Network Rail Trent Valley West Coast Mainline Upgrade, Staffordshire: Tamworth to Lichfield Sites 22, 24, 25



Archaeological Evaluation Report



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NGR: SK 1860 0680

ARCHAEOLOGICAL EVALUATION REPORT

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SUMMARY

In June 2005, Oxford Archaeology (OA) carried out a field evaluation as part of the West Coast Main Line upgrade between Tamworth and Lichfield in Staffordshire on behalf of Network Rail. A number of areas of this rail improvement have been designated to be of archaeological interest and this report concerns the zones known in the project known as Areas 22, 24 and 25. These are located mid-way between Tamworth and Whittington, where the railway crosses the river Tame (centred at NGR: SK 1860 0680).

The evaluation revealed thick layers of alluvial deposits derived from the river Tame, post-medieval/modern field drains and service trenches and deposits associated with the construction of the nearby railway. A modern ditch and pit were also observed in the course of the work, as was a banked earthwork feature, possibly bank or former hedgerow feature of post-medieval date.

1 INTRODUCTION

1.1 Location and scope of work

- 1.1.1 In June 2005, Oxford Archaeology (OA) carried out a field evaluation on land adjacent to the West Coast Railway Mainline, at the point where it crosses the river Tame in Staffordshire. This evaluation site is situated north-west of Tamworth, is *c* 1 ha. in area and is located at NGR: SK 1860 0680 (centred).
- 1.1.2 The evaluation was carried out on behalf of Network Rail ahead of works for upgrading of the rail line between Tamworth and Lichfield (known as Network Rail 'Order 2').
- 1.1.3 Discussions between Ian Wykes, Archaeological Officer for Staffordshire County Council and OA, led to an agreement that in areas where there was the potential for damage to possible archaeological remains, due to temporary or permanent landdisturbance, archaeological fieldwork would be carried out.
- 1.1.4 As a first stage, this would take the form of a trenched evaluation (except in the case of new haul roads, which would be covered by a separate watching brief). An outline project proposal detailing how OA would implement the evaluation and watching briefs was agreed between all parties (OA 2004 and see 1.3 below).

1.2 Geology and topography

- 1.2.1 The part of the area of this stage of the railway upgrade lies on the recent Gravel Terrace and the floodplain of the river Tame, overlying Pleistocene Glacial Boulder Clay at *c* 55 m OD.
- 1.2.2 The site is located c 1.5 miles north-west of Tamworth town centre where the rail track crosses the river Tame. For the present evaluation, the site was divided into three Areas numbered 22, 24 and 25 (Fig. 1), all of which are fairly level fields.

- 1.2.3 Area 22 is situated on the east bank of the river Tame and is bounded by the rail track to the south, an existing hedge line to the west and the new Haul Road 5 to the north.
- 1.2.4 Areas 24 and 25 are situated on the west bank of the river Tame, to the north-east and south-west of the rail track respectively. Area 24 is bounded to the north-east by Haul Road 5, to the south-west by the rail track. Area 25 extends 60 m south-west of the rail track, which forms its northeastern limit. Prior to the current development, Areas 24 and 25 were used for agriculture, having been ploughed recently, and Area 22 was under pasture.

1.3 **Previous work and project background**

- 1.3.1 In 2002, an initial phase of field-walking was carried out for *Railtrack* along the northern side of the railway line between (approximately) Whittington and the Sewage works to the north-west of Tamworth.
- 1.3.2 The report for this work has not yet been produced, as the project did not continue once *Railtrack* as a company had ceased to exist. The results of the work, however, revealed post-medieval material throughout the study area in the vicinity of a former track-way. It was thought, nonetheless, that there would have been greater potential for archaeological finds along the walked route, owing to the number of crop marks within the vicinity of the track-way and in adjacent fields.
- 1.3.3 In 2002, when Network Rail Order 2 went to Public Inquiry, Staffordshire County Council requested that further and more detailed archaeological work should be undertaken on known crop-marks along the route and within fields with ancient field names depicted on Parish Tithe maps.
- 1.3.4 The Council also requested that an all-encompassing archaeological project design be produced to cover the construction works proposed under Order 2. This work (*West Coast Mainline Upgrade Trent Valley. Outline Proposal for Phase 1 Works, OA 2004*) was undertaken by OA and included provision for both evaluation trenches and for watching briefs.
- 1.3.5 Currently, the construction of haul roads associated with the development is being covered by watching briefs being carried out by OA. These shall be reported separately

1.4 Acknowledgements

1.4.1 OA extends its thanks to Network Rail and to Alfred MacAlpines for providing detailed plans of the areas to be investigated. OA's Hugo Pinto supervised the evaluation works under the management of Clare King of OA.

