THE SITE OF BRIDGE 62,
ASHBY CANAL,
OFF QUARRY LANE,
SNARESTONE,
LEICESTERSHIRE



AN ARCHAEOLOGICAL MONITORING



**July 2015** 

PRE-CONSTRUCT ARCHAEOLOGY LTD R12141

#### **DOCUMENT VERIFICATION**

# THE SITE OF BRIDGE 62, ASHBY CANAL, OFF QUARRY LANE, SNARESTONE, LEICESTERSHIRE

#### AN ARCHAEOLOGICAL MONITORING

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### Archaeological Monitoring on the site of Bridge 62, Ashby Canal, Off Quarry Lane, Snarestone, Leicestershire

Local Planning Authority: North West Leicestershire District Council

Central National Grid Reference: SK 3477 1049

Site Code: ACAL15

Report No: R12141

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PCA Report Number: R12141

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#### **ABSTRACT**

This report describes the results of archaeological monitoring carried out by Pre-Construct Archaeology on the site of a demolished canal bridge (62) along the former Ashby Canal, just north Snarestone, Leicestershire (NGR SK 3477 1049). The monitoring works were carried out as a consequence of and during the restoration of the former Ashby Canal, and on the recommendations of the Principal Planning Archaeologist at Leicestershire County Council. The aim of the monitoring work was to ensure that any structural remains or deposits associated with Bridge 62 that were exposed during the restoration groundworks were fully recorded and interpreted.

The monitoring revealed that very little of the structure of the former Bridge 62 survived intact and in-situ. Two short lengths of foundation wall for the bridge abutments were present along the eastern side of the canal, while a short section of more truncated wall survived along the opposite bank to the west. Evidence of the tow path, built with blue engineering brick copings to the canal edge survived along the west side, as did sections of re-used railway sleepers and later concrete repairs to the canal kerb. The character of the brickwork, using over-sized bricks manufactured between 1784 and 1803 as a response to the burden of the brick tax, supports a contemporary later 18th to early 19th century date for the bridge and canal construction.

#### 1 INTRODUCTION

- 1.1 Archaeological monitoring was undertaken by Pre-Construct Archaeology Ltd (PCA) between 13th and 15th May 2015 on the site of canal bridge 62, which formerly crossed the Ashby Canal, just to the north Snarestone, Leicestershire (NGR SK 3477 1049) (Fig. 1). In 2005 approval was granted by way of a Transport and Works Act Order to reopen 8 miles of the Ashby Canal north of Snarestone. Since then a large portion of the canal has been reopened starting at Snarestone and heading north towards Measham. The restoration project has since reached the site of Bridge 62, which will be re-instated as part of these works.
- 1.2 The archaeological monitoring works were commissioned by Leicester County Council and carried out as part of a restoration project, aimed at reopening an eight mile section of the former Ashby Canal between Snarestone and Measham. The archaeological works were undertaken in accordance with a Written Scheme of Investigation (WSI) prepared by Kathryn Brook (PCA 2015) and on the advice of Principal Planning Archaeologist, Richard Clark at Leicestershire County Council.
- 1.3 The aim of the monitoring work was to ensure that any structural remains or deposits associated with Bridge 62 which may be exposed during the restoration groundworks were fully recorded, interpreted and an archive created.
- 1.4 This report describes the results of the monitoring. The site archive will be held at PCAs Midland Office before being deposited with the relevant museum.

#### 2 GEOLOGY AND TOPOGRAPHY

#### 2.1 Geology

2.1.1 The subject site is characterised by a bedrock of Tarporley Siltstone Formation, a siltstone, mudstone and sandstone sedimentary bedrock formed during the Triassic periods, when the local environment was dominated by lakes. The overlying superficial deposits are Glacio-fluvial sand and gravel formed in the Quaternary, when the local environment was dominated by Ice Age conditions. (British Geological Survey www.bgs.ac.uk).

#### 2.2 Topography

2.2.1 The site is located at the northern end of c. 0.76 miles of recently restored Ashby Canal. It is located approximately 1.1km to the north of the village of Snarestone and c.1.9km southeast of Measham. The area is currently a construction site with the initial works, comprising the re-excavation of the canal to the north of bridge 62, underway. The general area is broadly flat, to the north is the back filled canal cut, to the south is the restored canal and to the east and west are large enclosed agricultural fields. A spot height taken within the centre of the site is recorded as 95.28m AOD.

