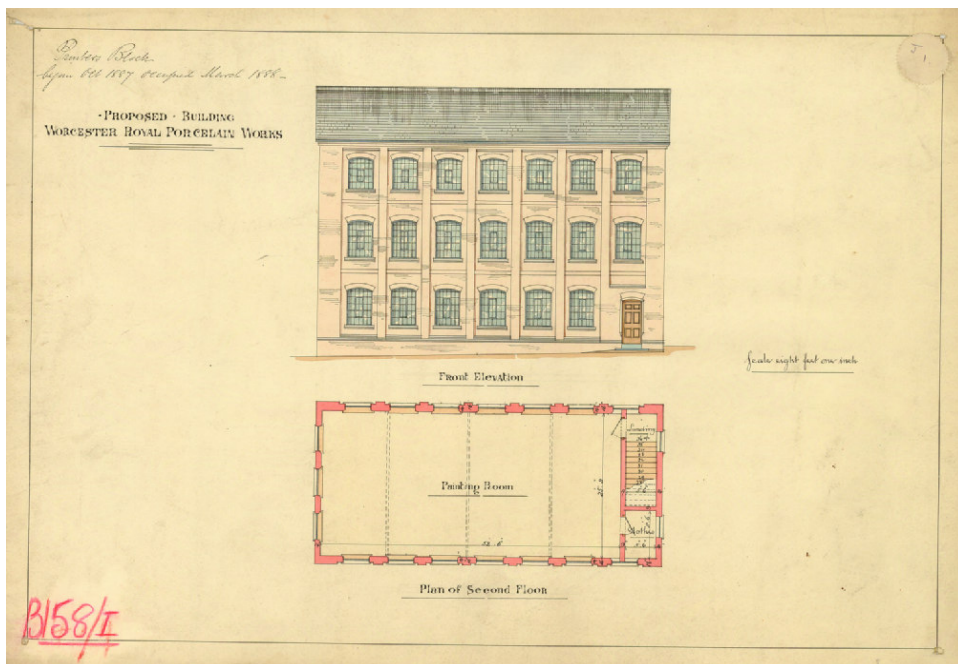


Figure 3: The east elevation and top floor of Building Q as planned in October 1888 by Thomas Sutton (source: Worcester Porcelain Museum)



Figure 4: Inking in Building Q c1920

Here the inkers are stippling in the ink with a leather pad. The ink would need to be heated for it to take to the engraved copper or steel plates. A press can be seen to the right (source: Worcester Porcelain Museum).

Figure 5: Printing and transferring in Building Q c1920

The printers' presses were located in the middle of the printing room. The engraved copper or steel plate is passed through the rolls under considerable pressure forcing the ink into the paper transfer which is then taken to the women under the windows who apply the transfers to the ware (source: Worcester Porcelain Museum).



Figure 6: The first floor of Building Q c1920. Transferrers at the benches by the windows (source: Worcester Porcelain Museum)



The three storey building was organised with the painters on the top floor with the two floors beneath dedicated to printing. The staircase lay at the north end where there was a lobby to contain it. The building is long and narrow with large windows to allow maximum light for the transferers, who had benches alongside the windows. Six new printing presses were located in the middle of each floor and it was supplied with gas lighting and steam heating. The apparatus within was three printers' hotplates and stands and eight printers' colour plates.² The way these were used is described in the captions to Figures 4 to 6.

In 1928 a bridge was built linking the first floors of Buildings Q (Figure 7) and R providing a route through to the enamelling kilns in M and N for the printed pots. There were two further link walkways. One was a continuation of the link to R running alongside the east side of Q to the printers block in Building U. Metal stairs at the end of the walkway led up to the top floor of U. An exterior wooden staircase led off to the left down to the yard. The other struck off at right angles from the north end of Building Q to the engravers room in the first floor of the new wing of Building J where a copper strong room was built in 1934 (Figure 8).

