

## **APPENDIX**

### **ROYAL WORCESTER PORCELAIN WORKS, HISTORICAL AND INDUSTRIAL RESEARCH OF THE GROUP COMPOSED OF BUILDINGS K1, K2, K3 and K3 extension**

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## Background to the Buildings



Figure 1: K1 (left) and the K2 front onto Prince's Drive

Buildings K1 and K2 front onto Prince's Drive which runs from north to south through the works (Figure 1). Building K1 runs through towards the Worcester & Birmingham Canal and K3 with the kilns (demolished in the 1950s) extend behind K2 (of which they were part) towards the canal. Prince's Drive obtained its name following a Royal visit in 1884 to the works which included the Museum (Building K2). The Worcester Herald recorded the visit at the time.

'On Saturday 20th December 1884 the Albert and Alexandra, Prince and Princess of Wales visited the factory. They were escorted by chairman George W Hastings MP (son of Sir Charles Hastings, founder of the BMA), M D Richard Binns and works manager Ernest P Evans. After visiting the showrooms, the Royal Visitors were taken to the potting, decorating and burnishing rooms and visited the museum where their carriage awaited them at the doors. They then drove along the canal to Sidbury'

The land on which Buildings K1, K2 and K3, including the kilns, (the present K3 extension) were built was acquired in February 1857. This gave the company further access to the Worcester and Birmingham Canal but the area remained relatively open until 1879 (Figure 2).

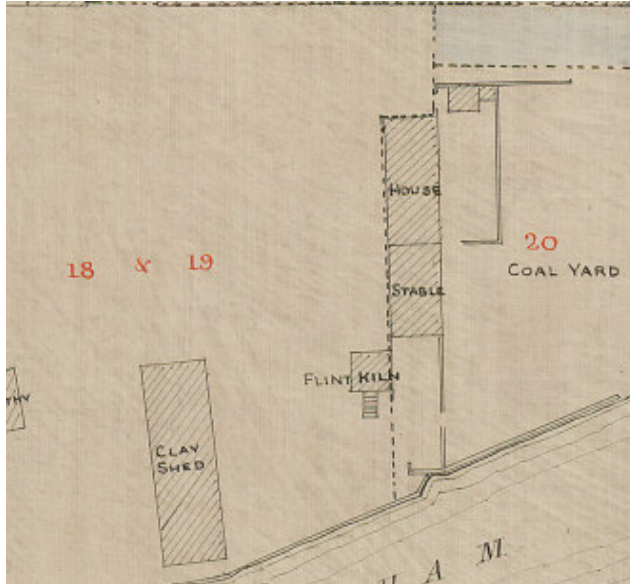


Figure 2: The open area adjacent to the canal on which the K buildings were built in 1875 (source: Worcester Porcelain Museum) 'Copied from the PLAN on the MORTGAGE dates 2 June 1875 and numbered and coloured to show the Title under which the various parts thereof are held.'

There were already a cottage and a stable on part of the site and these were to prove an impediment to building in the planning stage which ultimately led to the shape of the combined K2 and K3 and to the delay in building K1 (Figure 3).

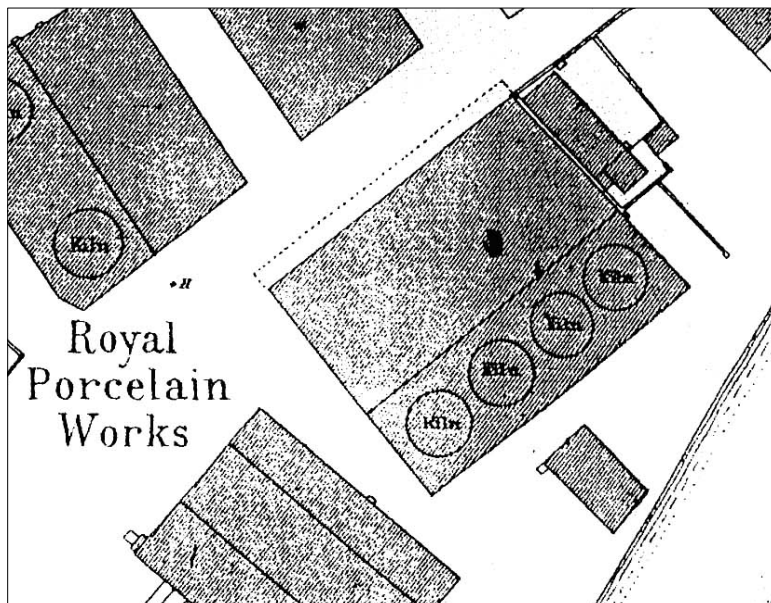


Figure 3: Extract from the 1st Edition OS map of 1884 showing the completed Buildings K2 and K3. K1, the area to the right, was still occupied by a stable and a house.

