



The Limes railway embankment, Norton Canon,
Herefordshire: archaeological survey
and monitoring

Huw Sherlock, P J Pikes and Jerry Newby-Vincent
2002



archenfield archaeology ltd

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2002*

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Cover Photograph: Photograph of the bridge from the south.
The western (left) abutment has now been demolished.



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Summary

In August 2001 Archenfield Archaeology recorded a length of railway embankment immediately before its removal to permit housing development. This was at Norton Canon in Herefordshire, on the old Hereford and Brecon line, which went out of use in the 1960s.

A note was made of its means of construction and the probable source of the materials. A brief history of the line was compiled, together with anecdotal evidence from the local newspaper and the diaries of the Rev. Francis Kilvert.

1.0 Introduction

NGR (SO) 33685 24782
Herefordshire Sites and Monuments Record 31728
Hereford City Museum Accession No 2002-4

Archenfield Archaeology was commissioned by Mr. David Palliser (the client) to monitor the removal by machine of a length of railway embankment and a section of a bridge abutment. This was in response to a judgement made by the regional planning inspector who made a ruling on an appeal made by the client after his initial application for permission to remove the embankment had been refused by the local authority planning inspector. No formal brief for the conduct of the work was issued by the Archaeological Adviser to Herefordshire Council, but a programme of archaeological recording was drawn up and agreed between Archenfield Archaeology, the client and Herefordshire Archaeology.

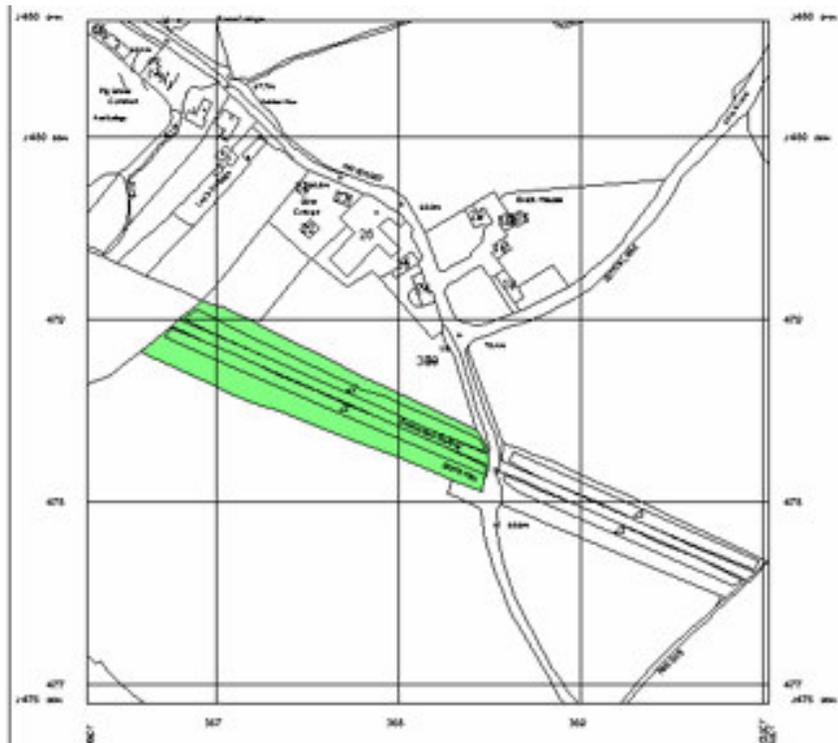
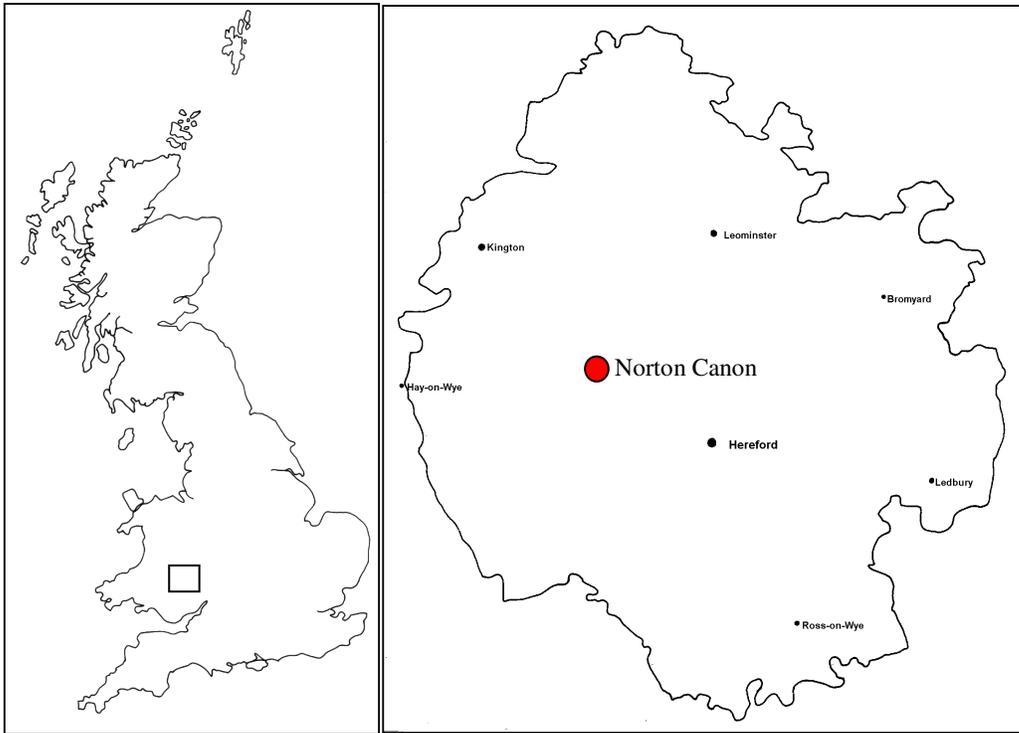


