

Construction of a Carpenters' Workshop.

Pewsham Locks- Chippenham

Wilts & Berks Canal Trust



Pewsham Locks Carpenters Workshop, June 2025- D Maloney

Stage One of the Carpenters' Workshop project completed.

1.15km south of the A4 on the outskirts of Pewsham, Chippenham, is an area known as Pewsham Locks. Sitting on the line of the Wilts & Berks Canal the area is so named because it includes a flight of three locks. The site is also of significant industrial archaeological interest with the remains of the eight major installations that performed a vital role for the Wilts & Berks Canal during its operations in the 19th century. One of these structures is the Carpenters' workshop. It was used to construct and repair timber structures required for the canal infrastructure and its users.

Aims of the Project

The aim of the project was to reconstruct the Carpenters' workshop on its original site to emulate a mid 19th century Carpenters' workshop while giving added benefits as an educational hub where children and adults alike will not only be able to learn about carpentry practices in the mid 19th century but also be involved in a multitude of activities from seminars on the history of canal construction and the need for canals but also the social history of its peoples. The hiring of the workshop by those who want to teach traditional skills for example will also be possible. Although not 2.7km from Chippenham Town centre there is little light pollution in the area so star gazers are already asking about the building's availability "out of hours." Of course we will also showcase the restoration of the Wilts & Berks Canal in the immediate area which will not only include information of the restoration of the canal line and the local industrial structures but also our Environmental work during the restoration of the line and enhancements such as the new wild flower meadow at Naish Hill.

The project was spilt into two stages:

Stage One - The clearance of the site and construction of a secure and water tight shell.

Stage Two - The fit out of the main area so as to emulate a mid-19th century Carpenters' workshop complete with relevant tools and knowledgeable volunteers to impart information to visitors.

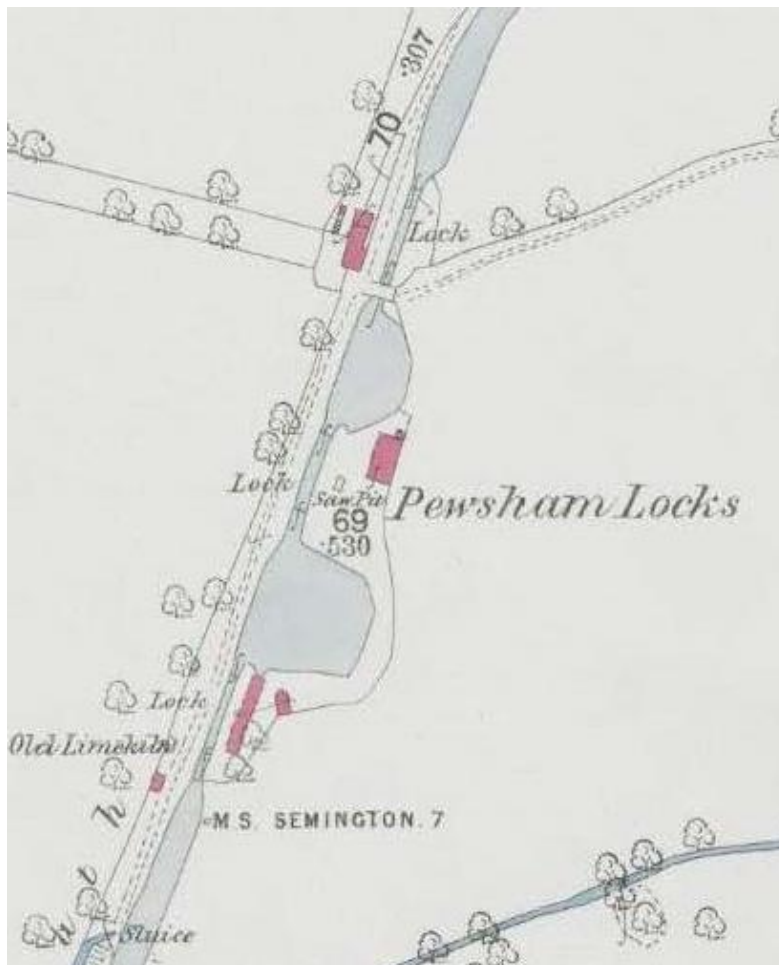
Stage One.

