

NEWSLETTER

No.1. February 2013

Welcome to the first newsletter of the Butterley Gangroad Project. We are sending you this because you expressed an interest to know more about the project and/or offered to take part in it. This is a community activity, so we need people like you to get involved and shape it. Ways in which you might help are included in many of the articles that follow.

What's it all about?

The Derbyshire Archaeological Society is receiving £17,900 from the Heritage Lottery Fund (HLF) for the "Butterley Gangroad Project". The Butterley Gangroad was built in 1793 and is the oldest Derbyshire railway of which substantial remains survive. The project is being led by people local to the area where the railway was situated in Crich, Fritchley and Bull Bridge. The plan is to involve many others to help discover and record its history and surviving features.

A tunnel on the railway, buried under the road at Fritchley, may be the world's oldest railway tunnel. The project involves opening up, investigating and recording the tunnel to see if this claim is true. We also hope to capture the memories of people who remember the line in operation, since it continued to work into the 1930s, and involve schoolchildren and young people in research, archaeology and other associated mini-projects.



LOTTERY FUNDED

The railway was originally horse worked and carried limestone down from Quarries at Crich to the Cromford Canal at Bull Bridge. From there it was taken by boat to a tunnel under the Butterley Works and lifted up into the works for use in making iron. The engineer was Benjamin Outram, one of the original founders of the Butterley Company, and it was his first ever railway project. They went on to supply many others including the historic Surrey Iron Railway (one of the first public railways), and the Kilmarnock and Troon (the first in Scotland). Over 30 horse worked railways were eventually built to feed traffic into the Cromford Canal. The line was also the location of one of the first ever successful trials of a steam locomotive. Brunton's "Mechanical Horse" of 1813 used legs to propel itself along the track at 2.5 mph! It was built at the Butterley Works and was the first steam locomotive in the Midlands. Steam locomotives largely replaced horses later.

LATEST NEWS

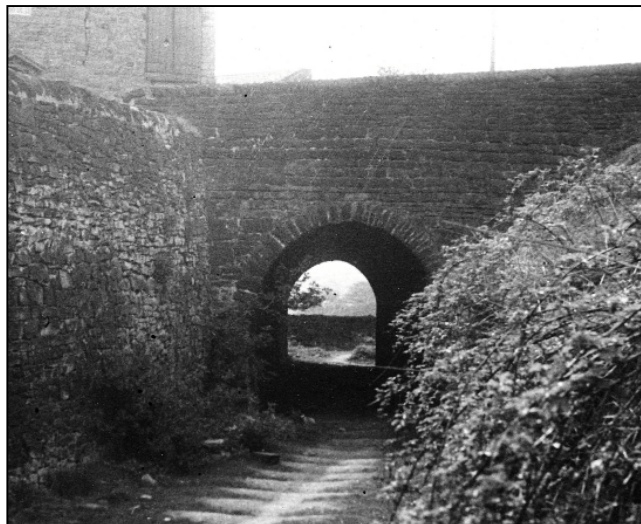
The project officially started on December 17th last year but did not get underway in earnest until after Christmas and the New Year. On January 16th our contractor removed two large trees over the buried northern tunnel portal at Fritchley and then excavated down about 2m to clear the crown of the arch.



So for the first time in over 30 years the interior of the tunnel was visible. To the untrained eye it appears remarkably sound and unobstructed. It was immediately obvious that the tunnel has a curve at the southern end towards the west, where it is blocked by a stone and brick wall. Virtually the whole length of the tunnel with the sleeper markings could be seen. The crown of the tunnel portal arch was still sticky with oily black soot left there by locomotives "Fitz" and "Salisbury" at least 80 years ago!

For safety and legal reasons it is not possible for anyone to enter the tunnel. A professional safety assessment will take place before Wessex

Archaeology remotely record the tunnel interior using laser scanning and photography.



It is clear however that we are dealing with a tunnel and not a bridge. A photograph taken in 1946 by the late Bertram Baxter (above) does make the tunnel look shorter than it actually appears now, perhaps because of the focal characteristics of a box camera? An analysis of maps suggests that it has existed since at least 1826 but was altered at its southern end between 1849 and 1880 to follow a more westerly alignment (this explains the curious internal curve). Both the archaeology and further research should provide more information on whether or not this really is the world's oldest railway tunnel.

Meanwhile many people, including residents surrounding the tunnel location, have come forward with information, memories and offers of help. These include people who were leading the "Portland Path Project", which was also Heritage Lottery funded and centred on the Portland Railway, which was another early railway connected to the Cromford Canal. Part of the Butterley Gangroad Project will be capturing memories (see below).

