Colsterworth Railway Bridge, Lincolnshire

Historic Building Recording

2007

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Supervisor	date
Project Manager	date

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Historic Building Recording 2007

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COLSTERWORTH RAILWAY BRIDGE, LINCOLNSHIRE: HISTORIC BUILDING RECORDING 2007

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SUMMARY

In July 2007, Birmingham Archaeology carried out Level 1 Historic Building Recording of Colsterworth Railway Bridge, Lincolnshire (NGR SK 930 249). The work was commissioned in advance of the proposed demolition of the bridge as part of the ongoing redevelopment works at the A1. An analytical and photographic record of the structure was made; this was accompanied by an analysis of the historic map evidence.

The recording work and historic map regression revealed a railway bridge constructed between 1959 and 1978. It is likely that it was constructed at the time of a series of bypasses on the A1 in the early 1960s. The bridge is of plated steel girder construction, and its span of c. 30m is raised on red brick abutments on either side of the A1 road. It is c. 2.5m wide, and no evidence for railway tracks remain in-situ.

COLSTERWORTH RAILWAY BRIDGE, LINCOLNSHIRE: HISTORIC BUILDING RECORDING, 2007

1 INTRODUCTION

In July 2007 Birmingham Archaeology carried out a programme of Historic Building Recording at Colsterworth Railway Bridge, Lincolnshire (Fig. 1). The work was commissioned by ATKINS *Heritage* on behalf of Interserve Project Services Ltd. in advance of the proposed demolition of the structure as part of ongoing redevelopment works at the A1.

This report outlines the results of the Historic Building Recording, which was carried out on the 24th of July 2007, and which was prepared in accordance with the Institute of Field Archaeologists Standard and Guidance for the archaeological investigation and recording of standing buildings or structures (IFA 2001), and was carried out to Level 1 as defined by English Heritage (English Heritage 2006).

The recording was also carried out in accordance with guidelines laid down in Planning Policy Guidance Note 15 (DoE 1994).

2 LOCATION

The site is located on the A1 or Great North Road c.1 km to the north of the village of Colsterworth, Lincolnshire, which is c.12 km to the south of Grantham and c.37 km to the northwest of Peterborough, and is centred on NGR SK 930 249 (Figs. 2 and 3).

The structure (Fig. 4) is a disused steel railway bridge, which was constructed as an overpass above the A1 roadway. The A1 or Great North Road runs under the bridge from southeast to northwest. Much of the land surrounding the site is arable fields or is used for tillage. To the immediate southwest of the bridge is an area of dense vegetation, which is bounded by the B 6403 to the west. A dirt path runs from the bridge through this wooded area to this road. On either side of this road, directly in-line with the current site, are the brick abutments of a former railway bridge, which once spanned this road. A now overgrown embankment connected both bridges. The course of the Roman Road Ermine Street runs south-north c.0.6km to the east.

3 AIMS AND OBJECTIVES

The principal aim was to record the structure to Level 1 as defined by the English Heritage (2006).

4 METHODOLOGY

A site visit was carried out in order to assess and record the structure. This involved the following:

Written Record

An analytical record was complied on *pro forma* structure sheets, which involved systematic recording of each aspect of the bridge. These field notes were used as a basis for the definitive account.

Photographic Survey

A photographic survey was made of as much of the structure as was safely possible using a Nikon D40 Digital Camera; this included both general and detailed photographs. Photographs were recorded on a register, giving a brief description, orientation, photographer, and date taken.

In addition a small amount of historic research was carried out in an attempt at understanding the bridge. This included:

Specialist Websites

A number of specialist railway, steel, and bridge websites were consulted during the course of the project.

Cartographic Regression

In order to illuminate the chronology and understanding of the development of the structure, a number of historic Ordnance Survey maps were consulted.

5 BRIEF HISTORICAL CONTEXT

Following the site visit it was decided to consult historic map evidence in order to aid an understanding of the chronological development of the bridge and the railway it conveyed (Figs. 5 and 6). The historic Ordnance Survey maps show that the railway bridge had not been constructed by the time of the 1959 map. There is no evidence of the railway on the 1886 or 1904 maps. The 1931 map shows the railway which appears to have been part of the LNER or London and Northeast Railways line which was constructed after an Act of Parliament in 1921. This is carried over the now B 6403 by the now partially demolished railway bridge to the west of the current site. In addition a line running from an ironstone quarry in Colsterworth meets the track to the west of the site. The section of A1 spanned by the extant bridge had not been constructed by the 1959 map.