Research.

Although there are countless records of the freight carried on the Wilts & Berks during its days as a commercial waterway there is precious little information on the actual construction of the canal and none at all on the construction of buildings at Pewsham. We are therefore fortunate that an 1860 tithe map shows the positions of buildings at Pewsham Locks. The Dry Dock still existed, so using physical measurements from this structure and comparing with the tithe map we were able to create a scale that would help decide the size of the workshop. We were surprised to find it was almost 50 feet x 25 feet!

We had not carried out any restoration of the site in the area of the workshop so set about clearing the area and started looking for clues of its existence. It took us a few days but we eventually uncovered elements of a brick floor and, to our astonishment, evidence of a hearth. This may explain why the building was so large, was it also accommodating a small

forge to make the many, many nails and metal fittings used along the canal line?
Unfortunately there was no evidence of a dividing wall, but research continues.



Our research also determined the size and shape of the windows and the internal ceiling i.e. flat interior or apex (we went for the apex). There were no plans of the building but in correspondence with canal historians we decided on a large door at one end to take out relevant items produced/repaired and a smaller pedestrian door. We obtained the correct nail type for the era and decided to clad the building in larch (timber readily available in the mid 19th century) as we had experience of a local barn where such cladding had turned a lovely shade of grey within about 19 months. A local reclamation yard was able to supply Welsh slate from around

the era the original workshop was built (we know the roof was covered in Welsh slate due to the abundance of slate around the site when excavating). Our previous research determined boats weren't built indoors so there was likely to be no boat building in the workshop, although we now believe some was going on at the edge of one of the pounds not 20m away so it's possible some boat components were built in the workshop. We also decided on an annex in which we could hide toilet facilities, a kitchen and small store for tables and chairs.

Construction

Melksham Chippenham & Calne Branch is the branch of the Wilts & Berks Canal Trust dealing with the Pewsham site and is fortunate to have a few retired builders and a roofer amongst its volunteers. These volunteers were responsible for the construction and shared their skills with other volunteers. We already had planning permission for the Pewsham site and decided that as the building was of timber construction it would be quicker and easier to find a company that could produce wall panels offsite and deliver them for volunteers to erect. So we set about finding a supplier, which we did after some months of research. Unfortunately we were persuaded to use someone even closer, which sadly was a mistake. We will carry out much more rigorous research of such companies in future. We have since reflected on our decisions and will use a different approach in future. At all levels volunteers learnt a lot during the construction of this structure.

Once the order for the building was placed and we waited for the panels to arrive we started work on the concrete floor for the annex and the low walls to which we would affix the sole plate for the walls. Such was the interest from BBC Radio Wiltshire they sent a reporter down to take a look and interview some of the volunteers. It was pleasing to have our volunteer work showcased and to be able to publically acknowledge our donors.



Carpenter workshop site- Pewsham. S Court

Due to a change of supplier our time scale was affected and once we had placed the order bad weather, inaccurate delivery dates and false statements re material availability resulted in a 5 month delay before the panels arrived on site. The company had provided a price for supply and erection to a specific state but their workmanship and quality of panel build was questionable. Due to H&S issues we asked them to leave site and obtain relevant training. They did return but relationships were not congenial, mainly due to continued shoddy workmanship that volunteers could see they would have to rectify. Finally we asked them to leave site altogether and negotiated a deal on final materials needed. All of these issues basically left us nearly 8 months behind schedule but, once volunteers got their hands on the building the results were unsurprisingly magnificent.

Within days the wall and roof issues had been rectified and the roofing battens were fitted. We had obtained larch cladding from a local sawmill and this was delivered to site fairly quickly, enabling volunteers to clad the walls and help save an inner membrane from damage.



East roof with solar panels. D Maloney

January 2025 saw the completion of the Solar Panels installation onto the east roof, so they would not be seen from the tow path. In fact only those walking along a rarely used public footpath can see them.

We needed to create bespoke windows and approached a local charity to see if they could help. Unfortunately Calne Men's Shed decided they didn't have volunteers with the skills but would allow the use of their woodworking machines out of hours and as such a MCC volunteer was able to pass on his knowledge to the Men's Shed volunteers whilst creating the windows we needed at the cost of the materials.