Figure 1: Location plan

2.0 Geological and historical background

2.1 Geological background and land use

The site is a former railway embankment lying on alluvium. Immediately to the east is a glacial moraine - the Staunton Moraine - composed of poorly sorted gravels with silts and sands. The old railway line traversed this feature by means of a cutting (Brandon, 1989, p37). The underlying geology is Old Red Sandstone, but subsequent glacial deposits overlie this in the area.

2.2 Historical background

The site had been open agricultural land before the construction of the railway in the 1860's.

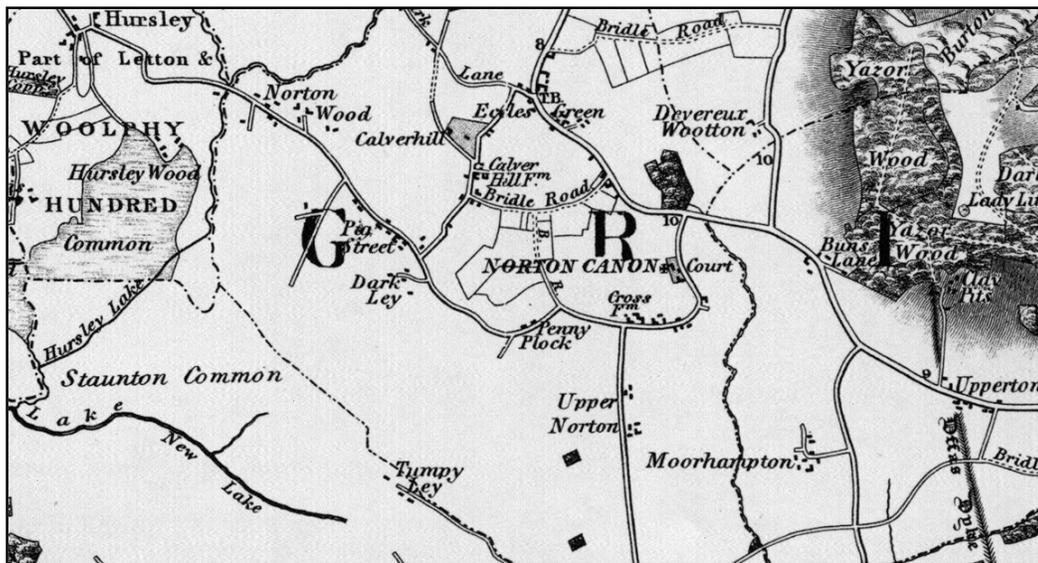


Figure 2: Norton Canon on Bryant's map of Herefordshire, 1835

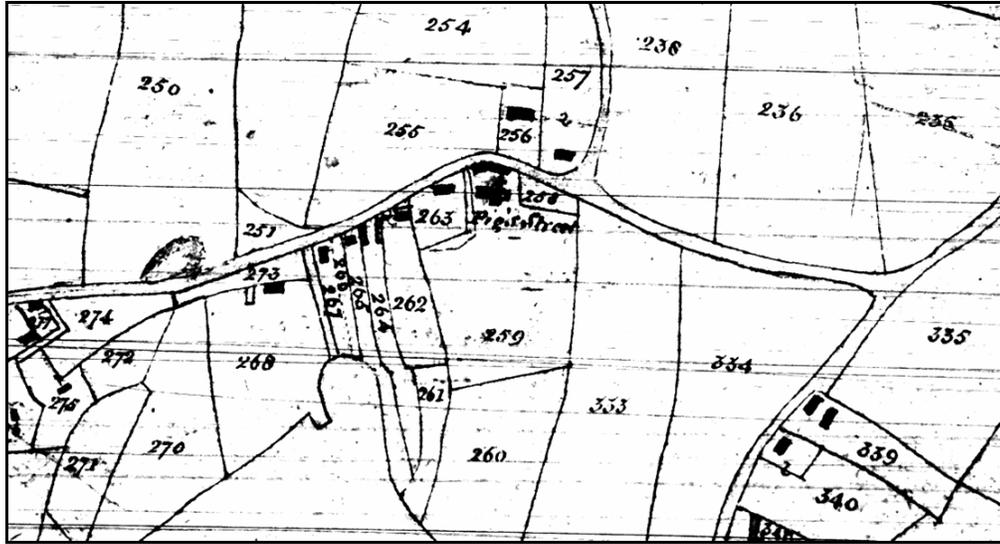


Figure 3: The 1841 tithe map

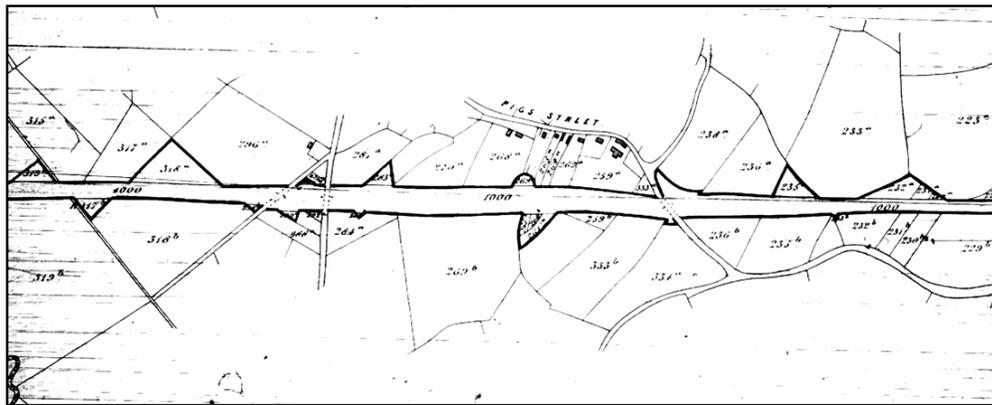


Figure 4: The altered tithe apportionment of 1868 showing the land newly acquired by the railway company.