2 EVALUATION AIMS

2.1.1 The aims of the evaluation were to determine the location, extent, date, character and state of preservation of any archaeological remains surviving on the site.

- 2.1.2 To establish the ecofactual and environmental potential of archaeological deposits and features.
- 2.1.3 To make available the results of the investigation on completion of the fieldwork and
- 2.1.4 To define relevant research priorities if additional archaeological investigation was deemed necessary.

3 EVALUATION METHODOLOGY

3.1 Scope of fieldwork, methods and recording

- 3.1.1 The field evaluation in Areas 22, 24 and 25 was initially to comprise the excavation of fifteen trenches, but as three of these were to be located along the line of temporary haulage road Number 5 (Trenches 6, 8, 11), these locations were covered by a separate watching brief instead, to be reported at a later date.
- 3.1.2 The evaluation finally consisted of twelve trenches each measuring 30 m by *c* 1.6 m (Fig. 2). The overburden was removed under close archaeological supervision by a JCB mechanical excavator fitted with a toothless ditching bucket. The trenches were mechanically excavated to the top of natural deposits or the top of any significant archaeological level, whichever was highest.
- 3.1.3 The trenches were cleaned by hand and the revealed features were sampled to determine their extent and nature, and to retrieve finds and environmental samples. All archaeological features were planned and where excavated their sections drawn at scales of 1:20. All features were photographed using colour slide and black and white print film. Recording followed procedures outlined in the *OA Fieldwork Manual* (ed. D Wilkinson, 1992). The stratigraphy of the trench was recorded even where no archaeological features were encountered. A limited number of sample sections of some of the trenches are included in this report the remainder are held with the archive.

3.2 Finds and palaeo-environmental evidence

- 3.2.1 Finds were recovered by hand during the course of the evaluation and bagged by context.
- 3.2.2 No deposits of environmental significance were revealed. The majority of deposits were layers of natural alluvium.

4 **RESULTS: GENERAL**

4.1 Soils and ground conditions

4.1.1 The site is located on terrace gravels overlying Pleistocene Glacial Boulder Clay; the soils encountered during the evaluation were almost entirely alluvial clays and were well drained. Field conditions were dry at the time of the evaluation.

5 **RESULTS: DESCRIPTIONS**

5.1 **Description of deposits**

<u>Area 22</u>

Trenches 1, 2, 3, 4, 5, and 7, 9 and 10 (Trenches 6, 8 not excavated)

- 5.1.1 Trenches 1, 3, 4 and 5 were aligned NE-SW and Trenches 2, 7, 9 and 10 were aligned NW-SE. All trenches measured *c* 30 m by 1.6 m. The proposed trenches (Trenches 6 and 8) were not excavated as they were located along the line of Haul Road 5 and were covered by watching brief. Sample sections are drawn for Trenches 1, 3 and 5 in (Figs 3 and 4).
- 5.1.2 The earliest deposit exposed within these trenches was a natural layer consisting of silty clay alluvium mixed with sandy gravel patches and frequent manganese oxide inclusions (contexts 103, 203, 303, 403, 503, 704, 904 and 1004).
- 5.1.3 The level of these layers ranged from 54.12 m OD in Trench 5 (503) to 55.43 m OD in Trench 2 (203), with an average level of 55.1 m OD across all trenches within Area 22.
- 5.1.4 In Trenches 1 (103), 3 (303), 5 (503) and 7 (704) this was equivalent to an average of 0.9, 1.12, 1.78 and 1.22 m below ground level (bgl) respectively. In Trench 10 (1004) it was 0.82 m bgl and in Trenches 2 (203), 4 (403) and 9 (904) to 0.65, 0.78 and 0.79 m bgl respectively.
- 5.1.5 These values indicate a slightly greater deposition of overlying alluvial deposits in trenches towards the south and west of Area 22 (Trenches 1, 3, 5 and 7) which progressively decreases in thickness towards the NE of the Area (Trenches 2, 4 and 9).
- 5.1.6 Directly overlying 703, 903, 1003 and the natural across all other trenches in Area 22 was a layer of silty clay alluvium with fewer manganese inclusions (contexts 102, 202, 302, 402, 502, 702, 902 and 1002). These layers had an average thickness of 0.32 m, and were overlain by another layer of silty clay alluvium (contexts 101, 201, 301, 401, 501, 701, 901 and 1001 with an average thickness of 0.39 m).
- 5.1.7 Overlying and sealing these alluvial deposits across all trenches in this area was a layer of topsoil (contexts 100, 200, 300, 400, 500, 700, 900 and 1000) with an average thickness of c 0.3 m.
- 5.1.8 With the exception of two post-medieval field drains in Trench 2, both on a N-S alignment and situated some 4 m and 0.3 m from the SE end of the trench and a further post-medieval field drain within Trench 9, on a NE-SW alignment and situated 5 m from the SE end of the trench, no archaeological features were exposed in any trench within Area 22.

