

Friends of Brandy Bottom Colliery Pucklechurch



Newsletter N° 34, February 2022

Photo 1 – This view of the north-eastern end of Egg-ended boiler settings was taken in early January 2022.

There were 2 more work parties in 2021 after the last newsletter, bringing the total for 2021 to 35. Not a bad number considering that there were no work parties between those on 02 January and 20 March because of Covid restrictions. There have been 5 work parties so far in 2022.

Work has concentrated on exploring the settings of the egg-ended boiler, though there has also been more excavation in the New Boiler area, and an investigation of a water drainage conduit. As the description of directions around the egg-ended boiler may well confuse anyone not familiar with the site layout, a sketch (photo [6](#)) has been included showing the location and direction of photos 1-3, 7-14, 16-21.

Progress: November 2021 - February 2022

The settings of the egg-ended boiler, to the south-east of the Cornish Engine House, continued to be the main focus of the work parties, as we plan to move the replacement boiler to this spot at some time in the future. But we first need to understand what structures lie in the boiler settings, which explains why we have spent so much time recently in this area. Spoil has been cleared down to the original floor at the north-east end, as can be seen from photo 2 on the right. The floor at this end was in remarkably good condition, and the asymmetric layout of the brickwork above it can be clearly seen. The quality of the bricks forming the floor deteriorated as we moved towards the firebox end (photos [10](#) and [11](#)). More excavation uncovered a 45° downwards slope in the floor (photo [12](#)). A small conduit was found on the south-east side of the settings, heading towards what we think is the



Photo 2 – The fully excavated north-east end of the boiler settings. (Compare the state of the floor at this end of the setting with that seen in photo [11](#))



flue that runs on the south-eastern side of the boiler settings. Photo [13](#) shows where this conduit is located, while photo [14](#) is a view inside. The conduit is about 4 feet deep and about 16" high. The brick wall at the end appears to be a later addition as it is not keyed into the arched roof of the conduit and has been built around the metal pipe. Just what the conduit did, and where it goes to is at present one of Brandy Bottom's mysteries.

A set of steps with substantial nuts and bolts at each end, were uncovered at the south-western end of the boiler settings (photo [17](#)), leading down to the firebox. The bolts seem to be over-engineered for just supporting a set of handrails and may have had other uses.

When we made the path around the back of the Cornish Engine House just before the 2021 Heritage Open Days, we did not realise what problems its alignment would subsequently give us. As we have since discovered, the path overlies some of the archaeology associated with the boiler settings, and it now has a test trench dug across its width at one point. The path is also getting in the way of spoil removal at the firebox (south-west) end of the boiler settings. It will have to be moved further away from the engine house to allow spoil to be removed from under its original location, but this is not an easy task because of the position of several trees. When Mick, Steve H, and Mark B started by cutting away the bank above it at its south-western end (photo [20](#)), they uncovered a metal pipe above a section of brickwork (photo 3 on the right). Further exploration showed that the brickwork extended downwards for some nine courses. This wall has been traced for a distance to the north-east. It does not appear to be the outside wall of a structure built around the egg-ended boiler. That structure appears in the old Ordnance Survey maps of the colliery, but they do not show any building to the south-east.



Photo 3 – This length of ~3" diameter pipe appeared when spoil was removed as part of the relocation of the path.

Tim and his sons have continued to work in the New Boiler area, where they found the metal hacksaw frame seen in photo [23](#). The frame is made from 2" wide metal. It is missing its handle, but still has the adjusting nut. It may have been left behind by the scrap metal merchants in the 1960s as it was clearly made to do some serious cutting.

Derek, helped by Oliver, Mick, Hamish and Jeff, has been surveying the water conduit that ends by the pond. Derek used a radio sonde attached to a wheeled trolley which was controlled by drain clearing rods. The signal from the sonde was tracked on the surface. Photo on the right shows the inside of the conduit when the trolley was at the far end. Its light can be seen in the distance, and the blue drainage rods can be seen in the foreground. Derek took the photo with another mobile phone. Photo [24](#) shows the trolley when adapted for photography, with a light on the left hand end and a mobile phone to its right. (The shutter was controlled by setting the phone to record a video) Photos [25](#) and [26](#) are two views of the inside of the conduit. Oliver has also surveyed the entrance section using his lidar scanner and linked the results to the position of the Horizontal Engine House (HEH). Bob Turner investigated the conduit in 1986, long before the AIBT arrived on the scene, and has given us his drawing of the layout of the conduit and two photos (photos [27](#) and [28](#)). Bob's drawing shows that the conduit has two forks, with one branch travelling towards the north-west side Cornish Engine House, another towards the south-east side and the egg-ended boiler and the final one heading towards the New Pit storage area. Photo [28](#) shows two pipes emerging from the roof of the conduit. According to his records, these were at the end of the conduit that went to the New Pit storage area. So far, we have discovered that the conduit is connected to the two pipes in the northern corner of the undercroft of the HEH. A fire was lit at the



Photo 4 – Inside of the water conduit during remote surveying. The blue pipe in the foreground is controlling the trolley seen in photo [24](#). (© D Hore, 2022)

entrance to the conduit, and the natural draft drew the smoke into the undercroft of the HEH where it was seen emerging from the pipes. The connection suggests that the pipes may have delivered the exhaust steam from the winding engines to the pond.