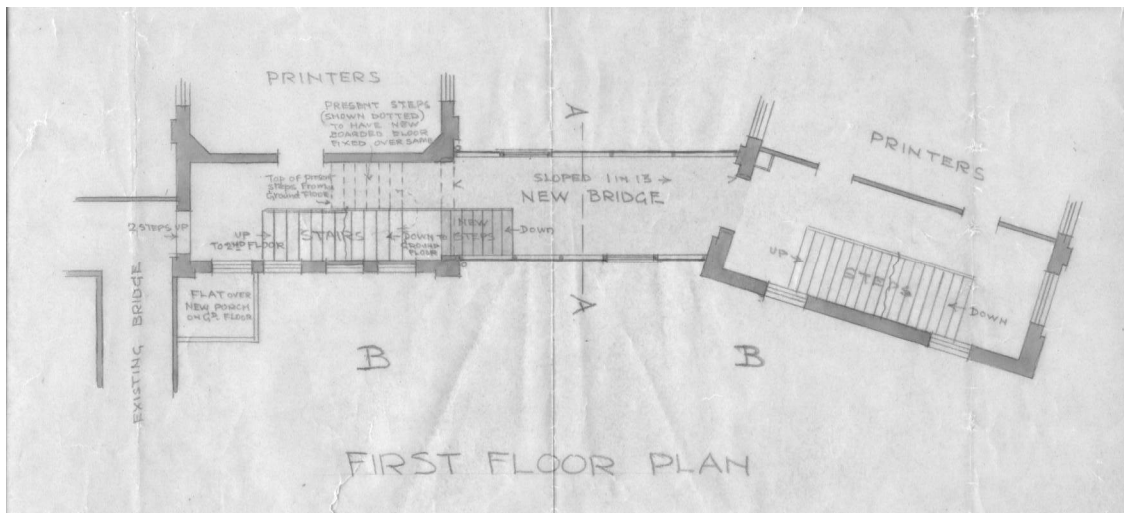


Figure 7: The link between Buildings R (left) and Q (right)

That to the engravers room ran from the lobby on Q towards the bottom (source: Scrivener & Sons 1928, Worcester Porcelain Museum)

The later history of Building Q is as follows. By 1953 the second floor was being used as the 'ground laying' department and this continued here until ground laying by hand ceased at the end of the 1980s. Around 1988 the computer department moved into the top floor having previously occupied the first floor of the Worcester Porcelain Museum. At much the same time the design department took over the first floor and continued here until 2006. The acid blacking department was the longest lived of the more recent occupants having been here on the ground floor from the 1900s until the 1980s. It was associated with the acid shop which was across a path at the south end of Building Q.