- 5.1.9 All three field drains were cut into the upper two alluvium layers (201 and 202 within Trench 2; and 901 and 902 within Trench 9), but did not reach the depth of underlying natural layers 203 and 904 (Trench 2 and 9 respectively).
- 5.1.10 In addition to this there was a possible linear feature within Area 22 that was not exposed within any of the trenches. This was a low bank or stepped earthwork, visible on the ground on a NE-SW alignment and extending from Haul Road 5 to continue nearly as far as the railway embankment (see Fig. 2). It is possible that it represents a defunct field boundary or former hedgerow.

<u> Area 24</u>

Trench 12 (Trench 11 not excavated)

- 5.1.11 Trench 12 was aligned NW-SE and measured 28 by 1.6 m. This was the only trench within Area 24 (Fig. 2) as the proposed Trench 11 was within area of Haul Road 5 and has been covered by watching brief.
- 5.1.12 A c 1.5 m long sondage at the NE end of Trench 12 was excavated to a depth of 1.84 m bgl and the earliest exposed deposit at 53.9 m OD (1205) was a natural layer of blue clay, likely to be Pleistocene Glacial Boulder Clay. Overlying this was a layer of silty clay alluvium 1204 (at 54.1 m OD) overlain in turn by another layer of silty clay alluvium (1203 at 54.3 m OD) containing manganese oxide inclusions. Both 1203 and 1204 were natural alluvial layers and the continuation of the trench to the SE of the sondage was machine-excavated to the base of layer 1203 to c 1.5 m bgl. Overlying 1203 was a 0.66 m thick later of alluvium (1202), that was subsequently overlain by another 0.48 m thick alluvium layer (1201).
- 5.1.13 Cutting 1201 was trench 1209, on an E-W alignment, containing a modern service pipe. The pipe trench (1209) cut through all alluvium layers (1201, 1202, 1203 and 1204) and also partly into natural clay 1205, thus truncating all potential archaeological remains along its length. The alluvium and the fill of the service trench were overlain by a 0.2 m thick layer of topsoil (1200).

<u>Area 25</u>

Trench 13

5.1.14 Trench 13 was aligned NNW-SSE and measured 30 by 1.6 m. The earliest deposit encountered was natural gravel (1302) at 0.58 m blg (c 54.38 m OD), though a 1 m square sondage. Overlying 1302 was a c 0.2 m thick layer (1301) of slightly modified natural gravel representing a subsoil interface between natural 1302 and topsoil 1300. At 13.5 m from the SSE end of the trench, adjacent to the eastern limit of excavation, 1301 was cut by a pit (1303), reaching a depth of c 1 m blg (Fig. 5). This pit was filled by a single deposit (1304) similar to the topsoil (1300). Pit 1303 was rectangular in plan, with its relatively steep SW side extending 0.8 m from the eastern baulk into the centre of the trench where it is truncated by a modern (plastic) field drain running across the trench on a NE-SW alignment, thus forming its NW limit. As there was no discernible difference between pit fill 1304 and the fill of the field drain, it is likely that pit 1303 was at least contemporary with the field drain and is also modern. Both fill 1304 and subsoil 1301 were overlain by a c 0.36 m thick layer of topsoil (1300).