We have made a presentation to Crich Parish Council to discuss possible sites for interpretation boards near the Market Place and at Fritchley. We are developing proposals to set up a 3ft 10inch gauge wagon on original plateway and railway track as a permanent display in Fritchley.

2013 is important for the railway because it is exactly 200 years since Brunton successfully operated his amazing walking steam engine here. This was the first steam locomotive to operate in the south of England and was an incredible "first" both for the East Midlands and for the Butterley Works. Dieter Hopkin, a museum professional, who was formerly Head of Library and Archive Collections at the National Railway Museum in York, has prepared a paper on the Brunton Locomotive and its operation on the Butterley Gangroad. He has kindly agreed to present this, as part of our project, at the Glebe Field Centre, on April 19th (see notice). This free event is

likely to be very popular so if you would like to attend please make sure that you reserve your places!

Mr. Brunton's Engine and the Butterley Company's Crich Rail-way

Illustrated talk by
Dieter Hopkin

With an update on the Butterley Gangroad Project

**Glebe Field Centre, Crich,
7.30pm 19th April 2013**

ADMISSION FREE

Prior booking essential

Email: butterleygangroad@gmail.com, to reserve

Other walks and talks are being arranged. The Derwent Valley Mills World Heritage Site are organising a week of walks in May and we will lead one to track the route that limestone would have taken by rail from the quarries at Crich and then along the Cromford Canal to Butterley Works. In November we will also repeat the very popular walk along the railway visiting sites and getting the latest information on what the project has discovered.

Fancy yourself as an archaeologist or explorer?!

On March 2nd Wessex Archaeology will run a full day (1000-1600) training workshop at the Crich Glebe Field Centre (see page 5). There will be no fee for attending the course but you will need to find your own lunch (one hour break).

We have identified 32 features along the route that we wish to record by means of observation, measurement and photography. This recording activity is planned to take place between April and September this year. The training will allow you to help lead and advise small groups of volunteers measuring and recording these features. The features include buildings, bridges, embankments, cuttings, the tips, quarries and limekilns. The original route of the railway near Fritchley will also be surveyed and recorded.

This activity will involve gaining access to private land. We are currently obtaining the permission required for this. One of the attractions of taking part will be becoming an “explorer” and discovering features that have never been recorded before!

Places on the training day will be limited, so please apply now if you are interested. You may also take part in subsequent site investigations without this training but you will gain useful transferable skills from it and make recording this historic railway much more effective.

Was your dad an engine driver?

Even though the railway closed 80 years ago there are people around who still remember it operating or remember things about it during its long period of dereliction. All of these memories could be vital information for this project. In addition many people will have “handed down” memories from earlier generations who may have worked on the railway, in the quarries or at the limeworks. It is important that we capture these memories before it is too late especially since so very little is written down anywhere about the railway.

We are conducting interviews so if you have any such memories or know anyone that has then please contact us and we will make arrangements to suit you. We are recording interviews and transcribing them so could also do with volunteer help from people willing to join the team undertaking this important and interesting activity.

Many people may have old photos of family members some of whom may have worked on the line. Sometimes you may have a photo with a train or just a bit of a building or wall in the background; these can all be vital clues. You may have old documents such as the deeds to your property, employment records and such like that may give an insight into local history. We are organising a series of “scan days” so that you can bring such things along, have them scanned for the record, and then return home with them so that there is no risk of them getting lost. Our next newsletter will contain details.

Do you like solving mysteries?

We have put together a list of topics where research would be of great value in increasing understanding about this pioneering early railway and would help get it better known. The list is not exhaustive and you may have your own ideas about other related topics worthy of study:

1. A comparison with other early railway tunnels.
2. Early Butterley Company records.
3. The case of fraud at the Butterley lime kilns.
4. Where the building stone for the line came from.
5. A history of the kilns at Bull Bridge.
6. A history of the stone quarries at Bull Bridge.
7. A study of census returns to identify people who worked on the railway, quarries, limeworks and wharf.
8. Details of the steam locos used.
9. The Midland Railway proposed Crich branch.
10. The standard gauge sidings at Bull Bridge.
11. Tonnages taken from Bull Bridge by canal.
12. The development of the limestone quarries.
13. Benjamin Outram.
14. The development of cast iron rails.
15. The development of railway inclines.
16. The location of other early railway tunnels.
17. The area around the Amber Wharf.
18. Where were the horses kept?
19. A study of the tippers in use at Bull Bridge.
20. Where were the stone blocks quarried?