6 ANALYTICAL DESCRIPTION

The Colsterworth Railway Bridge (Plates 1 to 12) is an example of a steel plate girder bridge raised on red brick abutments. Rather than being of rolled steel construction, like those constructed prior to the Second World War; the bridge appears to have been made out of flat steel sections that have been welded together into an I-beam shape, with structurally supporting struts or stiffeners lining the interior. There is no evidence of any railway track along the deck, which itself is composed of earth and pebble.

From Below (Plates 1 to 5)

From the roadside the bridge gives the appearance of a large steel girder spanning the highway, which is essentially what it is. The structure is utilitarian in appearance, and no attempt at embellishment or decoration has been made. From underneath it is possible to gain an understanding of the construction of the bridge. It comprises two steel I-beams with c.1.5m high webs and projecting flanges. The inner flanges support and are welded to cross-running steel joists which support the deck above (Plate 4). The bridge is raised on a red brick abutment.

From Above (Plates 6 to 12)

From on top of the bridge it is apparent that the corner of each of the I-beams are curved, and that the top of brick abutment is coped with moulded brick. Where the brickwork is exposed, it is clear that the bricks have been stamped RIDDINGS which probably means that they were

made in Riddings, Derbyshire, where there was an extensive pottery works. The bridge appears to be tied to the abutment from above with large bolts (Plate 9). As noted above a number of stiffeners line the interior of the bridge. These thin strips of steel have been welded to the structure to provide further support. On the south side some of these stiffeners have projecting supports which may have been used to raise planking so workers could walk along the bridge without having to walk on the track (Plate 11). Some of the stiffeners are thicker, have flanges, and are set in concrete footings. The bottom flange at each side of the interior of the bridge appears to have been covered in concrete. As noted above the deck of the bridge is of earth and pebble, and there is no railway track remaining in-situ.

7 CONCLUSIONS

This programme of historic building recording has revealed that the bridge was probably constructed in the early 1960s. It is of steel plate girder construction and is raised on red brick abutments, and is an example of a type of bridge that was extensively used to span the ever expanding road network in the mid 20th-century.

8 ACKNOWLEDGEMENTS

The project was commissioned by ATKINS *Heritage*, on behalf of Interserve Project Service Ltd. Thanks are due to Julia R. Bennett of ATKINS *Heritage* for her co-operation and assistance throughout the project. Thanks are also due to Richard French of Interserve Project Services Ltd. for his assistance throughout. The Historic Building Recording was undertaken by Shane Kelleher, who also produced the written report which was illustrated by Nigel Dodds, and edited by Malcolm Hislop who also managed the project for Birmingham Archaeology.

9 SOURCES

9.1 Secondary Sources

Department of the Environment (DoE) 1994 Planning Policy Guidance Note 15: Planning and the Historic Environment.

English Heritage 2006 Understanding Historic Buildings: A Guide to Good Recording Practice.

Institute of Field Archaeologists (IFA) 2001 *Standard and Guidance for Archaeological Investigation and Recording of Standing Buildings and Structures*, rev. edn.

