ARCHAEOLOGICAL MONITORING OF **GEOTECHNICAL** INVESTIGATIONS, NORTH LITTLETON, WORCESTERSHIRE

Tom Vaughan

Illustrated by Carolyn Hunt

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Project 2661 Report 1299 WSM 33974

Archaeological monitoring of geotechnical investigations, North Littleton Flood Alleviation Scheme (Phase 2), North and Middle Littleton, Worcestershire

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Background information

Client Site address

National Grid reference Sites and Monuments Record reference Brief Project design Project parameters Glendale Environmental North Littleton, North and Middle Littleton, Worcestershire SP 08414774 - SP 08204709 WSM 33974 HEAS 2004a HEAS 2004b IFA 1999

Previous archaeological work on the site

There has been no previous archaeological work undertaken on site.

Previous archaeological work on associated sites

A summary of the archaeology within the vicinity has been prepared in Goad *et al* 2004, to which this is intended to be appended.

Aims

The aim of the archaeological monitoring was to observe and record archaeological deposits, and to determine their nature, extent, state of preservation, date and type, as far as reasonably possible.

Methods

General specification for watching brief Sources consulted	CAS 1995 HER Sources cited by the HER
Date(s) of fieldwork Area of deposits observed Dimensions of excavated areas observed	3 rd -8 th November 2004 11 test pits & 4 boreholes. Indicated on Fig 1 Test Pits length 0.20-2.98m width 0.20-0.46m depth 0.23-1.20m
	Boreholes
Access to or visibility of structure	

Observation and monitoring was undertaken during hand excavation of the test pits and drilling of the boreholes. Within the test pits exposed surfaces were sufficiently clean to observe well differentiated archaeological deposits, though any less clear may have not been identified.

Statement of confidence

Access to, and visibility of, deposits allowed a high degree of confidence that the aims of the project have been achieved.

Deposit/structure descriptions

North Road Bridge

NB1: Test Pit

Context	Interpretation	Description	Depth (below ground level)
100	Topsoil	Mid-dark greyish brown clayey silt. Turfed. Compact and cohesive. Occasional medium sub-angular light grey gravel. Slightly diffuse boundary with 101 below.	0.00-0.23m
101	Subsoil	Mixed mid fawn grey silty clay. Compact and cohesive. Occasional large charcoal flecks, roots and brick fragments.	0.23-0.71m
102	Wall foundation	Light yellow/beige limestone with brick fragments and a flat grey slate overlying. Within 101. Alignment unclear. Within NNE end of trench.	0.48-0.56m
103	Natural	Decayed light fawn grey lias stone fragments. Compact.	0.45m+

NB2: Test Pit

Context	Interpretation	Description	Depth (below ground level)
200	Topsoil	Mid-dark greyish brown clayey silt. Turfed. Compact and cohesive. Occasional medium sub-angular light grey gravel. Slightly diffuse boundary with 201 below.	0.00-0.21m
201	Redeposited clay	Mid blue-grey clay. Compact and cohesive. Occasional sub-angular medium grey gravel. To NW side only.	0.07-0.32m
202	Service trench backfill	Mid orangey red sub-angular gravel and gravel dust. Compact but not cohesive.	0.16m+

NB3: Test Pit

Context	Interpretation	Description	Depth (below ground level)
300	Topsoil	Mid-dark greyish brown clayey silt. Turfed. Compact and cohesive. Occasional medium sub-angular light grey gravel. Frequent roots. Band of light beige sand to base (from concrete wing adjacent). Diffuse boundary with 301 below. No subsoil. As 302.	0.00-0.21m
301	Natural	Mixed light yellow beige and mid blue grey clay. Very compact. Cohesive. Occasional sub-angular light grey lias/limestone fragments. As 303?	0.11m+
302	Topsoil	Mid-dark greyish brown clayey silt. Turfed. Compact and cohesive. Occasional medium sub-angular light grey gravel. Frequent roots. Band of light beige sand to base (from concrete wing adjacent). Defined boundary with 304 below. As 300.	0.00-0.21m
303	Layer/natural?	Mixed light yellow beige and mid blue grey clay. Very compact. Cohesive. Occasional sub-angular light grey lias/limestone fragments. As 301/disturbed natural?	0.21m+
304	Fill	Dark blue/grey clay. Occasional light blue clay and mid/dark brown silty clay patches. Occasional small sub-angular pebbles. Frequent roots. Fill of 305.	0.21m+
305	Foundation trench	Straight side at c 50° to horizontal. Filled by 304. Not fully excavated. Foundation trench for bridge?	0.21m+