2 Minute 3816 (Worcester Porcelain Museum)

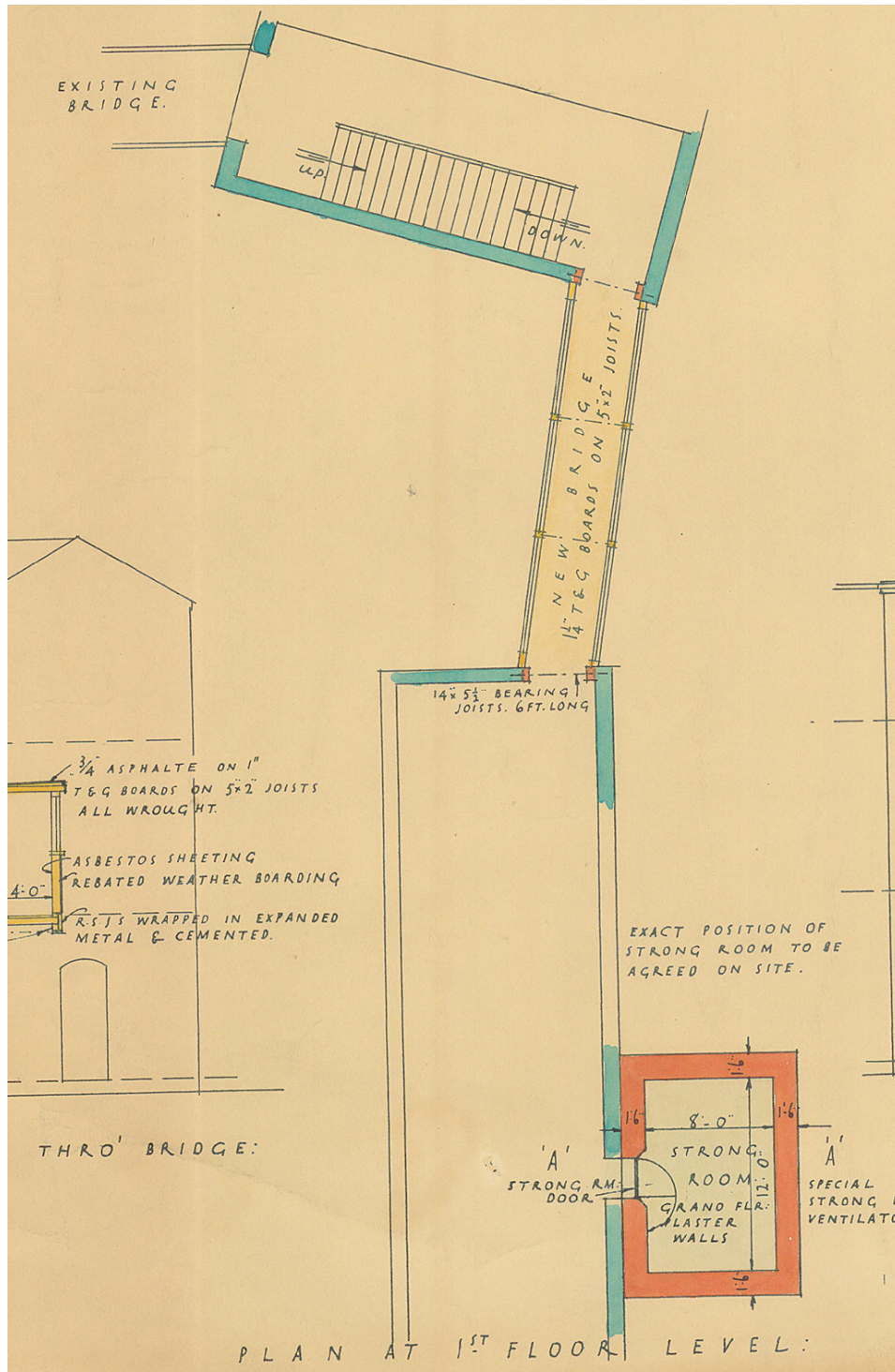


Figure 8: The link between Building Q and the Strong Room (source: Worcester Porcelain Museum)

Following the cessation of acid etching because of health and safety reasons in the 1990s the ground floor was used for aerograph decoration (spray painting) of figurines. Aerograph decoration was invented in the 1890s and spurred the development of the famous Royal Worcester blush ivory ware. Metallic oxide powder was mixed with water, methylated spirits and a small amount of glycerine and then sprayed with a very fine air brush onto the ware.

The Acid Shop

This small brick and weather-boarded building was erected in 1950 (Figures 9, 10 and 11) as an extension to the acid etching (blacking) department which lay on the ground floor of the nearby Building Q at the cost of £704. There is little previous history to the site apart from two air raid shelters which were here in 1941.³