#### 3 ARCHAEOLOGICAL BACKGROUND

#### 3.1 General

- 3.1.1 The following historic background of the canal is taken from information available on the Ashby Canal Association websites.
- 3.1.2 The construction of the Ashby Canal was first addressed in an Act of Parliament in 1790. The act reads 'At the parliament begun and Holden in Westminster on the 25th day of November, Anno Domini 1790, in the 31st year of the reign of our Sovereign lord GEORGE the third, by the grace of god, of Great Britain, France and Ireland, defender of the faith, and from thence continued, by several prorogations to the 21st day of January 1794, being the 4th session of the 17th parliament of Great Britain. An Act for making and maintaining a navigable canal from the Coventry Canal, at or near Marston Bridge, within the parish of Bedworth, in the County of Warwick, to a certain close in the parish of Ashby de la Zouch, in the County of Leicestershire, and for continuing the same from thence in one line to the lime works at Ticknall, in the County of Derby, and in another line to the lime works at Cloud hill in the said County of Leicester, with several cuts and branches from said canal' (9th May 1794).
- 3.1.3 Construction work began on Ashby Canal the autumn of 1794. Originally it was intended as a broad-gauge connection between the Coventry Canal and the River Trent (which it failed to reach), Ashby Canal was constructed lock-free following a contour of 300 feet. Despite its name the canal also never reached the market town of Ashby de la Zouch, instead its purpose was to serve the lime making and coal mining industry to the west. Work was complete and the canal opened in 1804 at a cost of £184,000, linking the mining town of Moria with the canal network at Coventry.
- 3.1.4 The canal or 'Moria Cut' became a hive of industrial activity as the coal miners soon discovered it was faster to transport coal by canal rather than the slow toll roads. Tramways were set up to link the mines with the canal and at its height there were 28 coal pits along its route. Such was the quality of the coal, prized more highly for its burning qualities than for its use in making iron, that it was still being routinely transported on the line until the 1960s. All of the mining activity, as the canal passed through the Leicestershire coal field, led to serious subsidence resulting in a progressive closure of the section of canal from Moira, southwards to Snarestone, between 1944 and 1966.
- 3.1.5 In 1846 the canal and associated tramways was bought by the Midland Railway Company, by 1873 a railway line, known as the 'Ashby to Nuneaton Joint Railway',

had been constructed almost parallel to the route of the canal. The canal remained profitable until the 1890s, after which it steadily declined and by 1960's the canal was no longer profitable, commercial uses had dwindled over the years and sections of the canal had been closed. In 1966 the canal was finally closed and the 8 miles from Snarestone to Moria backfilled. Only a 22 mile section between Snarestone and Coventry, managed by British Waterways remained open as a cruise way.

- 3.1.6 Bridge 62, demolished following the closure of the canal in 1966, was typical of the many accommodation bridges built along the length of the canal. Photographic evidence shows that it was a single span bridge built in red brick, with a one and half brick wide arch, flanked by splayed brick abutments and over-sailed by a slightly cambered parapet wall. The bridge sat within a cutting, with moderately steep sloping banks to the east and west, and spanned the canal and a tow path, the latter present along the west side only.
- 3.1.7 During excavation work to restore the canal channel, a large number of bricks and the original elliptical cast iron number plate form Bridge 62 were recovered. The name plate has been restored ready to go on the new bridge.

#### 4 METHODOLOGY

#### 4.1 Monitoring

- 4.1.1 Ground reduction was carried out under archaeological supervision using a mechanical excavator fitted with a 2.2m-wide toothless ditching bucket. The oversite, comprising a topsoil (001), sub soil (002) and a considerable deposit of largely mixed coal waste backfill (005) were removed in spits down to the level which coincided with the upper surface of the tow path (west side) and to a level where the foundations walls of the bridge abutments were first recognised (east side). Exposed surfaces were cleaned by trowel and hoe as appropriate and all further excavation was undertaken manually using hand tools
- 4.1.2 Field excavation techniques and recording methods are detailed in the PCA Fieldwork Induction Manual by Joanna Taylor, Gary Brown and Mark Hinman (2015) and were undertaken in accord with Standards and Guidance for Archaeological Field Watching Briefs (Charted Institute for Archaeologists, 2014).