NB4: Test Pit

Context	Interpretation	Description	Depth (below ground level)
400	Topsoil	Mid-dark greyish brown clayey silt. Turfed. Compact and cohesive. Occasional medium sub-angular light grey gravel. Slightly diffuse boundary with 401 below. No subsoil. As 402.	0.00-0.07m
401	Natural	Mixed light yellow beige and mid blue grey clay. Very compact. Cohesive. Increasing sub-angular light grey lias/limestone fragments with depth. As 403	0.04m+
402	Topsoil	Mid-dark greyish brown clayey silt. Turfed. Compact and cohesive. Occasional medium sub-angular light grey gravel. Slightly diffuse boundary with 401 below. No subsoil. As 400.	0.00-0.20m
403	Layer/natural?	Mixed light yellow beige and mid blue grey clay. Very compact. Cohesive. Increasing sub-angular light grey lias/limestone fragments with depth. As 401/disturbed natural?	0.20m+
404	Fill	Mid/dark greyish brown silty clay. Light blue/grey clay patches. Occasional small sub-angular gravels. Frequent roots. Fill of 405.	0.20m+
405	Foundation trench	Sharp break of slope. Sub-convex edge at c 80° to horizontal. Filled by	0.20m+

404. Not fully excavated. Foundation trench for bridge repair?	

NB5: Borehole

Context	Interpretatio	n	Description	Depth (below ground level)
500	Topsoil		Mid-dark greyish brown clayey silt. Turfed. Compact and cohesive. Occasional medium sub-angular light grey gravel. Slightly diffuse boundary with 201 below.	0.00-0.18m
501	Service backfill	trench	Mid orangey red sub-angular gravel and gravel dust. Compact but not cohesive.	0.18-c 1.20m
502	Service backfill	trench	Mid blue-grey clay. Compact and cohesive. Occasional sub-angular medium grey gravel.	c 1.20-1.30m
503	Service backfill	trench	Light pinkish brown fine pea gravel.	c 1.30-1.40m
504	Natural		Light fawn beige and grey clay with bands of sub-angular lias/limestone fragments.	c 1.40m+

NB5a: Borehole: not observed.

NB6/001: Borehole

Context	Interpretation	Description	Depth (below
600	Topsoil	Mid-dark greyish brown clayey silt. Turfed. Compact and cohesive. Occasional medium sub-angular light grey gravel. Slightly diffuse boundary with 201 below.	ground level) 0.00-0.24m
601	Natural	Mid blue-grey clay. Compact and cohesive. Occasional sub-angular medium grey gravel.	0.24m+

NB7: Trench

Context	Interpretation	Description	Depth (below
			ground level)
700	Topsoil	Dark greyish brown clayey silt with mid blue/grey clay patches. Turfed.	0.00-0.16m
	-	Loose and uncompact.	
701	Bridge capping	Horizontal light greyish fawn concrete surface. Solid and intact. 20th	0.10m+
		century.	

NB8: Test Pit: not observed.

Footbridge

FB1: Test Pit: not observed.

FB2: Test Pit

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Context	Interpretation	Description	Depth (below
			ground level)
250	Topsoil	Mid/dark greyish brown clayey silt. Occasional sub-angular gravel.	0.00-0.23m
		Turfed. Loose and uncompact.	
251	Bridge foundation	Rough sub-angular limestone blocks, 0.25x0.15x0.05m set in mid grey	0.23m+
		silty clay.	

FB3: Test Pit: not excavated.

FB4: Borehole: not observed.

South Road Bridge

SB1: Test Pit

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Context	Interpretation	Description	Depth (below
			ground level)
130	Topsoil	Mid/dark grey brown silty clay. Occasional very small sub-angular	0.00-c 0.12m
		lias/limestone chips and fragments. Moderately compact and cohesive.	
131	Disturbed	Mid fawn grey clay with light yellow beige sand band. Frequent snail	c 0.12m+
	subsoil/natural	shell, white chalk flecks and sub-angular lias/limestone fragments.	
		Moderately compact and cohesive. Overlying modern service at 0.70m.	

SB2	: Test Pit		
Context	Interpretation	Description	Depth (below
			ground level)
230	Topsoil	Mid/dark grey brown silty clay. Occasional very small sub-angular	0.00-c 0.10m
		lias/limestone chips and fragments. Moderately compact and cohesive.	
231	Natural	Mid fawn grey clay. Frequent small sub-angular grey lias/limestone	c 0.10m+
		fragments. Compact and cohesive.	

SB3: Test Pit: not observed.

SB4: Test Pit

Context	Interpretation	Description	Depth ground le	(below evel)
430	Topsoil/weathered natural	Mid grey clay. Turfed with frequent roots. Occasional fawn/orange flecks and small sub-angular lias/limestone fragments. Moderately compact and cohesive. To base of test pit.	0.00-c 0.	/

SB5: Test Pit

SB5. TOST IC				
Context	Interpretation	Description	Depth	(below
			ground l	evel)
530	Topsoil/weathered	Mid grey clay. Turfed with frequent roots. Occasional fawn/orange flecks	0.00-c 0	.25m+
	natural	and small sub-angular lias/limestone fragments. Moderately compact and		
		cohesive. To base of test pit.		