Figure 9: The Acid Shop from the west



Figure 10: The Acid Shop from the east

3 Shown as K, L and M on Sam Cooke's plan of 1941

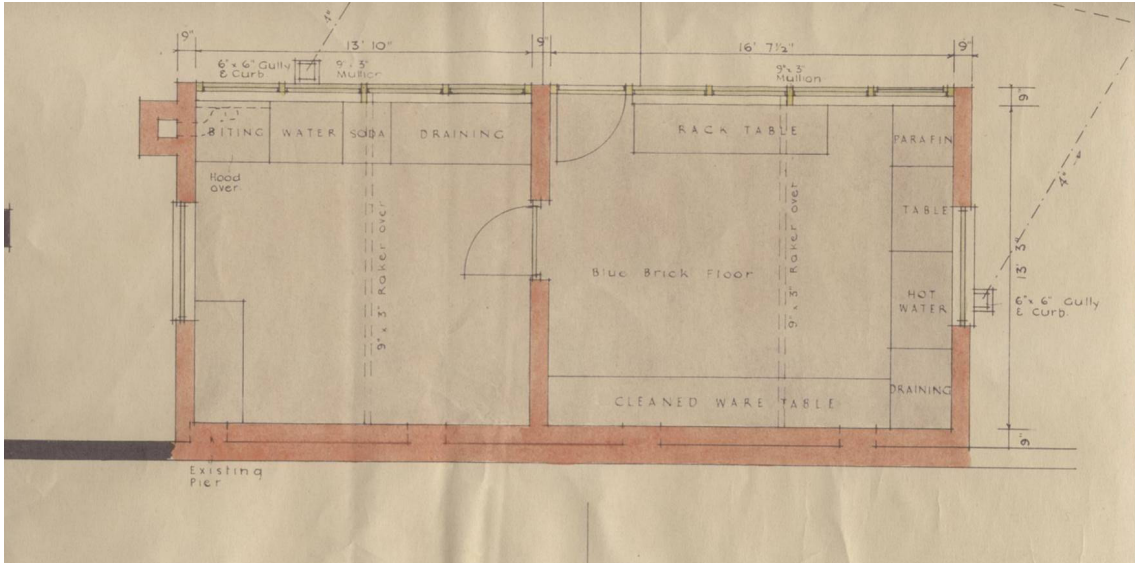


Figure 11: Plans for the Acid Shop by Sam Cooke⁴

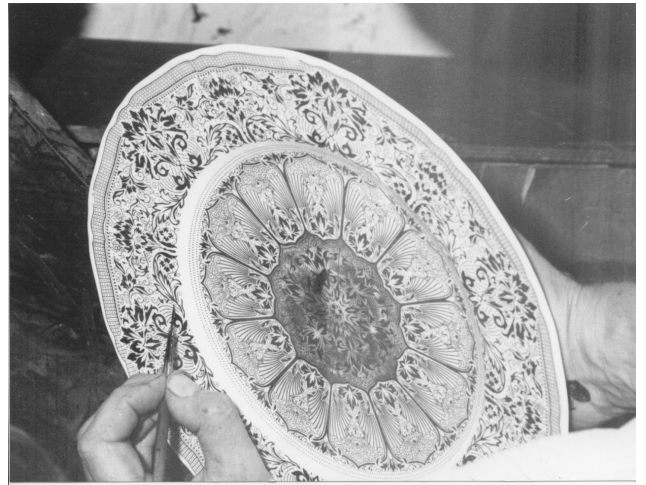


Figure 12: Painting out with bitumen (source: Worcester Porcelain Museum)

4 These are referred to in the Company Minute Book 12, Minute 901 (Worcester Porcelain Museum)

The process of acid gold decoration was invented around 1900 by Leonard Burgess. Acid gold was used for many years to embellish the most expensive tableware. The process was as follows:

A design was first engraved by hand onto a copper plate and then printed onto a piece of china in bitumen. The back of the plate was also painted out in bitumen (Figure 12) – this took place in Building Q. The plate was then dipped into a bath of hydrofluoric acid in the Acid Shop (Figure 13) which etched into the parts of the plate not covered with the bitumen. After washing and gilding over the top with 22 carat gold the piece was fired.