#### 4.2 Recording Methodology

- 4.2.1 Deposits or the removal of deposits judged by the excavating archaeologist to constitute individual events were each assigned a unique record number (often referred to within British archaeology as 'context numbers') and recorded on individual pre-printed forms (Taylor, Brown and Hinman 2015). Archaeological processes recognised by the deposition of material are signified in this report by round brackets (thus), while events constituting the removal of deposits are referred to here as 'cuts' and signified by square brackets [thus]. The record numbers assigned to cuts and deposits are entirely arbitrary and in no way reflect the chronological order in which events took place. All features and deposits recorded during the monitoring are listed in Appendix 2.
- 4.2.2 High-resolution digital photographs were taken at all stages of the monitoring process

#### 5 RESULTS

5.1.1 The over-site, comprising a topsoil (001), sub soil (002) and a considerable deposit of largely mixed coal waste backfill (005), measuring up to 0.65m of compacted dark grey/black coal waste, was removed to a level which coincided with the upper surface of the tow path (west side) and to where the foundations walls of the bridge abutments were first recognised (east side). Context (005) was also used to back-fill the canal waterway, as its extent clearly defined the width of the canal, recorded as cut [004].

#### 5.2 West side

5.2.1 The canal cut [004] was flanked on its western side by the remains of the original tow path and canal bank. This comprised a single blue brick edging or coping course laid on bed and perpendicular to the canal edge and a replacement section of concrete copings (015), possibly used as a repair or later renovation of the canal edge, to the south. The blue engineering brick edging (008) to the canal used bricks measuring 230mm x 100mm that were fixed using a hard lime mortar. They were abutted to the north, and within the canal cut, by lengths of timber sleeper (010), later inserted (reused from the parent company) to protect the edges of the canal from strike damage. Context (011), a foundation layer, immediately west of the edging course coping, comprised of brick rubble was abutted further to the west by an un-coursed and unbonded brick rubble layer (context 007) extending for c. 5m and interpreted as representing a demolition deposit associated with Bridge 62. Removal of this layer revealed the disturbed, but partly bonded, structural remains of a single foundation wall of the bridge, context (016). The brickwork used for this wall was characteristically similar to the abutment walls (012 and 013) recorded on the opposite side of the canal.

#### 5.3 East Side

5.3.1 The canal edging recorded on the western side of the canal was not as clearly visible on the eastern side of the canal. This was mainly due of an extensive spread of moderately compacted light brown silty sand material (context 014) interpreted as part of the bridge construction, spread across this area. This re-deposited soil was present between and in part overlay the structural remains of the bridge, surviving in the form of two foundation walls (contexts 012 and 013) of the former abutments. The exposed wall foundation, context (012), projected westward from the eastern site baulk and measured 3.1m in length and 0.75m in width. It survived to a maximum depth of four brick courses (exposed) and was constructed using oversized sized,

unfrogged red bricks (Wilkes Jumb or Gob bricks) held using a cream coloured lime mortar.

5.3.2 Context (012) lay to the south of the northern abutment foundation wall (013). This wall and context (012) were built broadly parallel but were also clearly splayed in plan, narrowing together as the walls progressed westward. Whilst context (013) was built using the same brickwork as recorded for (012) and to the same height (in courses), only 2.2m of wall projected into the site area from the baulk. It was however noticeable that up to another four courses of principally disturbed brickwork, associated with the northern abutment wall, were seen in the baulk section. It was abutted to the north by the coal waste backfill (005) and to the south by the sandy construction deposit, context (014). The stratigraphy confirms that the bridge was deconstructed prior to the infilling of the canal cut.

#### 6 DISCUSSION & CONCLUSIONS

- 6.1 The archaeological monitoring of the on-going works allied with the restoration of the Ashby Canal and in particular the site of the former Bridge 62, revealed that very little in terms of structural remains of that bridge survived in-situ. Two short lengths of foundation wall for the bridge abutments were present along the eastern side of the canal, while a short section of more truncated wall survived along the opposite bank. Evidence of the tow path, built with blue engineering brick copings to the canal edge survived along the west side, as did sections of re-used railway sleepers and later concrete repairs to the canal kerb.
- 6.2 The size and character of the extant brickwork of the foundation walls to bridge 62, were consistent with Wilkes Gobs also known as 'Jumbies' bricks. These over-sized bricks were produced between 1784 and 1803 as a response to the burden of the brick tax. They were locally manufactured in Measham, in a brickworks owned by Joseph Wilkes, a successful business entrepreneur, with interests in industry (coal mining and textiles) and farming, who was also shareholder, treasurer and advocate to the Ashby Canal Company.
- 6.3 There is a clear correlation between the manufacture dates for these oversized bricks and the construction of the canal, showing that the bridge was contemporary with or built shortly after the initial construction phase of the canal which started around 1794. The presence of a silty sand soil, similar to the surrounding superficial natural between the bridge abutment walls shows that the abutments were not solid brickwork, the void between backfilled using up cast from the cut. This construction method would have been carried out to keep down expenditure costs. The stratigraphic relationship also shows that bridge 62 was de-constructed, removing and possibly re-using the majority of the brickwork, before the canal cut was backfilled with coal waste in c. 1966.