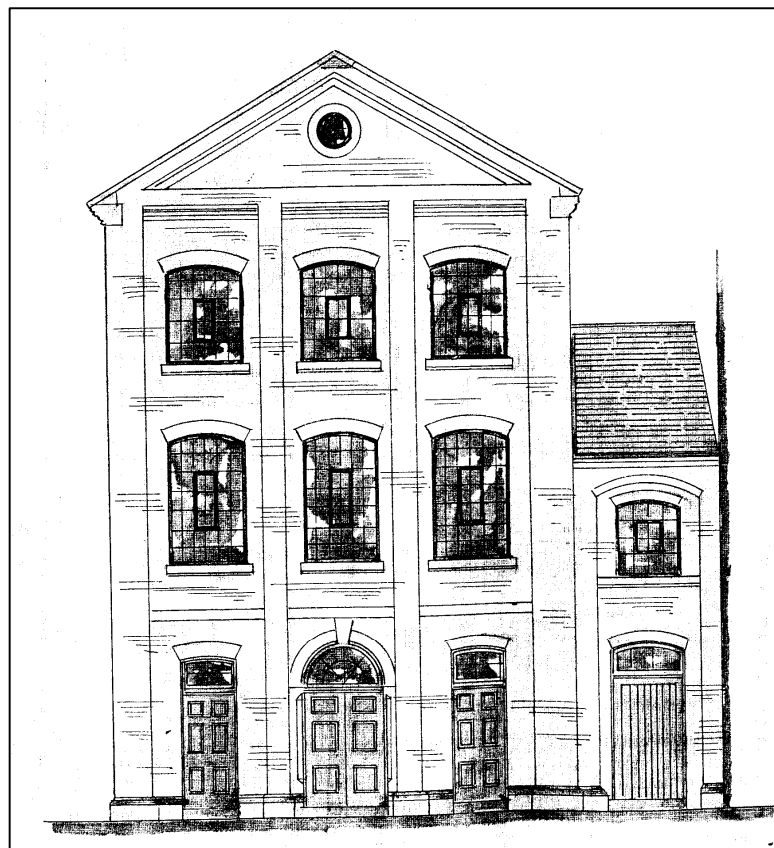
### **Building K1: Binns Building, north wing**

The northern cross wing of the Binns Building was built nine years after the other two parallel ranges but in the same general style.

#### **Outline history**

This was the last part of the Binns Building complex to be completed by which time the architect for the works had changed. Whilst its detailing is generally similar, there are some differences, including the use of engineering brick for the window sills instead of moulded red brick. This must be attributed to the fact that Thomas Sutton was the architect and not George B Ford who design the other buildings in this group.

Although the land was purchased in February 1857 it was not until October 1888 that a plan was submitted for a new 'Parian House' by Thomas Sutton, three stories high, at a cost of £1000 and it was decided to pull down two old dilapidated cottages to make room for this extension to the museum building.<sup>1</sup> The substance of Sutton's 1888 plans were put into practice but with some modifications. Figures 4 to 10 show that the essentials were followed through into the existing building.



**Figure 4: West elevation of Building K1 as planned by Thomas Sutton in 1888<sup>2</sup>**

1 Company Minute Book Minute 3871 (Worcester Porcelain Museum) hereafter shortened to Minute (Worcester Porcelain Museum)

2 Worcester City Planning Application 1329



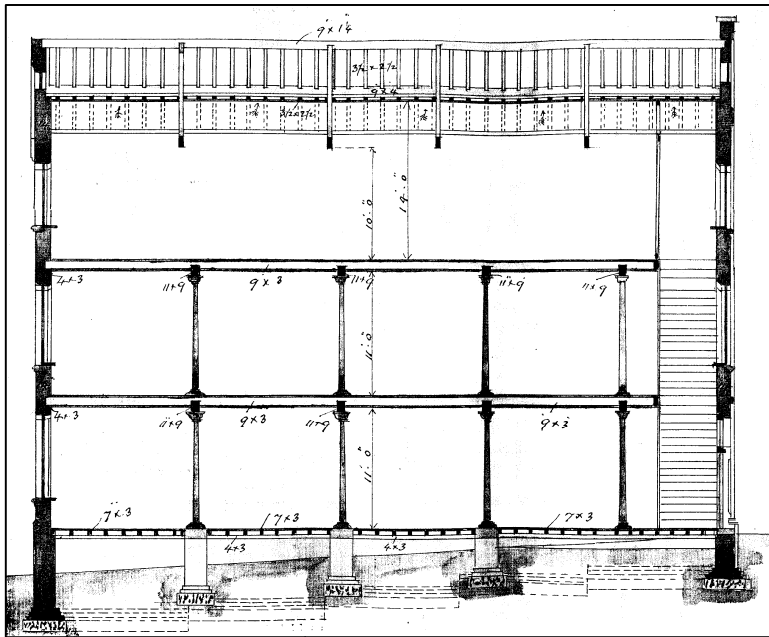


Figure 7: Section through north elevation of Building K1 as planned by Thomas Sutton in 1888<sup>5</sup>

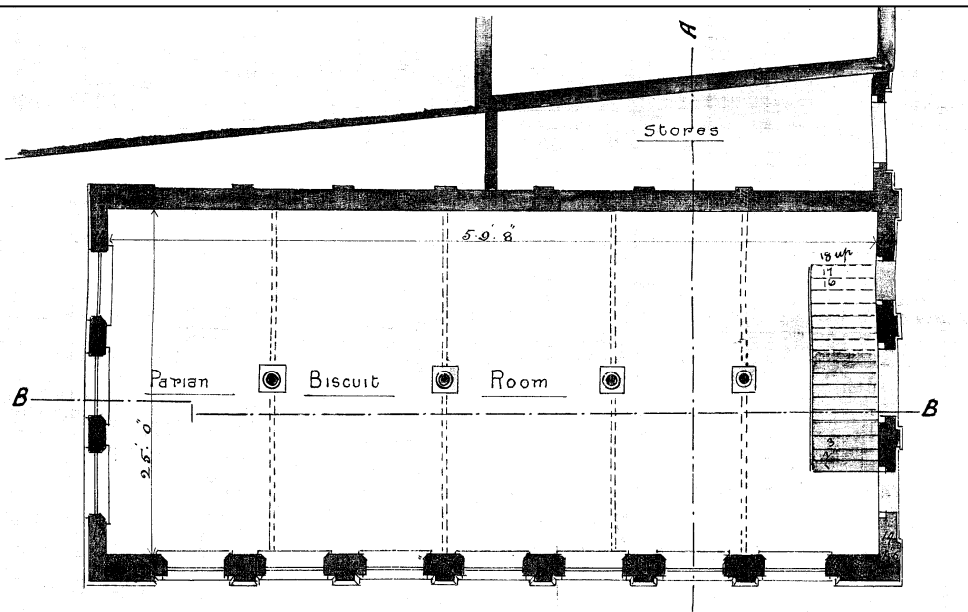


Figure 8: Ground floor plan of Building K1 as planned by Thomas Sutton in 1888<sup>6</sup>