Figure 13: Acid dipping (source: Worcester Porcelain Museum)



Figure 14: Burnishing the gold with bloodstone (source: Worcester Porcelain Museum)

Finally a piece was burnished or polished with a blood stone, giving the impression of intricately tooled gold (Figure 14). The process continued in much the same way until it was stopped for health and safety reasons around 1990.

Building U: Mens Painters Range

Outline history

Building U has had three very distinct phases to it. In February 1937 it was originally designed as a two storey structure and was described as a machine shop. By July, tenders were submitted by Mr S N Cooke for the erection of additional workshops for carpenters, plumbers and engineers, amounting to £1,400.⁵ The board also authorised the demolition of an existing joiners' shop and stores. As built it was of two storeys, seven bays with a flat roof with a single storey extension to the south (Figure 15).⁶ The ground floor was used by the engineers and stores and the first floor was a timber store with workshops for the carpenters and printers. In 1948 it was extended to its final 11 bays, the additional four being of single storey but matching those of the original. A single storey was tagged onto the end (Figure 16).

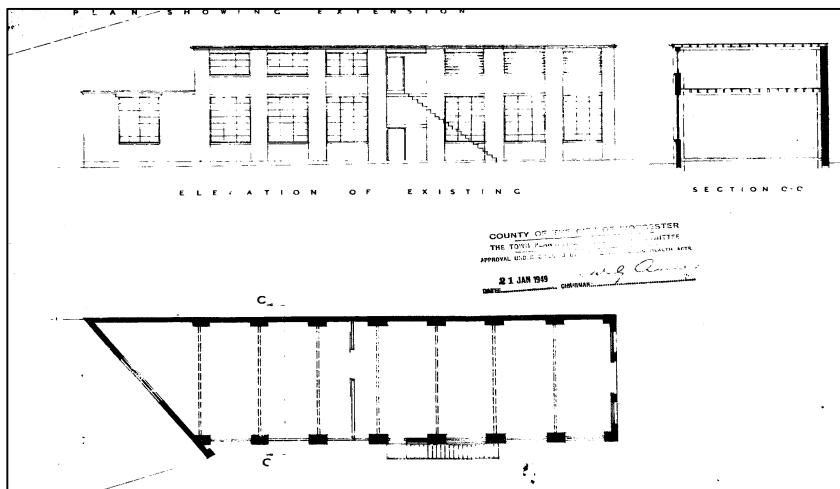


Figure 15: Building U as built up to 1941⁷

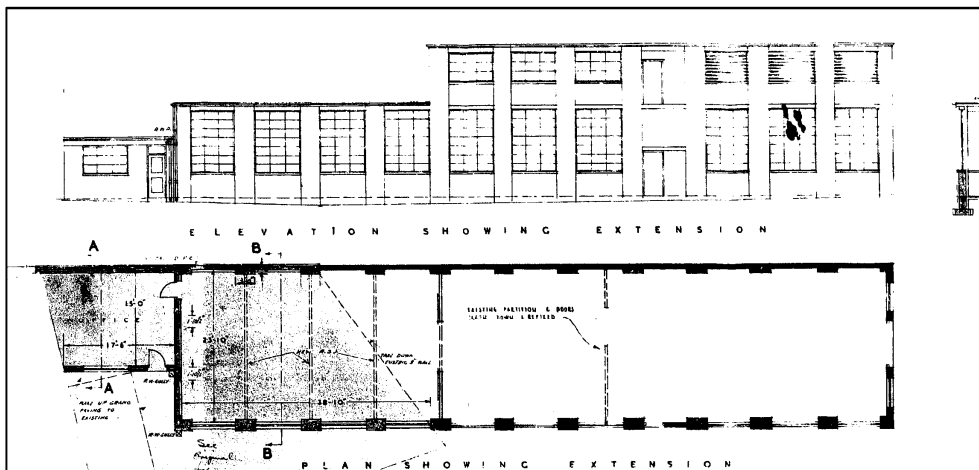


Figure 16: Building U as changed in 1948⁸

- 5 Minute 174 (Worcester Porcelain Museum)
- 6 City of Worcester Planning Application 8748 (19.11.1948). This refers to the original application dated 1.1.1941.
- 7 City of Worcester Planning Application 8748 (19.11.1948)
- 8 City of Worcester Planning Application 8748 (19.11.1948)

