

Dukesfield Smelters and Carriers project Heritage Grant Round One application

Section 3b What will your project do?

Our current views on the likely extent of capital work required is described first under Conservation and access, following by a summary of the activities we wish to pursue through which our wider objectives will be achieved. For convenience here, these activities are described under the following strands:

1. conservation activities
2. initial research and recording,
3. interpretation events,
4. the creation of interpretative products,
5. presentation and promotion of our heritage.

In each case a description of what we wish to do is followed by indications of how we hope to carry out the work.

1. Conservation and access

What

Capital Work:

- Consolidation of standing arches – clear undergrowth from the top, repoint, reinstate fallen edging stones and brickwork, and install appropriate topping.
- Conserve structurally sound features revealed by archaeological survey and any excavation eg. the hearth floor adjacent to the arches, the end of the mill leat, mill building masonry to north of track.
- Make good stonework removed by water action under the upper culvert under 18th century access trackway from the south, & reveal early cast iron bridge supports.

Activities:

- Clear back scrub and tree growth. This will reduce the risk of subsequent sapling growth on the arches, improve access to arches and adjacent mill leat tail race assisted by clear walkways/ steps, and to provide a safe viewpoint of the top of the structure from the bankside.

How

- Suitably skilled and accredited building contractors will work under an appointed conservation architect, who will be responsible to the project manager and the Steering Group. We also intend to create several opportunities for volunteer involvement and skill development such as:
 - precise survey of arched structure under architect direction, possibly including demonstration of latest masonry surveying techniques
 - training sessions by builder/architect/historic conservation expert on masonry and building techniques, possibly involving the North of England Civic Trust Heritage Skills Initiative
- Building conservation work will be monitored by the Northumberland County Council Conservation Officer for conformance with relevant guidelines and statutory requirements. English Heritage, while supportive of our intentions, has indicated that since the structure is not listed as Grade 2* or above it cannot prioritise the allocation of resources to monitor the project.
- Mature timber will be cleared by the landowner's estate staff or contractors.
- Clearance of underwood, scrub and saplings could be undertaken by volunteers under BTCV direction, including students at nearby Mencap Dilston College, and the local Young Farmers Club. This could also encompass the creation of steps to chimney stack base and end of mill leat, & decked access pathway to residual masonry of mill building, the design of which will be in keeping with the heritage. Hopefully timber felled on site can be reused for this purpose.
- Small works at road end access track to tidy up and improve car parking (probably subject to planning permission) & for construction access. We would consider reserving a car parking bay for disabled access.

2. Research and Recording Activities

This section comprises a number of historical and environmental research, recording and evaluation activities designed to address questions raised in preparatory work outside the project and provide a foundation for later interpretation works.

What

- Recording of riverside botany and wildlife, building on 2012 preparatory work (bat survey).
- Evaluation of documentary transcription work on smelting and carrying carried out by community group prior to this project & evidence gathered from archaeological survey of the mill site planned within a separate project to be undertaken as part of a programme run by the North Pennines AONB. Further excavation work could be considered during the project development phase depending on the outcome of this survey.
- Research into the adjacent Victorian tileworks and 20th century forestry - light railway & sawmill.

How

Environmental activities could include the following.

- Volunteer recording of flora and fauna, including Slaley and Whitley Chapel First School visits.
- Soil survey work for residual lead traces possibly in conjunction with local universities, and local voluntary expertise.

History research and recording is hoped to include the following.

- Documentary research within the archives at Woodhorn and elsewhere.
- Oral history interviewing and recording of elderly local residents regarding 20th century exploitation of the area – otherwise neglected, & often overlooked in favour of the more distant past – supplemented by copying and documenting old photographs.
- Evaluation of documentary and archaeological survey evidence carried out by local volunteers and History Society members drawing on expert advice and guidance as needed. Support for any further archaeological excavation would be carried out on the same basis.

3. Interpretation events

Community and other interpretation events, products, visual identity principles and activities described in this sub-section and the next have been gathered and selected from a number of public consultation meetings over the past six months. There is local enthusiasm for activities with a great deal of community involvement. While centred on the tangible remains at Dukesfield these will engage various groups of people living along the 'lead corridor' from the North Pennines dales to Blaydon via Dukesfield. Our intention is to inspire thinking about life and work in the lead industry 2-300 years ago, and recognise the value of its legacy.

The ideas arising from these various discussions include the following, which will be reviewed and structured by the Interpretation Strategy created during the next project phase.

- Drama workshops and writing a short play involving students at Queen Elizabeth High School, Hexham and St. Thomas More, Blaydon, under the guidance of teachers and a local farmer & amateur playwright/director, perhaps informed by preparatory visits to Killhope Museum, Blaydon and along the lead routes. Performances could then be given at various venues (see sub-section 5 below).
- Community walks in period costume along sections of the lead routes, possibly with horses.
- Heritage cooking evenings focused on old recipes & regional dishes handed down through families
- Reviving the Halliwell picnic, which took place nearby from the Victorian period until the 1930s.
- Slaley, Hexham and Corbridge art club project
- Guided walks and history talks

They would be planned, publicised and overseen by a project volunteer co-ordinator, using input from previous research work, and assisted by the project's Education Officer. Activities

will be recorded in photographic/video & written form – as will the conservation work described in sub-section 1 above.