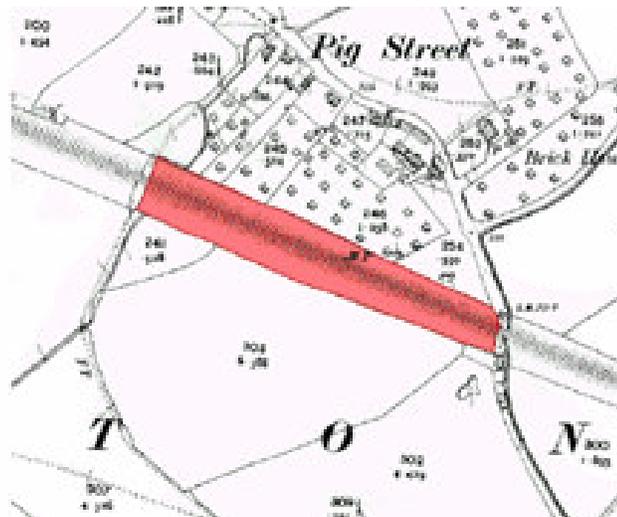


Figure 5: The site on the OS 2nd Edition 1:2500 plan

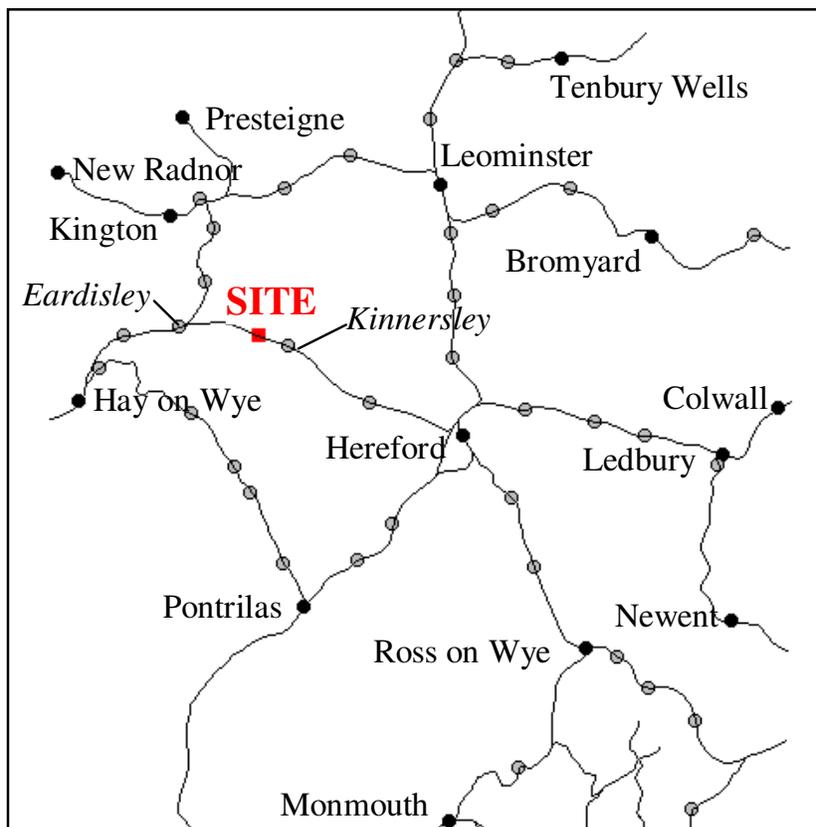


Figure 6: Railways in Herefordshire in 1904

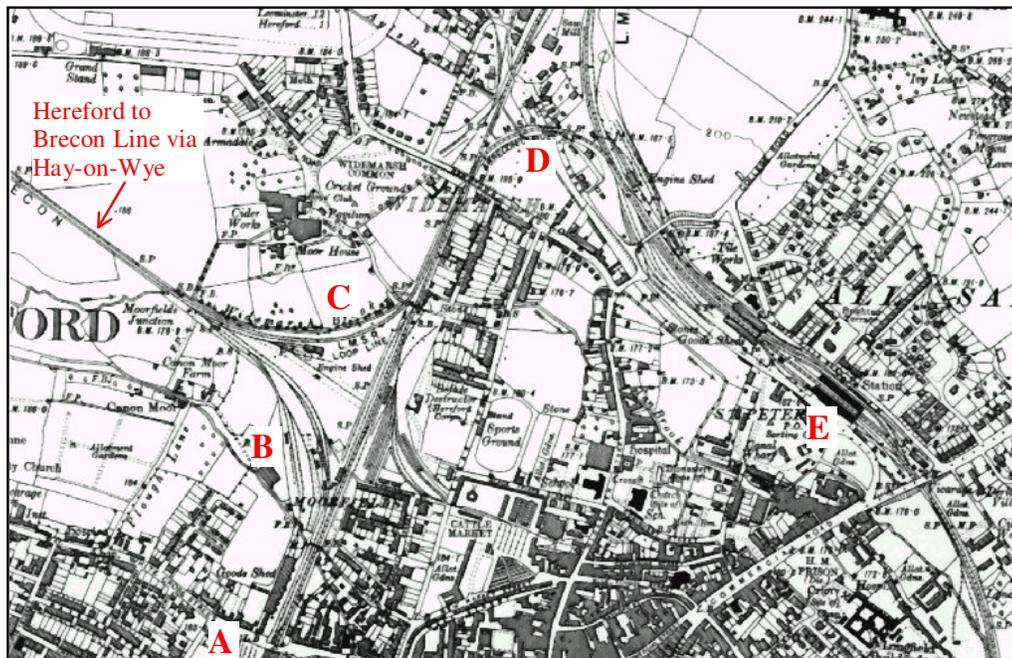


Figure 7: The Hereford end of the line in 1930.