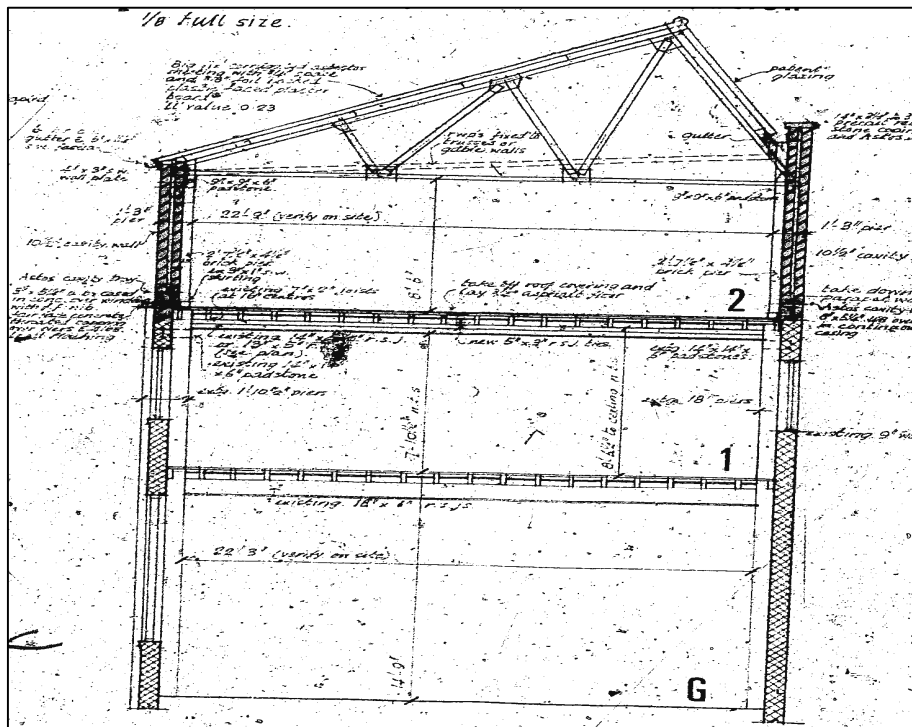


Figure 17: Building U in 1960⁹

In March 1960 the southern single storey structure was heightened to match those of the original seven bays. The plan was the same as that for 1948. The final change occurred in June 1970 when the whole building was raised by one storey for the senior painters and given an asymmetrical roof (Figures 17, 18, and 19). This roof was designed to provide light for the senior painters. Plans for fire escapes were added at the south a few months later (Figure 21).