4. Interpretation products

A range of interpretation materials is envisaged to capture the essence of our heritage, help explain it and encourage its further exploration. These are likely to include the following.

- Site interpretation display boards, one to be installed by the arches and one by the roadside gate.
- Walks/trails leaflets (paper/downloadable) covering short and medium circuits and longer length trails encouraging the exploration of the wider industrial heritage of the area and the lost lead routes.
- School education packs to support, for example, local Middle Schools' history topic on the industrial revolution. While volunteer content input will be invaluable, responsibility for producing these will lie with the project education officer.
- A book on the local lead industry and transport, site remains and the Dukesfield project, following on from the research work. This could be produced in collaboration with Hexham Local History Society, which has an established series of publications in various formats.
- A website containing many of the resources described above and to act as a repository for the project's findings and research materials. The website will be organised within the Friends of the North Pennines online strategy.

In all these our approach would be to:

- derive the content from local knowledge and work carried out through community participation in the various activities and research described elsewhere, as far as possible,
- marshal and portray this with professional graphic design support and common visual identity principles.

Specialist expertise will be commissioned to create the website framework and structure for subsequent ownership and maintenance by project team members and volunteers, for whom relevant digital content management and social media training will be provided.

Digital animation concept

While we see an important role for such traditional interpretative features we also wish to capture imaginations and reach out to new audiences with a digital animated 3D visualisation of the mill, showing how a water-powered and bellows-driven 18th century smelt mill actually worked, at a tiny fraction of the cost of actually rebuilding, operating and maintaining one. As well as being accessible remotely from our website this would also be suitable for increasingly powerful and widespread hand-held devices so that the full extent and operation of the mill could be virtually reconstructed on site. Our initial research into this concept has not revealed any other current examples of the application of digital media and games technology to industrial heritage, so we believe this would be an innovation offering great potential for Dukesfield and elsewhere in the region and capable of attracting new audiences to engage with our heritage.

This has been explored with staff at the Teesside University School of Computing, which is interested in becoming a partner in the project. Initial scope would cover the creation of:

- the software framework,
- a fully visualised '3d' environment,
- the animation of major mill features such as waterwheels and bellows, with some audio accompaniment, and
- the incorporation of some explanatory 'pop-ups' at a few locations.

Further opportunities beyond this could exploit games technology to:

- talk to virtual 'avatars', busy at work at their hearths, fetching and carrying, or preparing to set off with their train of horses,
- solve interactive puzzles
- support assessment of concepts learned.

During our development phase we would:

- establish design principles to allow modular development and permit the easy later incorporation of additional features should initial use demonstrate the enthusiasm of new audiences to engage more deeply with our heritage in this way, as we believe it will
- define a practical collaborative approach to the work needed between the School of Computing and industrial archaeologists to enable early confirmation of the concept's value, and a detailed development plan
- identify opportunities for applied student coursework and for new graduates to put their skills to use in this new area.

5. Presentation and promotion

The project will culminate in a number of events to present back the work described above to those who have participated and promote it to the wider region as heritage with enduring educational and recreational appeal. These events will probably include:

- An official 'opening' of the site followed by a celebratory meeting for volunteers and an exhibition of artefacts, photos, descriptions, schools artwork and Art Club project works, publicity material, & project diary at Whitley Chapel Parish Hall. Depending on the detailed delivery timetable this could form part of the autumn 2014 Heritage Open Days weekend. This happens to co-incide with the 250th anniversary of the dedication of Whitley Chapel as a separate parish, largely achieved through the patronage of Sir Walter Blackett in the 1760s
- The Exhibition could then tour for short periods to venues such as
 - Hexham Library/Queen's Hall Arts Centre, & Prudhoe Library
 - Killhope, & Allenheads at the Pennine dale end of the lead corridor
 - Path Head Water Mill at Blaydon & Metro Centre at the Tyneside endto promote visits to site and website, supported by performances of dramatised smelter & carrier story. The Metro Centre is close to the old Blaydon staithes and refinery and would bring awareness of the lead industry heritage of the immediate area to a whole new audience
- School visits with project education officer co-ordination, using teachers' briefing packs and digital material. While we hope to involve schools during the project itself schools in the area are also interested in longer term curriculum potential. An education programme could be co-ordinated with that of Killhope to integrate its mining heritage with Dukesfield's focus on carrying & smelting. Initial funding support for school visits and education officer support would help to fine-tune materials for subsequent school directed use of the site and associated heritage interpretation materials.