We would like to thank Jeff for transporting the two halves of a 6' 6" diameter mine wheel (photo 5 on the right) and its bearing (photo 29), plus another (~4' 6" diameter) wheel (photo 31), to the site from the South Gloucestershire Mines Research Group's base. We would like to thank the SGMRG for the wheels. The wheels are heavy, and photo 32 shows a 5-man squad moving the smaller wheel. At the time of writing this newsletter, we do not have much information on the wheels. According to the SGMRG records, the two-piece wheel came from the Calverton Colliery in Notts where sinking the N° 2 shaft started in 1947. (The N° 1 shaft with its 17 foot diameter wheel had been sunk around 1938 as a satellite ventilation and man-riding shaft for the Bestwood colliery) Calverton was the first pit to be sunk by the National Coal Board. It opened in 1952 and closed in 1993. In 1994 it was re-opened by RJB Mining who closed it in 1999. Further research is needed to confirm the wheel came from the N° 2 shaft, and we may find out more if there is a manufacturer's mark on the undersides of the half wheels. There is a manufacturer's sticker on the associated bearing (photo 30). An Internet search on the company, Isometals Engineering of Mansfield, showed that it started in August 1970 as a supplier to the Coal Board and was wound up in February this year. The company moved from Mansfield to Leicester during its life. While that gives a date span for the manufacture of the bearing, it does not indicate the age of the wheel itself as this could well be a replacement bearing. The smaller one-piece wheel came from Hemingfield, also known as Elsecar Low. It was one of a group of mines at Elsecar, near Barnsley in Yorkshire.



Photo 5 – The two halves of the 6' 6" diameter wheel that came from the Calverton Colliery via the SGMRG. (30 cm black/yellow scales on the near half)

Steve H rigged up some battery powered lights in both the Horizontal Engine House (photo 33) and the container, hopefully making fumbling in the dark a thing of the past. Provided of course that the battery is kept charged and nobody leaves the lights on. Oliver has continued with his lidar survey of the site, working inside the Vertical Engine House, and the flue at the base of the chimney. He has also linked the position of the conduit above the pond to the position of the Horizontal Engine House. Daphne has joined us and has been weeding the area above the seats that are below the egg-ended boiler. She has also planted flowers, some of which have been chosen to attract bees and butterflies.

The author would like to thank the other photographers for allowing him to use their photos, and to Ken for proof-reading the draft of this, and many earlier, newsletters.

Visitor Access, Future Work Parties, and Joining In

At present there is only visitor access to the site on days when there is a work party in progress. It is usually possible to give small groups a guided tour during the work parties on a 'turn-up on the day' basis, but that depends on both the number of volunteers present and the work in progress. Special arrangements can be made for parties of 10 or more people by making contact through our email address of info@aibt.org.

The dates of work parties in 2022 are: Saturday 19, Wednesday 30 March; Saturday 09, Wednesday 20, Saturday 30 April; Wednesday 11, Saturday 21 May; Wednesday 01, Saturday 11, Wednesday 22 June; Saturday 02, Wednesday 13, Saturday 23 July; Wednesday 03, Saturday 13, Wednesday 24 August; Saturday 03, Saturday 10 and Sunday 11 (Heritage Open Days), Saturday 17, Saturday 24 September; Wednesday 05, Saturday 15, Wednesday 26 October; Saturday 05, Wednesday 16, Saturday 26 November; Wednesday 07, Saturday 17 December.

Please note that work parties, and their starting and finishing times, may be altered at short notice. The nominal opening times are between 10.30 am and 3 pm, but these timings are not fixed so we may start later and/or finish earlier. Because of this, newcomers who would like to join a work party should first make contact via the AIBT's email address of info@aibt.org. Youngsters must always be accompanied by a responsible adult.

We would like to thank the volunteers and near-by residents who keep an eye on the site when there are no work parties in progress.

There is a location map on a dedicated page of the website www.aibt.org, together with directions on how to reach the site. This page can be found by a link on the main Brandy Bottom project page.

Information on the AIBT Website

There are copies of all earlier newsletters on the Archive page of the AIBT's website: www.aibt.org. The Brandy Bottom section has pages covering a brief history of the pit and reports on work parties, as well as many photographs of the buildings, work parties, artefacts and structures discovered, and of some of the wildlife and wildflowers.

Photographs: November 2021 – February 2022

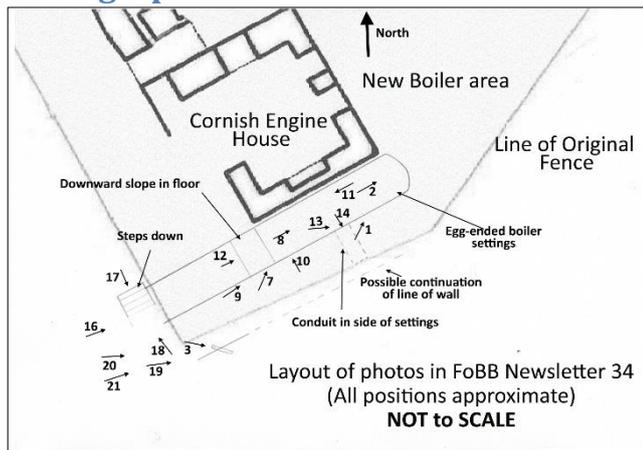


Photo 6 – Layout of photos 1-3, 7-14, 16-21



Photo 8 – Steve H inspecting progress. The plastic sheets are to protect the exposed brickwork from frosts.



