



## Operations Report September 2021

### Overview

The two-week work party was largely blessed with good weather. It was so hot on some days that work stopped early to avoid sunburn and heat stroke! Our site layout once again allowed for volunteers to be well spaced apart for covid 19 infection avoidance.

### Bank excavation and lining

Once we were sure that we had no badgers living in the offside bank at bridge 4, work progressed to rough excavate and then final profile and line and block, both banks. As can be seen in the picture, progress along the bank was pleasingly rapid. The towpath side, at 40m long, ended up being slightly more advanced than the offside. Bridge 4 can be seen in the distance



## Bentomat Handling

Whilst we modify the “Bentomatic”, (excavator mounted Bentomat handling rig), we needed to find an interim method of handling the heavy Bentomat sheets. By adapting another handling tool, we were able to cut 4m pieces from the roll on the bed, attach them to the lifting rig and place them on the bank with an excavator.



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## Brickwork

The swing bridge brick work at Bridge 4 has been cleaned up to remove the old crumbling Lime, loose bricks, and other debris. The new “old style” heritage bricks are now being carefully built up with fresh lime mortar.



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## Coal Tar and spoil

A long time ago the canal was lined with a new-fangled material that was a by product of making the first town gas by heating coal in a closed retort. The residue from the gas producing process contained many chemicals and compounds and one of the most useful was coal tar. This material was used on many of the roads of the day and is still there in lots of cases but covered with later layers of Bitumen (derived from crude oil). At the time this material was seen as a cheaper method to waterproof reservoirs and ponds compared to the traditional clay puddling process. The Canal Directors decided that the leaky Wendover Canal should be coated with a layer of this material, and it is still there today.

In 2021 the coal tar is now a problem material when considering how to dispose of tonnes of spoil that now contains the tar. We have found that coal tar is not accepted at all at landfill sites, and that includes spoil with small amounts of the tar in it. We know the tar does not leach into the sub soil and we also know that it is not dissolved in water, or it wouldn't still be there after 100 years or so.

We have now been a lot more careful when excavating the banks. It has been possible to remove the contaminated top layers and the coal tar layer itself and leave the original clean subsoil exposed and then remove it and keep it separated from the tar contaminated spoil. This in turn has allowed the removal of the "clean spoil": - (we will have a net excess of spoil, so something must be removed from site). This can be done relatively cheaply.



Clean spoil piled up ready for collection Not that exciting to look at, but very important in disposing of the excess material at the right cost.

And here is the pile of spoil with lumps of coal tar visible in it. About 100m long and 2.5m high. Currently it would cost 12 times as much per tonne as the clean spoil to get it off site. We will be able to use some of this for backfilling the banks and bed



## Concrete pipe capping/Roadway

Due to the bank excavation and lining going well, it was decided to leave the concreting of the pipe capping until the last day to allow access for the machines and focus on the bank works. Another 30m of capping was completed on the last working day and that brings us almost up to the last lamp hole and the length now stands at 480m from bridge 4.

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## Towpath/Footpath

The footpath which goes through the site entrance and along the towpath was segregated from the working area by this new fence. It does stop people wandering over to see what is going on and reduces the risk of mixing people with big machines.



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## More Benches

We had a team of volunteers from Network Rail working with us for one day. They carried out the installation of two more benches and we are very grateful to the Team for their efforts. We now have two benches that are now offered to the public to be memorials of their loved ones.



As can be seen here the two benches are on the offside bank just above the Mooring wall next to bridge 4. (The third bench is further back from the wall than it looks and was previously installed)

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Tony Bardwell.  
Operations Director.