The earliest station for the uncompleted line was a temporary one at Moorfields (B on map). The service was then transferred to Barton station (A) until its closure in 1893. This necessitated the construction of new lines at C and D in order to give the service access to the remaining Hereford station at Barr's Court (E).

The railway was originally incorporated under an act of 1859. Under the Brecon & Merthyr Railway (Amalgamation) Act 5th July 1865, power was given to the Brecon & Merthyr Tydfil Junction Railway Company and the Hereford, Hay & Brecon Railway Company to be amalgamated and for issue of shares or stock of the Brecon & Merthyr Tydfil Junction Railway Company to proprietors of the Hereford, Hay & Brecon Railway Company. This amalgamation was annulled by the Brecon & Merthyr Railway (Arrangements) Act of 1868, and the Hereford, Hay & Brecon Railway Company was reinstated.

Under The Hereford, Hay & Brecon Railway Act of 1869 this company was given fresh powers, and under The Midland Railway Act of 30th July 1874, The Hereford, Hay & Brecon Railway was vested by way of lease in perpetuity in The Midland Railway Company as from 1st July 1874.

Under Section 31 of Midland Railway Act of 25th June 1886, The Hereford, Hay & Brecon Railway Company was to be dissolved and vested in The Midland Railway Company as soon as mortgages and debenture stock of the former company had been exchanged for debenture stock of the Midland Railway Company.

Eventually the Midland Railway Company was amalgamated into London Midland & Scottish Railway Company under the North Western, Midland and West Scottish Group Amalgamation Scheme 1922 dated 30th December 1922.

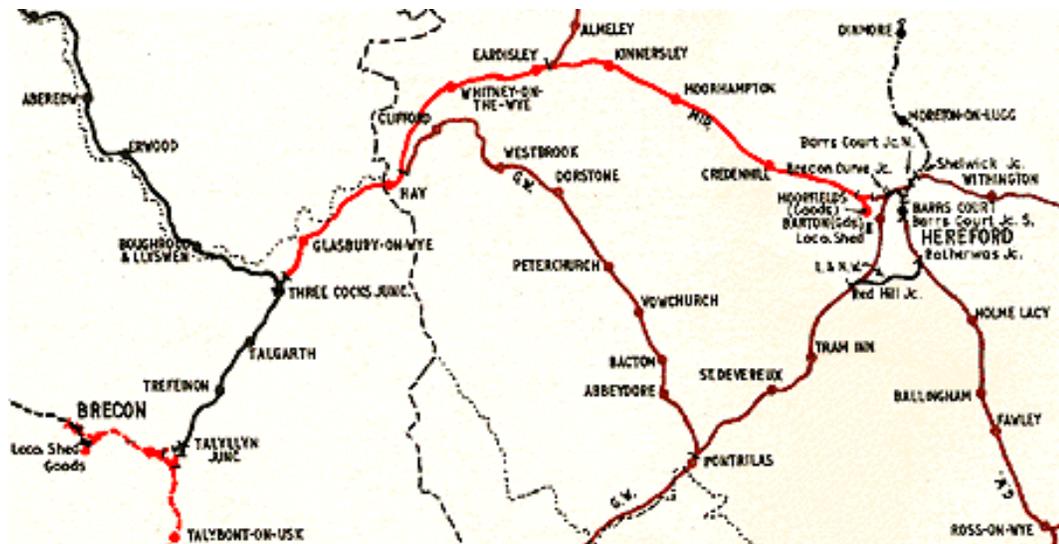


Figure 8: The Railway Route

As authorised by the act of 1859¹, the HH & B was to stretch 34 miles, but this length was reduced to 27 miles by the truncation of two sections. That from Three Cocks Junction to Talylyn Junction was transferred to the Mid Wales Railway and that between Talylyn and Brecon to the Brecon & Merthyr.

The HH & B bought the Hay Railway (a tramway) in 1860 and adapted three miles for its own route. The route was built in stages: the nine miles from Hereford to Moorhampton opened in October 1862; a further five miles to Eardisley were completed in June 1863, followed by Eardisley to Hay (seven miles) in July 1864 and the remaining 5½ miles to Three Cocks Junction on 19 September 1864 when a through service began.