5 Worcester City Planning Application 1329

6 Worcester City Planning Application 1329



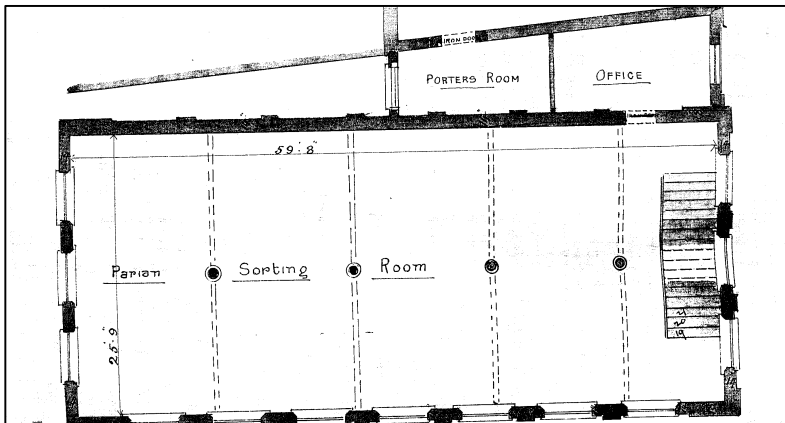


Figure 9: First floor plan of Building K1 as planned by Thomas Sutton in 1888<sup>7</sup>

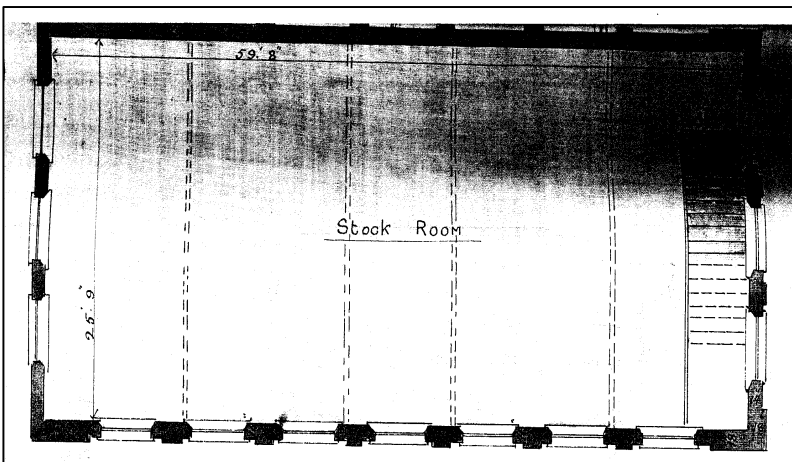


Figure 10: Second floor plan of Building K1 as planned by Thomas Sutton in 1888<sup>8</sup>

This building was designed for the production of Parian wares. Parian was a type of porcelain developed in the 1850s with the intention of imitating marble sculpture. Parian made classical sculpture accessible to the up and coming middle classes and quickly became very fashionable. At Royal Worcester the cream-coloured material was used in preference to bone china (which is very white) for all ornamental shapes until it was discontinued in 1931. Both glazed and unglazed Parian wares were produced in huge quantities (Figures 11 and 12).

7 Worcester City Planning Application 1329

8 Worcester City Planning Application 1329



**Figure 11: Unglazed Parian figurine – fired only once (source: Worcester Porcelain Museum)**



**Figure 12: Glazed Parian with a blush ivory finish. This was one of Royal Worcester's most successful products at the end of the 19th century (source: Worcester Porcelain Museum).**

On the ground floor of this three-storey block was a Parian scouring room (Sutton's plan shows it as a 'Parian Biscuit Room' – Figure 13) and the foreman's office. Some of the furniture in this room has survived from the 1890s. The low level wooden cupboards in the centre date from the late 19th century. They were lined with plaster of Paris and were used as damp boxes. The work benches around the walls were also installed in 1888 – 89. They have one inch thick Welsh slate tops and were used as part of the scouring process. After the biscuit firing, any small bits, seams or irregularities had to be cleaned or scoured off to perfect the surface finish. The bases of vases or figurines are sometimes uneven and they are evened out by grinding on wet slate. The process is still known today as 'Slating the bottom!'



**Figure 13: Ground floor with low-level cupboards and benches**



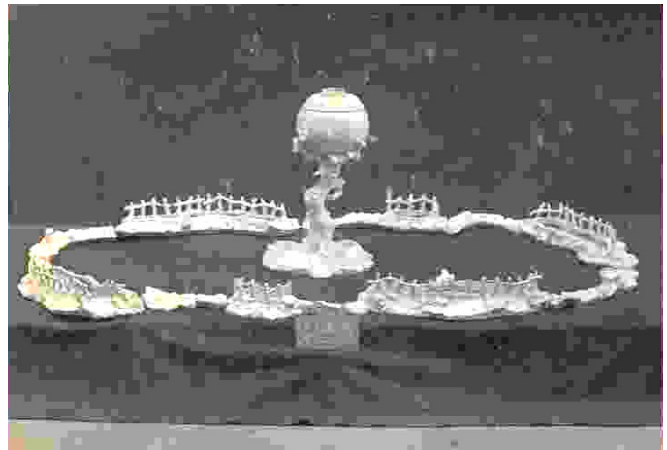
**Figure 14: The first floor of building K1**

On the first floor was a Parian glost sorting room where glazed Parian had any imperfections removed before any decoration was applied (Figure 14). On the second floor there was a Parian stock room (Figure 15) presumably for storing undecorated Parian wares and also a dark room and photographic studio. Photographic plant was purchased in 1884 at a cost of £15 14s and further equipment bought the following year for £37 2s 6d. The factory maintained a photographic record of all shapes produced from the late 1860's onwards (Figures 16 and 17). The photographic studio was used to produce books of images of different shapes – to be used for reference in the making departments of the factory and in the showrooms for customers to choose from.