#### 7 ACKNOWLEDGEMENTS

Pre-Construct Archaeology Ltd would like to thank Geoff Pursglove of Leicestershire County Council for commissioning the work. The author would like to thank Kevin Trott for managing the project, Tom McCarthy and Steve Jones for undertaking the fieldwork and PCA's CAD department for preparing the figures.

#### 8 BIBLIOGRAPHY

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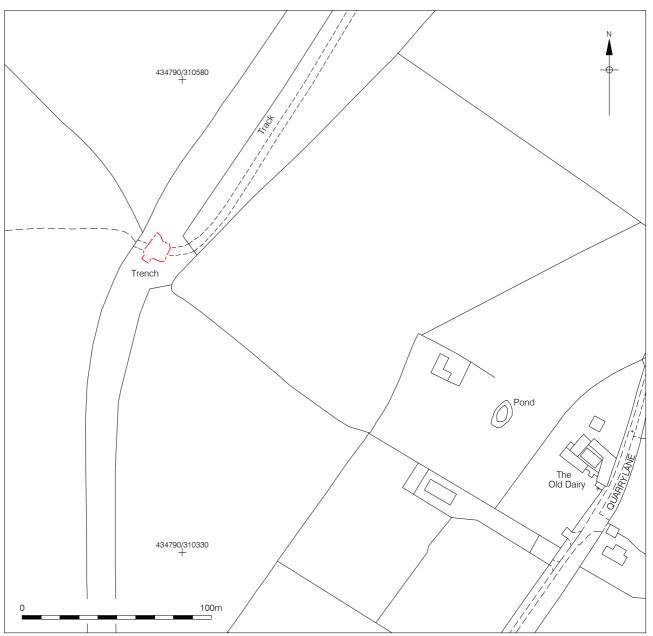
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#### 8.2 Websites

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- 2) https://ashbycanal.org.co.uk
- 3) https://canalrivertrust.org.uk/canals-and-rivers/ashby-canal
- 4) https://en.wikipedia.org/wiki/Joseph Wilkes



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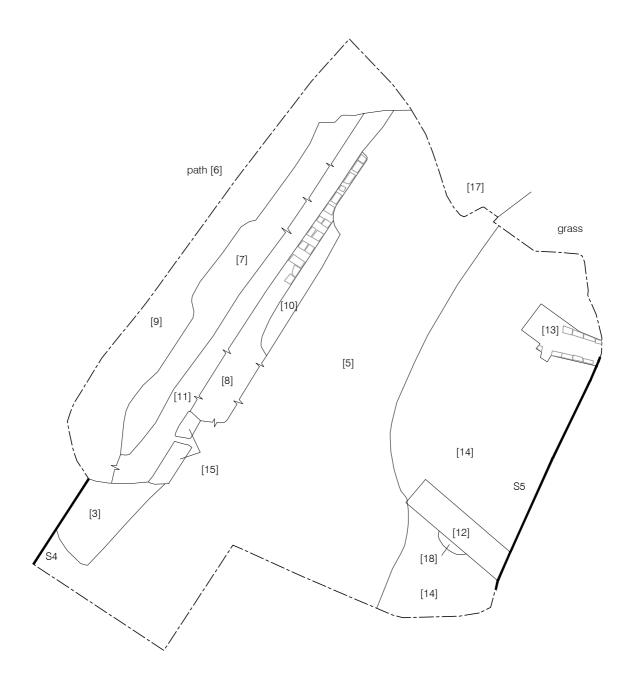


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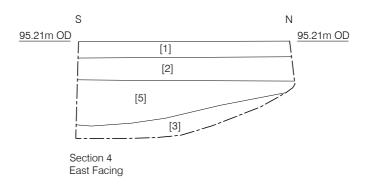
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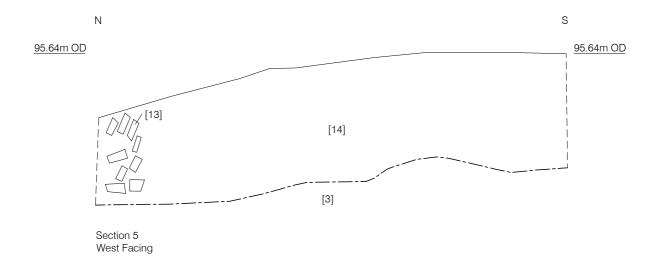
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#### **APPENDIX 1: PLATES**