The line did not attract the passenger and goods traffic for which its promoters had hoped and it was soon in financial difficulties, from which it was rescued by the Midland Railway, which bought the company in 1874.

The value of the HH & B to the Midland was that it provided a through route to Swansea, although in passenger terms there was little to exploit and from 1874 until 1932 small 0-4-4 tanks valiantly performed trips of 79½ miles in each direction on some of the longest tank locomotive diagrams in Britain.

Rather more important was the exploitation of the route by the LNWR, which it developed for freight between South Wales and Birmingham. In later years, the single line between Hereford (Moorfields Junction) and Three Cocks was worked by electric train taken with crossing stations at Moorhampton (for a passenger and freight train, or two freight trains), and at Eardisley, Hay-on-Wye and Three Cocks.

The passage of the SLS special on 30th December 1962 did not quite mark the end of the HH & B for it continued to be a through route to South Wales until 4 May 1964 when it was cut back to Eardisley and to Hereford (Brecon Junction) four months later.

¹ Forgotten Railways: Volume 11 Severn Valley and Welsh Border

The railway became known as “The Egg and Bacon Railway” because of the farm produce it used to bring in to Hereford.

The engineers for the line appear to have originally been a William McCormick of Birkenhead and James Holme of Liverpool. There is a document that shows that Thomas Savin of Oswestry then took on responsibilities for completion of the route.¹ Mr Savin finished the project and was present as the contractor at a meeting of the directors and shareholders at the company's office, 9a, Bridge Street Westminster on 25th August 1864. At that meeting the chairman reported that the previous day he and several others had travelled the line throughout its entire length to Brecon.²

The line had already been opened as far as Hay on 11th July. It had reached Eardisley some time before and had been due to open to Hay on 1st April. Unfortunately the bridge at Whitney had failed to meet with the approval of the government inspector which led to a delay.³ It had not been until the previous Saturday (9th July) that it became known in Hay that the line would open on Monday. It was therefore decided that celebrations would wait until the line was open through to Brecon.

It seems to be this final stage that aroused most interest. On the 1st October the Hereford Times commented on the improvement of communication with Hay - *'instead of going to the coach office in Broad-street, and paying down a considerable sum even for a seat on the outside, we have only to go to the Barton Railway station, pay a trifling sum at the little window, receive the ticket courteously rendered, take our seat in the convenient carriages, and in a twinkling we are shaking hands with our friends in Hay'*.

On another page of the same edition a reported conversation between two female travellers makes the point vividly - *'in the old coach they charged 10s (50p) and we was travelling all day nearly'*. The journey time was now one hour and the return fare 1s 9d (less than nine pence).

The clergyman and diarist Francis Kilvert often used the line. Kilvert was a curate at Clyro in Radnorshire, near Hay-on-Wye, for seven years from 1865. The use that the local people were making of the train is suggested on 28th April 1870 - *'returned [from Whitney to Hay] by the market train crowded with market people'*.

Kilvert's parental home was in Langley Burrell in Wiltshire, and as a consequence his journeys there entailed changing stations at Hereford. For the 28th May 1870, he recounts a furious drive on a fly⁴ between Barr's Court Station, on one side of town, to Barton Station, on the other.

He was not always a joyful traveller. On 11th January 1872 he recorded *'left Langley by the usual early beastly train'*. Perhaps his mood is understandable considering that it was winter and he had just spent a pleasant Christmas break with his family.

Despite the ready availability of rail transport and its acceptance into general use among many sections of the population, not everyone was completely familiar with the longer routes. On 29th February 1872 Kilvert recorded *'there is a general belief among the Clyro and Langley people that I cannot travel from Radnorshire to Wiltshire without going over the sea'*.

¹ Various documents in Herefordshire Record Office

² Hereford Times, 27th August 1864

³ Hereford Times, 16th July 1864

⁴ A light horse-drawn vehicle - these would have been waiting for hire at the station.

On Monday 2nd September that year he finally left Clyro 'As the train went down the valley of the Wye to Hereford I waved my handkerchief to all the old familiar friendly houses'.

3.0 Project aims and objectives

The aims of the project were to:

- record a major landscape feature before its removal and to investigate its means of construction
- record the changed levels of the ground surface resulting from the removal of the embankment

4.0 Methodology

The following methodology was employed: -

- The embankment as it existed at the start of the project was surveyed by means of triangulation and levelling
- The demolition of the embankment was monitored by means of site visits
- The ground surface was re-surveyed at the end of the project.