If you would like to conduct your own research in any of these or other related areas either singly or working in a team then please let us know. We will coordinate activity, facilitate exchange of information, provide training and tutoring service, provide resources and ensure that the results are eventually disseminated. We will also provide key initial advice on where and how to look for the information. There is a wealth of untapped information out there and discovery can be an extremely rewarding activity.

But I'm too young to know anything!

Great, you are just the sort of person we need! What will happen when everyone who knows anything is too old to cope and the sitework is too energetic?! You could get a lot out of finding out how to study old records, undertaking archaeology and writing up history for web sites etc.. It all looks good on a CV and will impress at an interview. It's also a lot of fun sharing such activities with other like minded people and it's not a commitment either, you can just dip in and out when it suits you. We will organise a series of “taster days” so you can join in with others in a focussed activity and see real results at the end of the day.

Among the activities planned are writing a song about the railway. Professional support has been offered to teach how to do this and a performance “slot” has even been set up. But you may have better ideas.

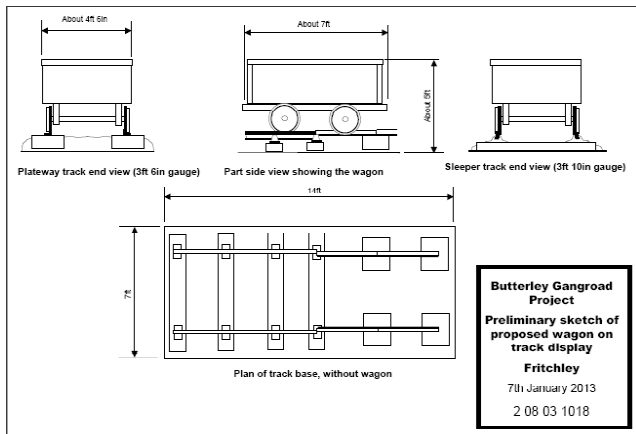
Schools and youth groups should contact us to discuss their needs and how they may match ours.

HIGH FLYERS WANTED!

The project is currently being managed by a mixed team of Derbyshire Archaeological Society members and other quite ordinary people with an interest in the line. If you have a special skill or expertise of value to us, such as those given below, and can find the time to attend regular meetings (about once every two months) and to undertake administrative activities then why not apply to join the team!

ENGINEERS WANTED

One planned output of the project is a limestone wagon mounted on a section of track as a permanent display. A small part of the rim of an original wagon wheel was found recently and from this and photos we have been able to estimate the dimensions of the wagons used in 1933. We may build a mock-up or rebuild an old colliery wagon to look like one.



The track gauge during the plateway era was 3ft 6in, measured between the backs of the rail flanges. When conventional railway track replaced this it was laid to a gauge of 3ft 10in. This allowed the new wagons with flanged wheels to run on the tips of their flanges on plateway sections during the transition. Our display will be a full size demonstration of this technique.

However we could do with assistance from an engineering firm willing to undertake the wagon manufacture/conversion in part or in whole as a freebie. It might make a novel training/team building/publicity exercise as well as being a lasting contribution to the community.

WEB SITE MANAGER

We are planning to disseminate the project output through a website, accessible to all. This would include material for people to download freely for their own interest, research purposes and as a teaching resource. Although members of the existing

team could manage this it would be much better if someone came in with fresh ideas with the time to concentrate on this important task. We can help with the technicalities so even if you know nothing about creating web pages you might like to use this as an opportunity to learn a new skill and gain an interest that will have lasting transferable value.

PUBLICITY

We have created a press release, contacted the media, made interviews, stood around for photoshoots and supplied images. However this is an activity that is best performed by someone who can lead and focus on this one task. So if you have skills in this area or just want to prove that you have the potential to be the world's greatest journalist then we would love to hear from you! Full support will be given.

EVENTS

Apart from the events already noted we are planning others including a summer event in Fritchley to celebrate the railway. This is currently planned for the second half of July. If you would like to help organise and run this event, provide entertainment, a stall or something to raise money for your own community organisation then please contact us. We want it to be a very popular and enjoyable day.

Likewise if you have any ideas or suggestions for other events that you might like to organise or work with us on under the project "umbrella" then please let us know.

The Derbyshire Archaeological Society

The Society has well over 400 members and is active in carrying out archaeology, conservation, research and publication to a high standard throughout the County. It is responsible for managing some historic sites including the old Morley Park ironworks. It also spreads knowledge through an intensive programme of talks, and visits for its members and the general public. You might like to consider joining to take full advantage of your interest in projects such as the Butterley Gangroad, full details are obtainable from the website: www.derbyshireas.org.uk.