<u> Area 25</u>

Trench 14

- 5.1.15 Trench 14 was aligned WSW-ENE, within Area 25 and measured 30 by 1.6 m. At the western end of the trench a natural sandy layer (1407) was exposed at 1.1 m bgl (*c* 53.39 m OD). Overlying 1407 was natural clay layer 1405, which extended the length of the trench and was fully excavated along the westernmost 10 m of the trench. Overlying clay layer 1405 were three layers of natural silty clay alluvium with progressively less manganese oxide inclusions from lower to uppermost (1404, 1403 and 1402 respectively), totalling in thickness 0.7 m.
- 5.1.16 Overlying these alluvial deposits was a dumping or levelling layer comprising of deposits 1401 and 1406. Deposit 1401 extended c 14 m from the western limit of the trench and was a relatively sterile pale red brickearth with degraded green-stone inclusions. Layer 1406, which continued to the east, contained abundant brick fragments, similar to those used in the construction of the nearby railway bridge.
- 5.1.17 1401 overlay 1406, but it was clear that both are part of a single deposition event, either as a levelling layer associated with the construction of the railway bridge or dumping after construction. These deposits were overlain by a *c* 0.26 m thick layer of topsoil (1400).

<u> Area 25</u>

Trench 15

- 5.1.18 Trench 15 was located in the SW corner of Area 25, on a NNW-SSE alignment and measured 30 by 1.6 m. Natural clay 1513 was the earliest deposit encountered at 1.2 m bgl below the base of ditch 1506 (see 5.1.13). Overlying 1513 was another natural clay layer (1505) at 1 m bgl at the southern end of the trench.
- 5.1.19 Overlying this was a 0.2 m thick layer of natural silty clay alluvium (1503) with manganese oxide inclusions, which was overlain by two similar layers of alluvium (1502 and 1501 successively), with a combined thickness of 0.6 m.
- 5.1.20 Cut into alluvium 1501 was a ditch (1506), aligned east-west and located 5 m north of southern end of the trench (modern drainage feature, not illustrated). The ditch was 2.5 m wide and up to 1 m deep. Ditch 1506 was filled by redeposited natural clay 1512 (c 0.22 m thick) which was overlain by two successive silty clay fills (1511 and 1510) representing gradual silting of the ditch. Overlying 1510 was an almost pure, white sand backfill with charcoal flecks (1509) which was overlain by silty clay fill 1508. The uppermost ditch fill (1507) was a paler, siltier deposit and was overlain by topsoil 1500. No finds were recovered from any of the ditch-fills.

5.2 Finds

5.2.1 The only finds from the evaluation came from 1401 and comprised brick pieces probably derived from construction of the nearby railway. They are Victorian or later in date and are worthy of no further comment.

6 **DISCUSSION AND INTERPRETATION**

6.1 **Reliability of field investigation**

- 6.1.1 The stratigraphy encountered was uniform across Areas 22, 24 and 25, consisting of Pleistocene Glacial Boulder Clay or Gravel Terrace Gravels overlain by natural alluvium layers which are overlain by topsoil (except Trench 13, situated on the edge of the recent Gravel Terrace, where no alluvium has accumulated).
- 6.1.2 With the exception of the pipe trench in Trench 12, possibly associated with the construction of the rail track, the only modern disturbance was due to ploughing. The results of the investigation are thought to be a reliable representation of the archaeological potential of the site.

6.2 Conclusions

- 6.2.1 Although no finds were recovered from the fills of ditch 1506 in Trench 15, given that the ditch cut was cut from immediately below topsoil (1500) and that alluvium deposition has been relatively continuous, especially in areas close to current river course where the ditch is located, it is likely to be post-medieval/modern in date. Likewise the pit in Trench 13 appears also to be relatively modern in date.
- 6.2.2 Together with the post-medieval field drains encountered in Trenches 2, 9 and 13, it seems likely that the function of ditch 1506 was for drainage of the floodplain into the River Tame.
- 6.2.3 Within Trench 14 a dumping or levelling layer associated with the construction of the railway was encountered, possibly deriving from make-up layers for the foundations of the bridge to the east or from a haul road for its construction.
- 6.2.4 Within Trench 12 a service trench for a cast-iron pipe was investigated and was probably also associated with the construction of the rail track.
- 6.2.5 No features or finds from the Prehistoric, Roman, Saxon or medieval periods were identified. The bank seen on the middle of site Area 22 is likely to be of recent origin.