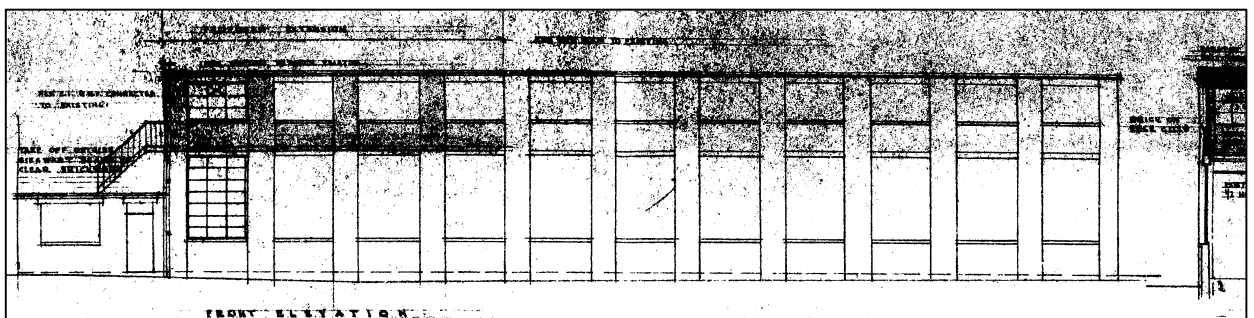


Figure 18: Building U in 1970¹⁰

9 City of Worcester Planning Application 70/0414 (5.6.1970) and 70/0907 (18.10.1970)

10 City of Worcester Planning Application 70/0414 (5.6.1970) and 70/0907 (18.10.1970)

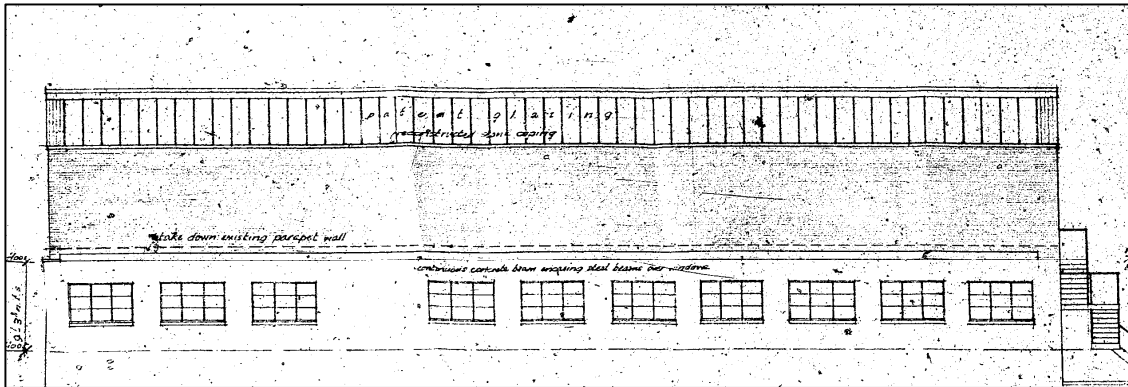


Figure 19: Building U in 1970 with its asymmetrical roof¹¹



Figure 20: The south elevation of Building U with the asymmetric roof



Figure 21: The fire escape as planned in 1970 for Building U with the single storey part of the original building

11 City of Worcester Planning Application 70/0414 (5.6.1970) and 70/0907 (18.10.1970)

Manufacture in Building U

During the War much of the factory was used by the Ministry of Aircraft Production, but this building was used for the production of the Doughty Birds series. The government allowed Royal Worcester to continue some bone china production during the war – 80% of which was exported.¹² The Doughty Birds were produced for the American market.

The ground floor of this building was known as the ‘Doughty Bird Shop’. Dorothy Doughty designed and modelled a series of 72 American birds between 1935 and 1957. The birds were the most complex models (Figure 22) ever produced in bone china and pushed the possibilities of manufacture to the limit. New methods of mould making, casting, and propping up models in the kiln had to be developed. A special range of matt colours were made to give the birds a life-like appearance and new methods of flower making were also tested. The birds were sold as limited editions and were some of Royal Worcester’s most successful products, often selling out even before the pieces had been made. The kilns for the Doughty Birds lay on the ground floor.

At one time Royal Worcester employed 150 flower makers. Flowers were totally hand-made petal by petal and assembled by hand. The clay is mixed with gum Arabic to make it more malleable. By the 1970s there were so many flower makers they even worked in the passage way between Buildings U and Q where the light was good. In 1980s and 90s the building was used for aerograph decoration of figurines on the first floor, retail storage on the ground floor and the senior painting department remained on the second floor.