In the second half of 20th century this building was used for mould making and slip casting. The ground floor housed the development mould makers where new models were cut up to make the master block moulds and their production was tested. Slip casting from working moulds for complex ornamental wares was housed on the upper two floors with the top ornamental casters. The top floor roof trusses as designed by Sutton still survived at the time of the survey and can be seen in Figure 18. The use of the building remained the same until production was condensed down in the early 21st century.



**Figure 15: The second floor of Building K1**



Figures 16 and 17: Photographic records were kept of all shapes produced at the Works



Figure 18: The top floor of Building K1 showing the roof trusses as designed by Sutton

## **Buildings K2 and K3**

### **Outline history and development**

After the show rooms, this is the grandest building on the factory site. The block is comprised of the museum, a two-storey block containing a placing room, a Greenware room and, slightly separate a set of three biscuit kilns. It was designed by George B Ford in 1878 (Figures 19, 20 and 21) and opened to the public in 1879. The museum was the dream of Managing Director, Richard William Binns, FSA, who aimed to provide examples of the finest works of the past to inspire his designers and craftsmen.

Ford presented a set of plans to the Board for approval in October 1878 (see Figures 19 and 20). His quote included a block of buildings to include a placing house, biscuit warehouse, Greenware room, a museum and a shed to house the ovens at a cost of £2800. Three biscuit ovens and cones were quoted at £600 whilst fixtures came to £200 to include stillages, benches, steam pipes and gas fittings.<sup>9</sup> Presuming that gas lighting was to be used it would be interesting to know where the gas-making plant was situated.

Earthenware was proving such a success as early as February 1874 when the Works Manager, E P Evans had stated in his report to the Directors of that there was more than a years' waiting list for earthenware services. The problem was exacerbated when Royal Worcester introduced their Royal Worcester Vitreous (earthenware) in 1868.<sup>10</sup> The demand for Crownware was so great that the Directors decided that the building must be erected at once.

Ford had presented the plans in October but these demands urged him to produce a south elevation which he did in November 1878 (Figure 21). It can be seen more clearly here that the kilns were distinctly separate from K3. After the kilns were cleared in the 1950s a long, but narrow, lean-to extension was built onto K3 in 1970 as the 'Lady Casters Department'.

At first sight Ford's October plans suggest that Buildings K2, K3 and the kilns form a square; however closer examination shows that there is a slight irregularity at the north end. This is due to the need to take into account the existing cottage. This stems from the Local Board of Health's intervention when in February 1879 they objected to the erection of the building on the grounds that the north end would lie too close to a cottage and stable.<sup>11</sup> It was agreed to demolish the stable, as it was no longer of any use, but the cottage remained until Building K1 was built on the site in 1888. Figure 3 shows the cottage still in place.

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9 Minute 2470 (Worcester Porcelain Museum)

10 Minute 1831 (Worcester Porcelain Museum)

11 Minute 2571 (Worcester Porcelain Museum)

Royal Worcester Porcelain – Buildings K1, K2, K3 and K3 extension



Figure 19: Ground floor plan of Buildings K2 and K3 October 1878 (source: Worcester Porcelain Museum)

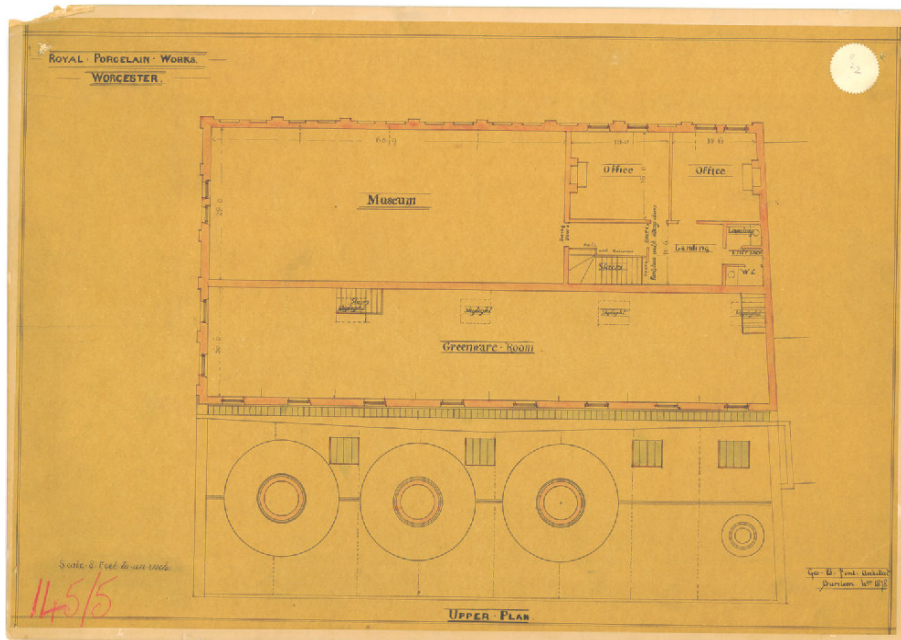


Figure 20: First floor of Buildings K2 and K3 October 1878 (source: Worcester Porcelain Museum)