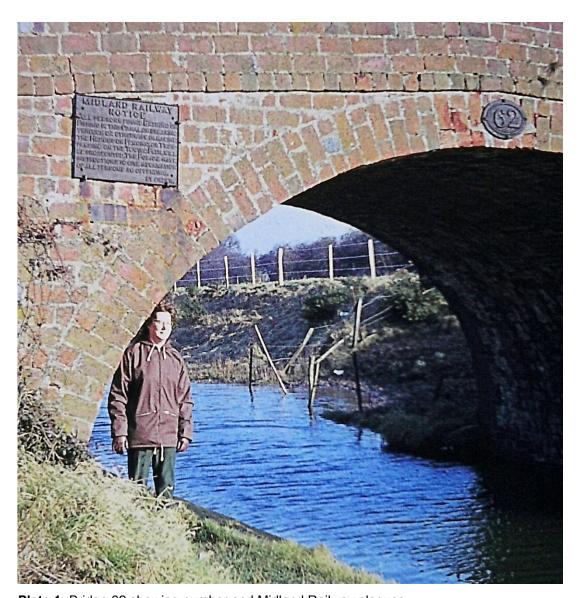


Plate 1: Bridge 62 showing number and Midland Railway plaques



Plate 2: Site stripping, exposing coal waste back-filled canal looking N



Plate 3: Canal and brick edging looking W



Plate 4: Blue brick edging to tow path, looking N



Plate 5: Re-used timber sleeper (010) along edge of canal



Plate 6: Site of Bridge 62, on the eastern side of canal, showing foundation walls, looking E



Plate 7: Surviving brick courses of the southern wall foundation (012) to Bridge 62, looking E



Plate 8: Surviving brick courses of the northern wall foundation (013) to Bridge 62, looking E



Plates 9 & 10: Birds-eye views of monitoring works at Bridge 62 site, showing extent of works



#### **APPENDIX 2: CONTEXT INDEX**

Context	Туре	Category	Interpretation
001	Layer	Overburden	Topsoil
002	Layer	Overburden	Subsoil
003	Layer	Geology	Natural
004	Cut	Feature	Canal cut
005	Layer	Fill	Coal waste backfill
006	Layer	Make-up	Modern path
007	Layer	Demolition	Brick debris
800	Structure	Feature	Tow path brick edging
009	Layer	Overburden	Trample layer
010	Structure	Feature	Re-used railway sleepers
011	Layer	Make-up	Tow path make-up
012	Structure	Wall	Southern abutment wall east
013	Structure	Wall	Northern abutment wall east
014	Layer	Deposit	Redeposited soils used in construction of bridge
015	Structure	Feature	Replacement concrete edging
016	Structure	Wall	Foundation wall west side
017	Layer	Deposit	Backfill (upper)
018	Layer	Deposit	Clay dump

#### **APPENDIX 3: OASIS FORM**

OASIS ID: preconst1-216093

Project details

Project name Archaeological Monitoring at Bridge 62, Ashby Canal Restoration

Project

the project

Short description of The monitoring works were carried out during the restoration of the former Ashby Canal, and in particular the site of on bridge 62. It revealed that very little of the bridge survived intact, with only two short lengths of foundation wall for the bridge abutments present along the eastern side of the canal, and a short section of truncated wall to the west. Evidence of the tow path, built with blue engineering brick copings survived along the west side, as did sections of re-used railway sleepers and later concrete repairs to the canal kerb. The character of the brickwork, using over-sized bricks manufactured between 1784 and 1803 as a response to the burden of the brick tax, supports a contemporary later 18th to early 19th century date for the bridge and canal construction.

Project dates

Start: 13-05-2015 End: 15-05-2015

Previous/future

No / Not known

work

Type of project

Recording project

Site status

None

Current Land use

Transport and Utilities 2 - Other transport infrastructure

Monument type

**CANAL Post Medieval** 

Monument type

**BRIDGE Post Medieval** 

Investigation type

"Watching Brief"

Prompt

Planning condition

**Project location** 

Country

**England** 

Site location LEICESTERSHIRE NORTH WEST LEICESTERSHIRE

SNARESTONE Bridge 62, Ashby Canal, Off Quarry Lane,

Snarestone, Leicestershire

Site coordinates SK 3477 1049 52.6906339123 -1.48551641752 52 41 26 N 001 29 07

W Point

Project creators

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originator

Project design Kathryn Brook

originator

Project Kevin Trott

director/manager

Project supervisor Tom McCarthy/Steve Jones

Type of Leicester County Council

sponsor/funding

body

Project archives

Physical Archive No

Exists?

Digital Media "Images raster / digital photography"

available

Paper Media "Context sheet", "Plan", "Section"

available

Project bibliography

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