9.2 Cartographic Sources

1886 Ordnance Survey 1:2500.

1904 Ordnance Survey 1:2500.

1931 Ordnance Survey 1:2500.

1959 Ordnance Survey 1:2500.

1978 Ordnance Survey 1:2500.



Fig.1

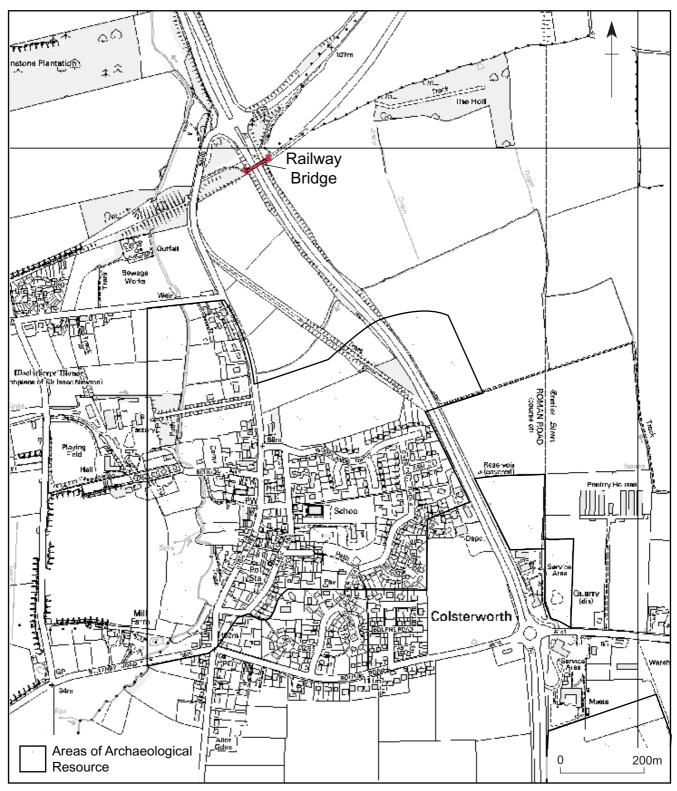


Fig.2





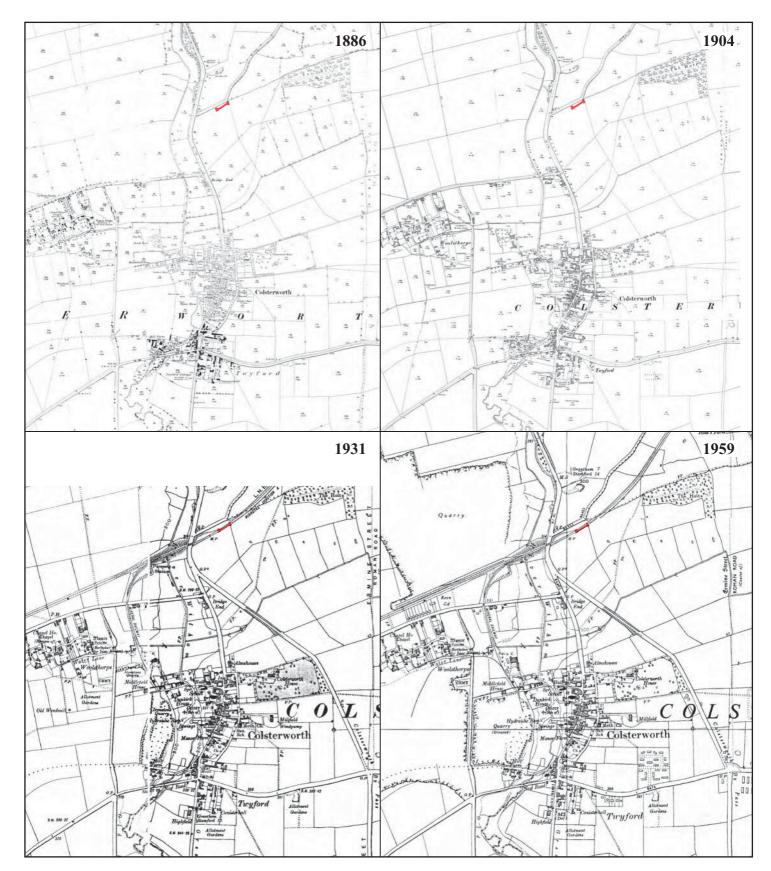


Fig.5

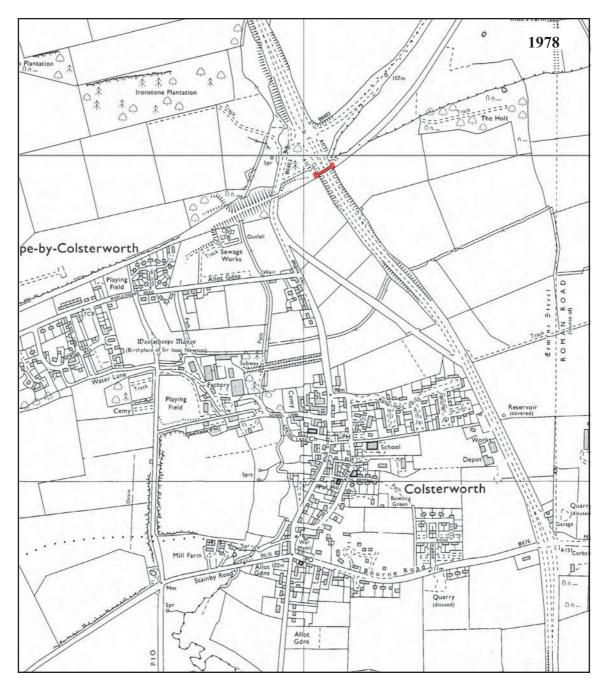


Fig.6





plate 2

plate 1





plate 3

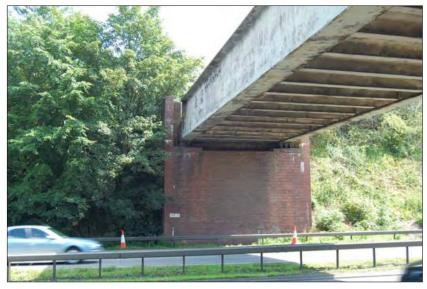


plate 6

plate 5





plate 7





plate 10

plate 9





plate 11

plate 12