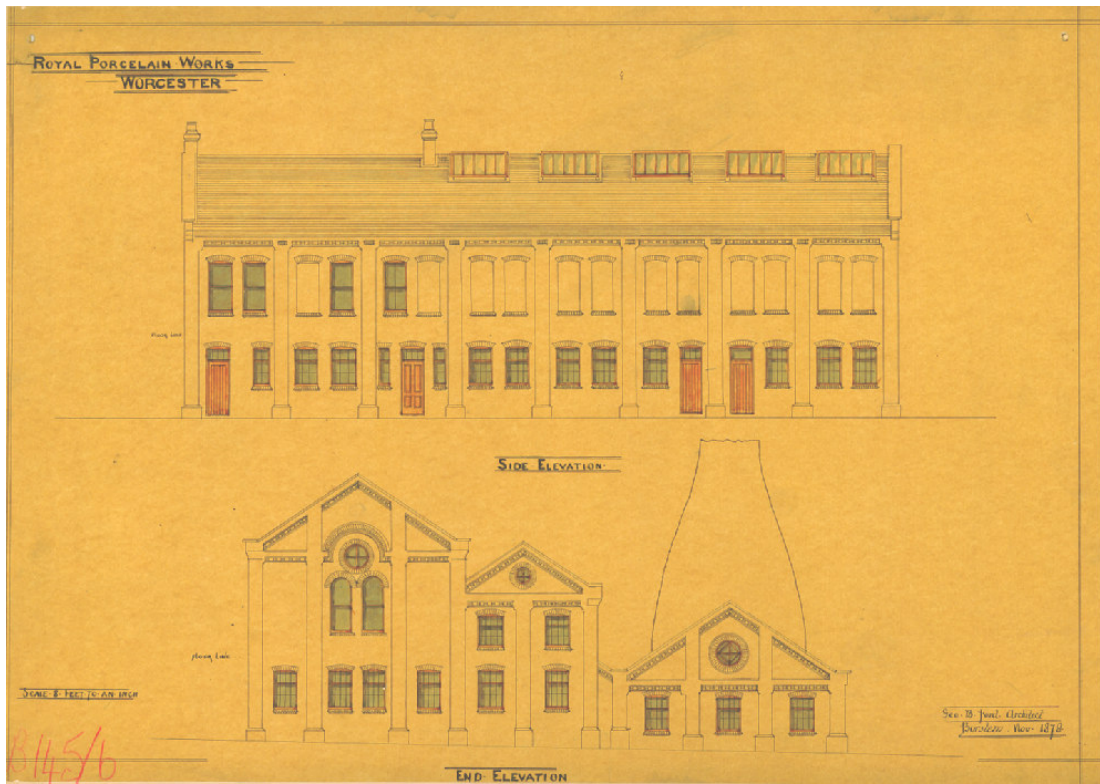


Figure 21: West elevation of Building K2, top, the south elevation of the combined K2, K3 and the kilns as designed by G B Ford in November 1878 (source: Worcester Porcelain Museum)



## Building K2: Binns Building, west wing

### Outline history

This range was built in the late 1870s, at the same time as the adjacent east wing (Building K3). Despite its proximity to the kilns in the adjacent wing, it was evidently a high status building, especially at first-floor level where there were two heated rooms, an elegant stair landing and a large area for the museum lit by a skylight. A blue black paving was added, leading up to the museum doors in July 1885.<sup>12</sup>

The museum was an integral part of the visitor's tour of the works. Double doors lead to a hall (with a Minton tiled floor) and staircase leading up to a large gallery on the first floor with grand top-lit ceiling and pendant gas lighting. The two adjoining offices were used by the Managing Director, Richard William Binns, and probably the Works Manager, Edward Probert Evans.

The museum opened to the public in 1879. The ceramics were displayed in tall glass cabinets lining the walls and in the centre of the gallery (Figures 22, 23 and 24). Royal Worcester re-used a series of display cases that had been made for the Paris Exhibition of 1878.<sup>13</sup>



Figure 22: A contemporary scene in the Museum (source: Worcester Porcelain Museum)

12 Minute 3384 (Worcester Porcelain Museum)

13 Minute 2853 (Worcester Porcelain Museum)

The museum collection was made up of approximately 50% Worcester Porcelain. Samples from earlier Worcester services were retained by the company for reference, but R W Binns also collected pottery, porcelain, glass and bronzes from all over the world. In 1898 Royal Worcester had a large stock of rich ornamental wares that they had made for various exhibitions and had failed to sell them. It was decided to remove the Japanese collections from the museum and display the exhibition pieces there instead, hoping to sell them.<sup>14</sup>

After Binns death, the vast collection of Japanese bronzes, Indian Ivories, Moorish pottery, metalwork and Oriental ceramics, used as examples of craftsmanship by the Royal Worcester designers and artists, was sold off in around 1905 but the museum remained in this building until it was moved to the first floor of Building A in 1929.



**Figure 23: Photograph of the Museum taken around 1905. Many of the objects in the image are still in the museum collection today including the large picture seen here on the back wall of Lilies by Edward Raby dated 1901 (source: Worcester Porcelain Museum)**



**Figure 24: A similar view to Figure 23 but taken from the other side (source: Worcester Porcelain Museum)**

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14 Minute 5161 (Worcester Porcelain Museum)

Where the building joins Building K1 there is, on the ground floor, an irregular-shaped lobby (Figure 25) which was the result of the constraints placed on the building by the Board of Health objections (see page 13). This left a corridor with a staircase to the first floor and with two small rooms on the right used as the foreman's office. The two other ground floor rooms, on the southern end of the building were the Parian biscuit room and scouring room.

In the 1980s the first floor was used for slip casting and assembly (known as sticking up) of figurines and ornamental vases from where it linked to the china casters in Building K1. At this time it was still part of the factory tour for visitors. The ground floor rooms were used for oval jollying and a mould store.