5.0 The Results

5.1 The Stratigraphy

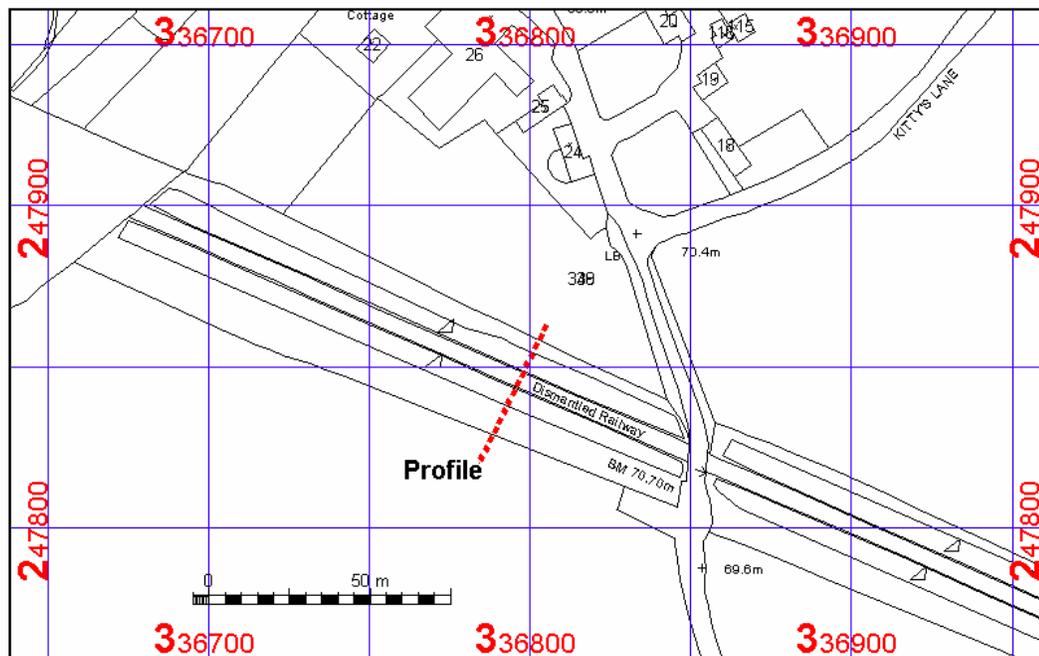


Figure 9: Site plan

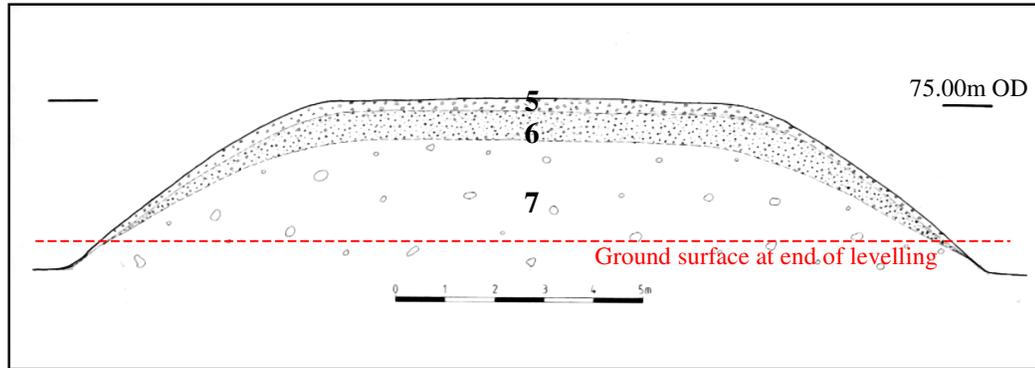


Figure 10: Profile through embankment

The length of embankment examined (context 1) extended for 190 metres west-north-west from the revetments of a brick-built bridge (context 2) which had originally carried the railway over a minor road. The embankment was up to 3.5 metres in height.

The core of the embankment (7) was heavy red clay mixed with large rounded stones. As the embankment was not totally removed, the base of this feature was not observed. Therefore the nature of its interface with the original soil is not known. Above 7 was the original ballast layer (6) of fine gravel mixed with large rounded stones which was approximately 0.6 metres thick. The topmost layer (5) was formed of mixed ash, clinker and slag and was 0.3 metres thick. Many broken bottles lay on this surface.