Donations to date have covered 98% of the cost of erecting the building. We have carried out extra local funding for the final push of material and simply have to make wire mesh screens to protect the window glass and landscape the external area for stage one to be completed. The Carpenters' workshop can be used for any purpose between now and when funds are raised to fit out the interior which in its basic form visitors will see a 19th century carpenters workshop.

Total spend to 01 July 2025 = £57,005.61

Total volunteers hours to 01 July 2025 = 2023 hrs with a matched funding value of £32,974.90

What's next?

Our fund raising team are attempting to raise funds to fit out the interior, which will emulate an 1860s Carpenters' workshop. Hidden items such as electrical outlets, uplighters, projector brackets and access to the annex will also enable us to use the workshop as a site for education. This spans not only the spectrum of 19th century Mechanical and Civil Engineering but also the social history of those who not only created the canal but also those who used it for employment. The interesting and challenging aspects of canal restoration and the restoration of Industrial Heritage along with Environmental works and studies is also an important element of the education of all ages into the wonderful UK canal networks. Of course the building may have other uses! We have already had enquiries regarding star gazing nights and the teaching of rural craft skills.

Of course volunteers are also keen to hone or learn more skills such as how to create work benches that look over 160 years old, hiding all the modern fittings so they stay hidden etc. Additionally there is the challenge of laying over 3000 bricks that will form the floor of the workshop.



Mid-19th Century carpenters workshop – Pewsham workshop had a brick floor.

The Wilts & Berks Canal Trust and its volunteers are grateful for the support of:

Banister Trust.

Calne Men's Shed.

Chippenham Borough Lands Charity.

Chippenham Town Council.

Entrust.

Gibson Green Electrical.

Hilary Awdry Charitable Trust.

Nineveh CT.

Steve Court Plumbing.

Wienstock Fund.

Dave Maloney

Project Lead

July 2025

Please see a selection of images on the following pages which show the various stages of construction.

A selection of images showing construction.



To reduce waste volunteers use cone to direct mixed on site concrete into hollow blocks forming the sole plate foundations.



Blocks will be hidden by landscaping during final stage.



Foundations created and sole plate blocks installed. S Court



Steve Court

North end (left of image) concrete slab is for the modern annex which will house toilets/kitchen/store. Access from the 1860 workshop behind “hidden doors”. Scaffold erected for installation of offsite constructed panels, seen here with blue membrane awaiting transportation to sole plate area.



Building starts to take shape. Despite the challenges of 3rd party involvement. A Vidler.



Roof trusses are fitted. A Vidler



Rafters installed. D Maloney



Roofing felt and batten applied. Other volunteers clad the northern end wall. D Maloney



Reclaimed Welsh slates from local building of 1860 sit well on the new roof. D Maloney



We went for a solar panel system that sits directly on the roof battens, this saving funds on Welsh slate. These trays will take the solar panels. H Wilson



Solar panels completed and tested. H Wilson



Roofing volunteers move to the west roof. Wall volunteers have cladded this side with larch from local sawmill. Larch was chosen as in 12/18 months it will start to "age" and turn shades of grey. H Wilson



Interior walls will be insulated before being cladded which will hide the insulation. D Maloney



Doorways to the modern annex currently visible, will be hidden by cladding which will form doors.
We will disguise the roofing felt, which wouldn't have been used in mid-19 century.



Bespoke window frames made by canal trust volunteer.

Volunteers were skilled in or were taught the techniques of:

Groundworks, block laying, concrete mixing, woodworking, scaffold design, scaffold erection, concrete mixing, excavator driving, dumper driving, Drone Pilot, media interaction, fund raising, publicity, concrete floor laying, interview techniques, project management, creation of spreadsheets, use of theodolites, roof construction, roof slate work, negotiating, budget management created the Carpenters' workshop at Pewsham Locks.

Total Volunteers hours to 01 June 2025: 3755 hrs with a matched funding value of £62,896

Volunteers also commented on a feeling of wellbeing, comradeship, sense of achievement, sharing skills, learning new skills, being outdoors and working coherently with likeminded men and women.

Dave Maloney
Project Lead
June 2025