INSURANCE AND SAFETY:

Derbyshire Archaeological Society members have some protection by virtue of the society insurance policy but other than this all activity undertaken on this project must be on an "at your own risk basis". Having said that all activities, even guided walks, will have a safety risk assessment

carried out before they are undertaken. This will enable everyone involved to be advised of any hazards, and be advised if they need protective clothing etc. No activity will be undertaken unless the risks can be mitigated to a generally acceptable level.

PROGRAMME OF EVENTS

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| 2 nd March | Archaeology Training Day |
| 19 th April | Talk “Mr.Brunton’s Engine and the Butterley Company’s Crich Railway” (see panel page 2). |
| 1 st May | Talk “The Belper and Morley Park and other railways”, Belper Historical Society, St.John’s Chapel, Belper, 1930. |
| 7 th May | Derbyshire Archaeological Society AGM with a talk on the Butterley Gangroad project. |
| 25 th May-2 nd June | Derwent Valley Mills World Heritage Site walks, including one touring both Crich railways and another following the exact route limestone would have taken down the gangroad and along the canal to the Butterley Works (details later). |
| 4 th July | Derbyshire Archaeological Society Visit to the Butterley Gangroad, starting at the Lord Nelson pub in Fritchley at 1915. |

Early days and the “Coffeepot”

Brian Key has kindly supplied an extract from the Butterley Company in house magazine of 1886 which throws some interesting light on the early history of the railway. It should be accurate as an “official” contemporary account.

Under the heading “The Lime Works” the article states that the present quarry, which would have been Hilt’s rather than the older Warner Quarry, had a working face 100 yards wide and 114 feet deep, it was producing 150 tons of limestone a day. It says that the railway was then 3ft 10½in gauge and was used to convey the limestone in small wagons to Bull Bridge, where most of it was burnt into lime by means of five kilns, turning out about 5 tons per day.

The wagons were returned to the quarry by a vertical boiler “coffee-pot” locomotive, implying that the loaded ones came down the 1 in 40 gradient by gravity. The article states that the Butterley Company then had six similar vertical boiler locomotives employed shunting at their collieries. This is especially interesting since very little is known about

these early Butterley Company owned locomotives. They all had crank axles that drove one of the two axles by gear wheels at a 3 to 1 ratio. The article mentions that the cylinders of the “limeworks engine” were only 4 inches in diameter, which implies that the other locomotives were larger.

Other accounts say that this locomotive sat out of use by the forge at Bull Bridge for many years and was sold in 1915.

According to the article, the lime was used for purification at gas works and various chemical purposes. The stone was taken to Butterley Works both by rail and by canal. Some of the harder stone (“churt”) was broken in a crusher at Bull Bridge and sold for road making.

Finally it says that the limeworks were then employing nearly one hundred men, “under the skilful management of Mr.J.H.Day”. Sadly, in the company minutes dated 5th September 1893 we find that the Directors had investigated and found, “gross irregularities and falsification of the Bull Bridge limeworks accounts by Mr.J.H.Day the Manager”, he was given three months notice. Three years later the minutes record that the £1064 2s 3d owed by John Henry Day had been written off and that the matter was now closed. It seems the company had made an embarrassing mis-judgement here.

Contact details:

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The events on the 2nd March and the 19th April will take place at the

CRICH GLEBE FIELD CENTRE
Glebe Field Close
Crich,
Matlock, Derbyshire DE4 5EU.

*Nearest bus stop (250m):
Crich Market Place.*

Free parking available on site.

Ways to help and get involved

Please fill in this form if you wish to help, attend an activity or wish to be added to our mailing list for future newsletters etc. You may send us a copy by post or electronically or just send an email including the relevant details (see contact information page 5).

Personal information will not be stored electronically or used for any other purpose.

Your name/names:

Your email:

Your phone:

Your address (only if you have not supplied an email address) - please include postcode:

Please reserve me places on the following events:

Archaeology Training Day, Crich, March 2nd (See page 2) places.

“Mr.Brunton’s Engine and the Butterley Company’s Crich Rail-way”, April 19th (page 2) places.

Although these events are free it is vital that you let us know if you are subsequently unable to attend so that we can release your places for others. We will confirm your reservation or failing that inform you that you are on a waiting list.

I/we would like to take part, from time to time, in archaeological site recording.

Would like to contribute personal memories (Please write “yes” in the boxes!)

Would be willing to help recording and transcribing personal memories

Would like to do some research, please state in which topic area (use the list numbers on page 3) or suggest your own:

I/we can help with - a website, building a wagon, artwork, publicity, arranging events or in other way, please state how:

Are you a member of a community group or organisation that might take part in these activities, or would you like a speaker to come and present the project to you?

Many thanks, we will contact you, we need you!