From the 1990s the ground floor was used as the casting die makers shop (Figure 26) where master dies were made to produce porous plastic moulds for pressure casting. Next to this was a china pug room for clay preparation which used clay from the new china slip houses behind.



**Figure 25: The odd-shaped space formed at the north end of K2 leading into K3**



**Figure 26: Casting die-makers' shop**

### **Building K3: Binns Building, east wing**

The east wing of the Binns Building (Figure 27) is built parallel to, and at the same time, as the west wing which it is integral. Externally at the first floor it has been relatively unaltered except on the south gable where a bridge into Building W1 was driven through in 1947 (Figure 28). At ground level the kilns abutted onto it (Figure 21) and here a single-storey extension was added in 1970 (see K3 extension below).



**Figure 27: The Binns Building, east wing (K3) from the canal**



**Figure 28: The bridge from Building K3 (right) to Building W1**

### **Outline history, development and use**

As we have seen, that following the introduction of Royal Worcester Vitreous (earthenware) (Figure 29) in 1868 demand soon exceeded supply and the kilns and ancillary building (K3) were hastily erected.

Ford's combined south elevation which, of course, included Building K2 and the kiln housing, was canny. Ford was faced with a taller building in K2 where the hall of the museum extended upwards beyond the needs of K3 and the kilns required only a first-floor housing to provide shelter where firing took place. He therefore devised a reducing façade which ran in a sloping fashion down to the canal (Figure 21). Although the kilns rose higher than the West Wing (K2) they were almost hidden from view. The whole concept would have impressed visitors as they progressed along Prince's Drive from the south. There was thus an odd combination of an industrial complex with a high status symbol. However, the urgency of maintaining orders for Crownware is the most likely reason for the decision to incorporate the two functions into one block. However, although built as a single unit, the functions were rigidly divided by providing only one means of access to both floors of K3 and this meant passing the Foreman's Office on the ground floor in the West Wing from Prince's Drive.

This entrance lay in the L-shaped part of K2 adjoining Building K1 (Figure 25) which had been forced on Ford by the Board of Health's unhealthy attitude. From this lobby the Placing Room could be reached by a double door whilst stairs led to the first floor Greenware Room. Internally there were stairs between the ground and first floors.



**Figure 29: Royal Worcester earthenware of the period**

The plans for the ground floor show the Placing Room with three sliding doors through to the kilns (Figure 19). These were obviously fire doors installed at much the same time as the disastrous fire which panicked the Directors into a number of measures to prevent a reoccurrence. The first floor Greenware Room (Figure 20) was used for drying out Crownware models before firing in the biscuit kilns. In the Greenware Room Ford set four skylights on the west-facing pitch of the roof.