Figure 22: A Doughty Bird (source: Worcester Porcelain Museum)

12 Minute 278 October 1941 (Worcester Porcelain Museum)

Building V: Orchard ware and mould-making shops

Outline history

In 1941 there were four Air Raid shelters¹³ on the site which replaced a possible store which lay here in January 1936 and survived up to 1941.¹⁴ This was replaced by the current buildings U and V (Figure 23) prior to 1948.¹⁵ It was built for the Orchard mould makers. Orchard ware was a range of earthenware shapes with fruit modelled in relief on the borders. The shapes were developed and tested and the plaster moulds for the range were made at Worcester. The actual earthenware pots were produced by the Palissy Pottery, Stoke on Trent that had been purchased by Royal Worcester in 1959. Orchard wares were finished with a treacle-like glaze in Sumerian gold, Sylvian green or Albion white that emphasised the modelling (Figure 24).

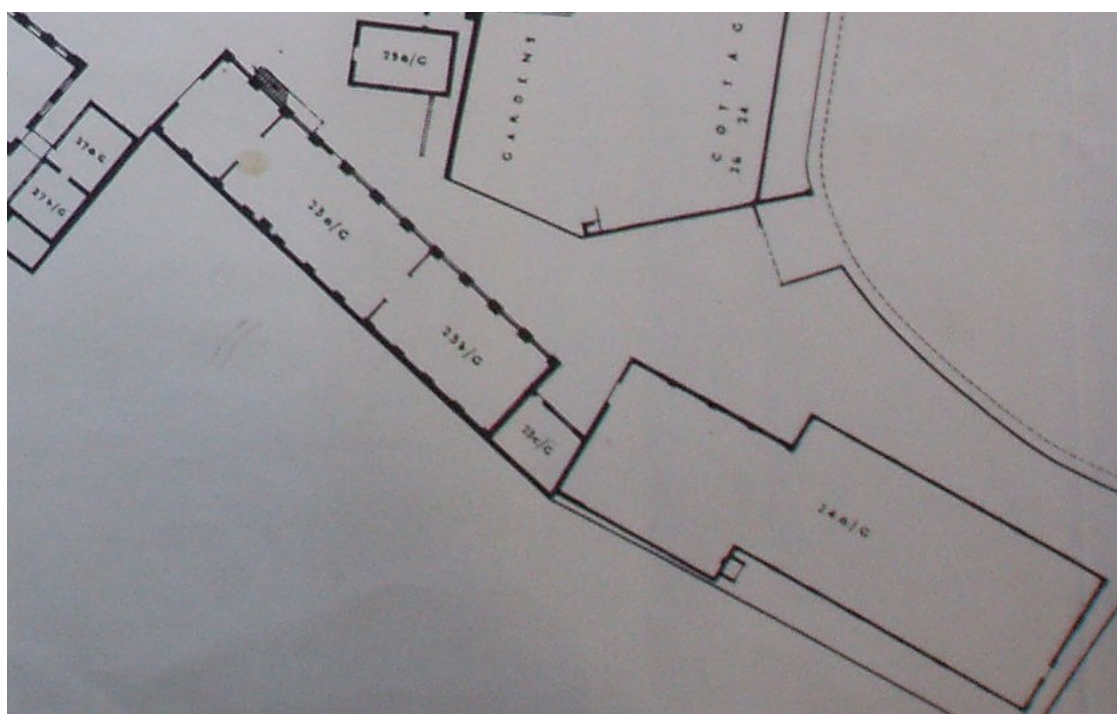


Figure 23: Buildings U (left) and V (right) Detail from a revised ground-floor block plan¹⁶

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- 13 Revised Block Plan Sam Cooke January 1941 22893 (Worcester Porcelain Museum)
 - 14 Schofield's Insurance Plan (January 1936) and Cooke's plan of 1941 (Worcester Porcelain Museum)
 - 15 Sam Cooke Revised Plan of 1948 (Worcester Porcelain Museum)
 - 16 Sam Cooke November 1953 Drawing 4916/2 (Worcester Porcelain Museum)



Figure 24: An assemblage of Orchard ware (source: Worcester Porcelain Museum)

Wendy Cook BA (Hons), Curator, Worcester Porcelain Museum
John van Laun PhD FSA MIFA