Photo 7 – Ken working on spoil clearance in the egg-ended boiler settings.



Photo 9 – Pete, Ken and Mark B working on the boiler settings.



Photo 10 – Ken working in the boiler settings, where a layer of dark spoil overlays a lighter layer of ash.



Photo 11 – The firebrick floor in this area has been affected by the heat of the flue gases.



Photo 12 – The sloping section of the egg-ended boiler settings.



Photo 13 – The arched brick conduit in the south-east wall of the egg-ended boiler settings can be seen at the centre of the photo. The following photo (14) shows the inside of the conduit.



Photo 14 – Inside of the conduit seen in the previous photo (13). The end wall is a later addition as it is not keyed into the brickwork of the arched roof. The wall looks as if it was built around the metal pipe seen in the middle of the photo.



Photo 15 – Light gauge railway chair found in the spoil filling the egg-ended boiler settings (30 cm scale). The inset is a view of the profile of the slot, sitting on a scale marked with 5 cm squares. Its origins are still under investigation



Photo 16 – The south-western end of the Egg-ended boiler settings. The brickwork in the front left is the start of the steps seen in the following photo (17).



Photo 17 – Close-up of the steps found at the south-western end of the egg-ended boiler settings. The steps have an embedded nut and bolt at each end. (© M Fletcher, 2022)



Photo 18 – Steve H, Hamish and Mick discuss what to do next at the south-western end of the egg-ended boiler settings.



Photo 19 – This (~3" dia) metal pipe and brickwork appeared when the bank to the south-east of the egg-ended boiler settings was dug while relocating the adjacent path.



Photo 20 – Mick, Steve H and Mark B working on the bank. The stretch of wall and the pipe seen in the previous photo is located between the Mick on the left and Steve in the middle.



Photo 21 – On the right of the picture, Ken can be seen looking for the north-east extension of the brick wall seen in the previous photo, while Steve H works in the boiler settings.



Photo 22 – The excavations in the New Boiler area looking south-east with the Cornish Engine House out of sight on the right.



Photo 23 – The large hacksaw frame found in the New Boiler area. Made from a 2" wide metal strip, it is 30½" long overall.



Photo 24 – Derek's remote survey trolley when rigged for photography. Light came from the torch strapped to the left hand end. (© D Hore, 2022)



Photo 25 – Inside of water conduit leading to the pond area. (© D Hore, 2022)



Photo 26 – Inside of water conduit leading to the pond area. (© D Hore, 2022)



Photo 27 – 1986 photo of the inside of the water conduit. (© B Turner, 1986)



Photo 28 – 1986 photo of the water conduit, showing two pipes entering the conduit from above. (© B Turner, 1986)



Photo 29 – Bearing for the 6' 6" diameter wheel. The blue patch on the right is the manufacturer's sticker, seen in close-up below. (30 cm black/yellow scale)



Photo 30 – Close-up of the manufacturer's sticker seen in the previous photo (29).



Photo 31 – The 4' 6" diameter wheel that came from Elsecar via the SGMRG. (30 cm black/yellow scales)



Photo 32 – Moving that smaller wheel was a 5-man effort.

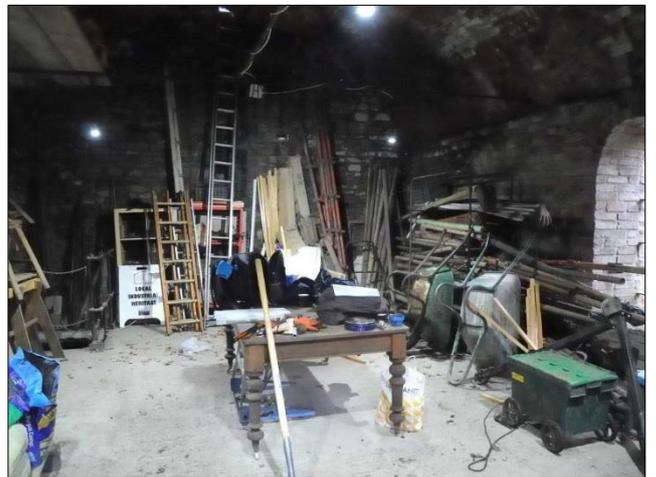


Photo 33 – The inside of the Horizontal Engine House, photographed on a dark January afternoon by the light coming from the newly installed lights.

© Avon Industrial Buildings Trust 2022

Website: www.aibt.org

email: info@aibt.org

Unless otherwise stated, all photos are by R H Whitworth (© 2022). All the photographers/draftspersons have kept the copyright of their work.