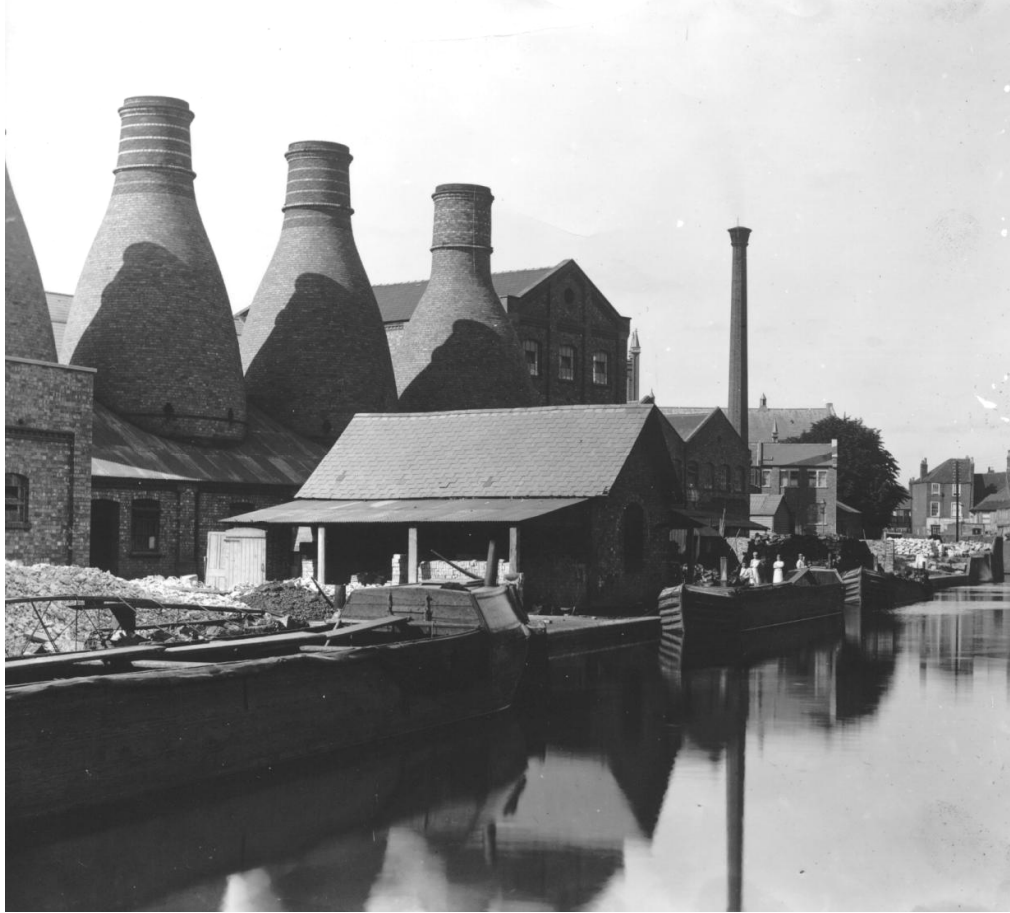
### The K3 extension

The area covered by this section remained mainly a vacant piece of land from the time it came into the possession of the Company in February 1857 until the 1960s. Of course its proximity to the Worcester and Birmingham Canal gave it an important role in the loading and off-loading of goods (Figure 30) and this is reflected in a small cone-shaped flint kiln and clay shed which lay here in 1875 (Figure 2). Presumably these were for the reception and preparation of two of the raw materials needed for slip – bone was dealt with to the south of the site which lay at some distance from the main works because of the smell. By 1884 (apart from the kilns built in 1879) only the clay shed remained, but this was probably considerably longer than the brick-built store seen in Figure 31. It is shown as a long building orientated east to west in a painting of the works made before Buildings N, S and T were built. This was gable-ended and slate roofed with an open-ended lean-to which appears to hold stacked bricks. However, this was normally used for storing hay for packing – hay, an obvious fire hazard, was kept well away from other buildings.

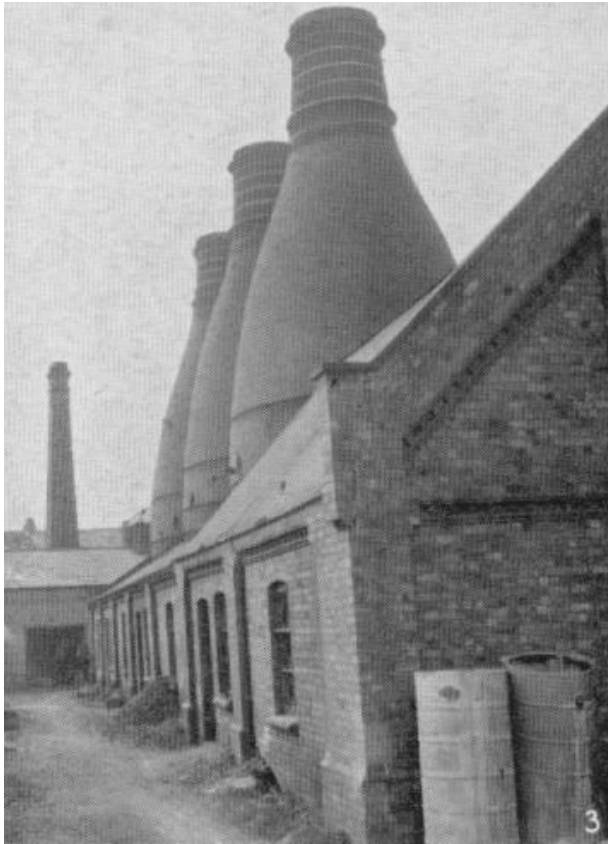
In 1879 the three kilns were built as part of the Binns Building. Ford left a space at the north end for a fourth, but in the meantime his intentions (Figure 20) were to build a flint kiln presumably to replace the one that was here in 1875. Figure 32 shows the completed three and, as far as can be judged, the outer housing conformed pretty closely to Ford's original intentions (Figure 33). Eventually a fourth was built at the north end which is shown on the 1884 OS map (Figure 3). Access to the kilns was only from the Placing Room at the ground floor of Building K3. There was sufficient space around the kilns within the outer housing to reach the eight or so fire holes. The wicket or entrance to the inner oven would have faced the Placing Room.



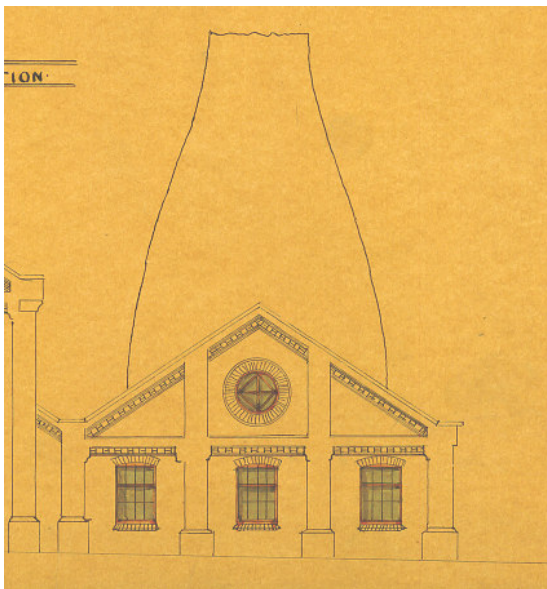
Figure 30: A Royal Worcester Porcelain Company narrow boat (source: Worcester Porcelain Museum)



**Figure 31: Historic photograph of c1906 showing the single gable-ended slate-roofed brick building on the area of K3 extension. The other gable, which appears to be part of the same building belongs to Building H. The tall building is K1. By the time the photograph was taken there were four kilns (originally three) based on the K buildings (source: Worcester Porcelain Museum).**



**Figure 32: The three kilns on K3 extension as built seen from the north (source: Worcester Porcelain Museum)**



**Figure 33: Detail showing the kilns and housing from Ford's 1879 elevation of the Binns Building (source: Worcester Porcelain Museum)**





**Figure 34: Demolition of the K3 kilns in the early 1950s (source: Worcester Porcelain Museum)**

After the Second World War there was some reconstruction to restore the works back to normal following their wartime role. In 1947 the historic Building T was completely dismantled and redeveloped with tunnel kilns. This was followed by that in Building G in 1950. Bottle kilns were now becoming a thing of the past particularly after the passing of the Clean Air Act in 1956 which finally put the lid on the use of bottle kilns.

With Building T established and some buildings dating from just before the War lying towards the south end of the works there was a gravitation of production towards this end. No doubt the largely vacant area by the canal must have caught the eye of the management and it was inevitable that the bottle kilns on Building K would become a casualty. As early as February 1945 it was proposed to demolish them and erect a new two- storey building on the site. But nothing came of this and it was not until the early 1950s that they were demolished (Figure 34).