The width of the embankment in the area of the project was 18.5 metres at the base. The width at the top was 8.5 metres.



Plate 1: The embankment from the south

Two drainage ditches flanked the embankment. To the north-north-east ditch 2 ran at a distance which varied between 4 and 8 metres from the base of the embankment. Its counterpart to the south-south-west was at a distance which varied from 9 to 13.5 metres from the embankment.



Plate 2: View along top of the embankment - looking west



Plate 3: The bridge from the south. The western (left) abutment has now been demolished



late 4: The internal elevation of the western abutment after the embankment had been levelled.

5.2 Finds

Not unexpectedly, the project produced little in the way of finds.

One length of rail was recovered, and several beer bottles from the upper surface.

The rail was made of cast iron and appears to be of a type initially used by the Midland RC and known as a 'reversible rail'¹. This was supposed to lengthen the service life of the rail by making it possible to lift the lengths of rail and relay them with their bottom surface facing up. In practice this did not prove practicable and the technique was subsequently abandoned.

The bottles would appear to be late 19th century green glass beer bottles, several bearing the stamp of the 'Hereford and Tredegar Brewery'.

6.0 Conclusions

The interpretation of this site was of course, fairly straightforward. Essentially it was an embankment, with flanking ditches, which had formed part of the railway between Hereford and Brecon.

The inference that can be drawn from its construction is that the nearest available material was used. In this case this seems to have been derived from the nearby cutting through the Staunton Moraine between (SO) 33768 24743 and 33825 24720. The source of the gravel ballast is not known, but again the determinants of distance and convenience would have been decisive.

7.0 Archive deposition

The primary project archive, consisting of the recovered material and any original paper records, will be prepared and stored in accordance with the guidelines laid down in the Institute of Field Archaeologists' guidelines for the preparation and storage of archives. The primary archive will be stored with Hereford City Museum.

¹

Pers. comm. J. Newby-Vincent

A copy of the digital archive stored on CD and consisting of context data, together with the site plan and selected photographs, will accompany the primary archive.

The client, in consultation with the project manager, will make provision for the deposition of all finds from the excavation with the Hereford City Museum. On completion of the fieldwork and the processing, collation, recording and analysis of the finds from the excavation all finds will be handed over to the museum staff, along with the project archive. Arrangements will be made with the museum for the transfer of title.

8.0 Publication and dissemination proposals

Paper copies of this report will be lodged with the Archaeological Adviser to Herefordshire Council, Herefordshire Sites and Monuments Record and Hereford City Library. A short note on the project will be prepared for publication in the Transactions of the Woolhope Naturalists Field Club.

CDs of this report, together with the supporting archival material will be available from Archenfield Archaeology.

The complete photographic record, including the negatives, will be retained by Archenfield Archaeology.

General bibliography

Documents held by Herefordshire Record Office

Tithe Commissioners, 1841, Tithe Apportionment for Norton Canon Parish
Tithe Commissioners, 1868, Altered Tithe Apportionment for Norton Canon Parish
The Hereford Times

Christiansen, Rex, 1988	Forgotten Railways: Volume 11 Severn Valley and Welsh Border. Newton Abbot, David St. John Thomas
Brandon, A, 1989	Geology of the country between Hereford and Leominster: memoir for 1:50000 geological sheet 198 (England and Wales). (British Geological Survey) London HMSO
Hughes, Kathleen, & Ifans, Dafydd, 1982 (eds)	The Dairy of Francis Kilvert, April-June 1870. Aberystwyth.
Plomer, William, 1944	Kilvert's Dairy, 1870-1879. Jonathan Cape
Simpson, Helen, J, 1997	The Day the Trains Came. Gracewing.
Smith, William, H, 1998	Herefordshire Railways. Sutton

Cartographic material

Tithe Commissioners, 1841	Norton Canon Parish Tithe Map
Tithe Commissioners, 1868	Norton Canon Parish - altered tithe map
Ordnance Survey, 1904	2 nd edition 1:2500 plan. County Series, Herefordshire Sheet XXV.10
Ordnance Survey, 1930	6" map - Herefordshire sheet XXXIII.SE
British Geological Survey, 1989	1:50000 Series, England and Wales Sheet 198 - Hereford: Solid and Drift Geology

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