APPENDICES

Trench	Ctx No	Туре	Width (m)	Thick. (m)	Comment
1					
1	100	Layer		0.22	Modern ploughsoil
	101	Layer		0.4	Alluvium
	102	Layer		0.38	Alluvium
	103	Layer			Gravel natural
2					
	200	Layer		0.28	Modern ploughsoil
	201	Layer		0.32	Alluvium
	202	Layer		0.36	Alluvium
	203	Layer			Gravel natural
3					
	300	Layer		0.2	Modern ploughsoil
	301	Layer		0.52	Alluvium
	302	Layer		0.32	Alluvium
	303	Layer			Gravel natural
4					
	400	Layer		0.24	Modern ploughsoil
	401	Layer		0.25	Alluvium
	402	Layer		0.28	Alluvium
	403	Layer			Gravel natural
5					
	500	Layer		0.3	Modern ploughsoil
	501	Layer		0.5	Alluvium
	502	Layer		0.3	Alluvium
	503	Layer			Gravel natural
7					
	700	Layer		0.4	Modern ploughsoil
	701	Layer		0.5	Alluvium
	702	Layer		0.52	Alluvium
	703	Layer		0.24	Alluvium
	704	Layer			Gravel natural
9					
)	900	Laver		0.26	Modern ploughsoil
	901	Layer		0.20	Alluvium
	902	Laver		0.2	Alluvium
	903	Laver		0.14	Alluvium
	904	Laver		0.17	Gravel natural
1.0					
10	1000	Lover		0.2	Modern plaushasil
	1000	Layer		0.2	A llouisern piougnsoil
	1001	Layer		0.32	Alluvium
	1002	Layer		0.42	Alluvium
	1003	Layer			Alluvium
	1004				Gravel natural
	Layer				
	I	1			

APPENDIX 1 ARCHAEOLOGICAL CONTEXT INVENTORY

12	1200	Layer	0.24	Modern ploughsoil
	1201	Layer	0.48	Alluvium
	1202	Layer	0.66	Alluvium
	1203	Layer	0.14	Alluvium
	1204	Layer	0.14	Alluvium
	1205	Layer		Clay natural
	1206	Fill		Backfill
	1207	Fill		Backfill
	1208	Fill		Backfill
	1209	Cut		Pipe trench
13				
	1300	Layer	0.42	Modern ploughsoil
	1301	Layer	0.16	Subsoil
	1302	Layer		Gravel natural
	1303	Cut	0.6	Pit
	1304	Fill	0.6	Fill of pit
14				
	1400	Layer		Modern ploughsoil
	1401	Layer		Make-up/ dump
	1402	Layer		Alluvium
	1403	Layer		Alluvium
	1404	Layer		Alluvium
	1405	Layer		Clay natural
	1406	Layer		Make-up/ dump
	1407	Layer		Sand natural
15				
	1500	Layer		Modern ploughsoil
	1501	Layer		Alluvium
	1502	Layer		Alluvium
	1503	Layer		Alluvium
	1504	Layer		Alluvium
	1505	Layer		Clay natural
	1506	Cut		Ditch
	1507	Fill		Fill of ditch
	1508	Fill		Fill of ditch
	1509	Fill		Fill of ditch
	1510	Fill		Fill of ditch
	1511	Fill		Fill of ditch
	1512	Fill		Fill of ditch
	1513	Layer		Clay natural

APPENDIX 2 BIBLIOGRAPHY AND REFERENCES

OA 1992 Fieldwork Manual (1st Edition, August 1992)

OA 2004 West Coast Mainline Upgrade - Trent Valley. Outline Proposal for Phase 1 Works

APPENDIX 3 SUMMARY OF SITE DETAILS

Site name: West Coast Mainline Upgrade, Tamworth to Lichfield Site code: WCMLTV05 Grid reference: NGR: SK 1860 0680 Type of evaluation: 12 trenches in three development zones: Areas 22, 24 and 25 Date and duration of project: June 2005, two weeks Area of site: 1 ha.

Summary of results: The evaluation revealed post-medieval field drains, a probable postmedieval bank feature or former hedgerow and a modern ditch and pit feature. Alluvial deposits derived from the River Tame were consistently observed across the site; debris associated with the construction of the nearby railway was also observed.

Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with The Potteries Museum & Art Gallery, Staffordshire in due course, under the following accession number: 2005 LH.1



Figure 1: Tamworth to Lichfield - evaluation areas 22, 24 and 25



Figure 2: Evaluation trenches in Areas 22, 24 and 25



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Figure 3: Sample sections 100 and 101



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Figure 4: Sample sections: Trenches 3 and 5



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