There were a number of plans proposed for this vacant area in the 1950s, 1960s and 1970s and most were of a 'make-do' nature. Basically they boiled down to the erection of two 'Banbury' type (Figures 38 to 45) buildings and an extension to K3 where the kilns had stood. Although hardly aesthetically pleasing they played an important part as an interim before the move to Portland Street.

In 1955 a large three-storey building was planned but never built. Instead a new slip house with two underground tanks was constructed within Building K3 the next year (Figures 35 and 36). The carpenters and engineers had made their home here but were displaced having to move into the old Infants school block.

In April 1970 it was decided to extend the east elevation of K3 at ground floor level into the area of the former kilns to accommodate the 'Lady Casters Department' and this was built as planned (Figure 37).<sup>15</sup> In Figure 36 the break between Building K3 and where the kiln building began is marked by the start of the skylight which lies over the extension.



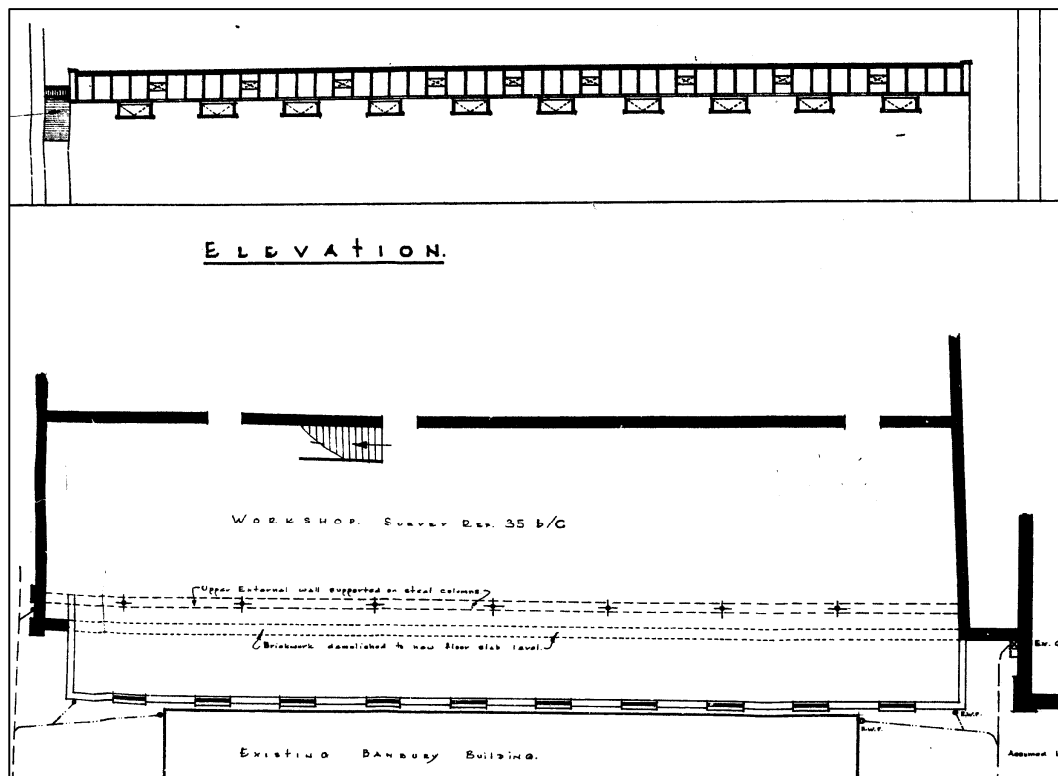
**Figure 35:** Slip machinery above the 1956 tanks in the north end of K3. After 1970 this extended into the Lady Caster Department which lay on the site of the former kilns – the division between the two is marked by the skylight to the left.



**Figure 36:** The same equipment as in Figure 35. This is looking towards the extension where the kilns lay.

<sup>15</sup> Worcester City Planning Application 70/0263

In March 1966 the first of the Banbury buildings (Figures 38 and 39) was planned and built. This 'Superspan' was built with its long side parallel to the east wall of K3 but left enough room for the 'Lady Casters Department' to be fitted in four years later.<sup>16</sup> This single- storey shed was originally used as extra space for the ornamental casters when demand for limited edition complex models was at its height. Later the building was used for storage by the retail carpenters who constructed display furniture for trade shows and UK concessions. In 1973 the second Banbury Building was added.<sup>17</sup>



**Figure 37: The 'Lady Casters Department' extension to K3. The crosses mark the placement of the columns in Building K3. The slip area lay to the right. There was a single-storey shed nearest the canal, erected in 1966 which was used for storage by the retail carpenters who constructed shelving and display materials/ furniture for trade shows and UK concessions.**

16 Worcester City Planning Application 17032 18.3.1966

17 Worcester City Planning Application 73/1164 7.9.1973. There was a single-storey shed nearest the canal, erected in 1966 which was used for storage by the retail carpenters who constructed shelving and display materials/ furniture for trade shows and UK concessions.



Figure 38: The Banbury Buildings. The 1966 'Superspan' lies to the left with the 1973 one right



Figure 39: Looking north with the 1966 Banbury Building on the left and the 1973 one on the right



**Figure 40: The north elevations of the Banbury Buildings**



**Figure 41: The south side of K3 extension showing the two Banbury Buildings. Building K3 lies to the left with the tall K1 to the right.**



**Figure 42: Looking south inside the 1966 Banbury Building of 1973**



**Figure 43: Looking north inside the Banbury Building of 1973**



Figure 44: Looking south inside the Banbury Building of 1973



Figure 45: Drawing office in the north-west corner of the Banbury Building of 1973

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