SB6: Borehole

Context	Interpretation	Description	Depth (below	
			ground level)	
630	Topsoil	Mid grey brown silty clay. Turfed with occasional roots and small sub-	0.00-0.16m	
		angular lias/limestone fragments. Compact and cohesive.		
631	Natural	Mid/dark fawn grey clay. Frequent small-medium sub-angular light grey lias/limestone fragments. Occasional roots. Compact and cohesive.	ey 0.16m+	

SB7: Borehole: not drilled.

Farm Access Bridge

FA1: Test Pit: not excavated.

FA2: Test Pit: not observed.

FA3: Test Pit

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Context	Interpretation	Description	Depth ((below
			ground leve	1)
340	Topsoil	Mid grey brown silty clay. Turfed with occasional roots and small sub-	0.00-c 0.35r	n+
		angular lias/limestone fragments. Compact and cohesive.		

FA4: Borehole

Context	Interpretation	Description	Depth (below	
			ground level)	
440	Topsoil	Mid/dark grey brown silty clay. Turfed with occasional blue grey streaks. Compact and cohesive. Diffuse boundary with 441 below.	0.00-0.16m	
441	Natural	Yellowish fawn clay. Frequent yellow/orange and fawn/grey streaks. Occasional snail shell and sub-angular lias/limestone fragments. Compact and cohesive.		

FA4a: Borehole: not observed

FA5: Borehole

Context	Interpretation	Description	Depth (below	
			ground level)	
540	Topsoil	Mid/dark grey brown silty clay. Turfed with occasional blue grey streaks. Compact and cohesive. Diffuse boundary with 441 below.	0.00-c 0.18m	
541	Natural	Yellowish fawn clay. Frequent yellow/orange and fawn/grey streaks and sub- angular lias/limestone fragments. Compact and cohesive.	6 3	

Discussion and conclusions

There were no significant archaeological deposits, structures or horizons and no artefacts pre-dating the modern period were retrieved. There was also no evidence of structures pre-dating the existing bridges, which are thought to be 18th century.

The natural matrix of lias clay and limestone was noted to be very high in the deposit sequence, adjacent to the North Road Bridge (NB3, 4 and 6), the South Road Bridge (SB1-6) and Farm Access Bridge (FA4 and FA5), such that there was little or no developed subsoil horizon. The reason for this is unclear, it maybe the result of generally wear or deliberate landscaping. The natural matrix was not observed adjacent to the Footbridge (FB2).

A substantial subsoil layer [101] was identified within only one Test Pit (NB1), where it contained inclusions of charcoal and brick fragments. It sealed wall [102], which was determined to be of post-medieval/modern date, as it comprised limestone blocks with brick fragments and a slate damp course. Its alignment and function were unclear, although it did not appear to be related to the North Road Bridge, to the east.

The existence of modern services [202, 501-503] cut into the natural on the east-south-east and west-north-west sides of the North Road Bridge (NB2 and NB5) indicate that any earlier deposits have probably been truncated at this point. It is unclear if foundation trenches [305 and 405] relate to the original bridge construction or to later repairs (NB3 and NB4).

The facing inside and above the arch of the North Road Bridge was noted to be concrete (NB7 [701]), indicating that it has also been extensively repaired in the 20^{th} century, probably when the concrete wings were added (Goad *et al* 2004).

Beyond the obvious 19th/20th century repairs to the South Road Bridge, there was no indication of modern disturbance adjacent to the Footbridge, the South Road Bridge or the Farm Access Bridge.

Publication summary

The Service has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, the Service intends to use this summary as the basis for publication through local or regional journals. The client is requested to consider the content of this section as being acceptable for such publication.

An archaeological watching brief was undertaken on behalf of Glendale Environmental of the Geotechnical Investigations, North Littleton Flood Alleviation Scheme (Phase 2), North and Middle Littleton, Worcestershire (NGR ref SP 08414774 - SP 08204709; HER ref. 33974). Eleven test pits and four boreholes were monitored, but no significant results obtained.

Archaeological monitoring of geotechnical investigations, North Littleton, Worcestershire

Archive			
Fieldwork progress records AS2	3		
Photographic records AS3	2		
Digital photographs	27		
Augerhole record AS26	4		
Trench record sheet AS41	14		
Computer disks	1		
The project archive is intended to be placed at:	Worcestershire County Museum Hartlebury Castle, Hartlebury Near Kidderminster Worcestershire DY11 7XZ		
telephone	01299 250416		

Acknowledgements

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Bibliography

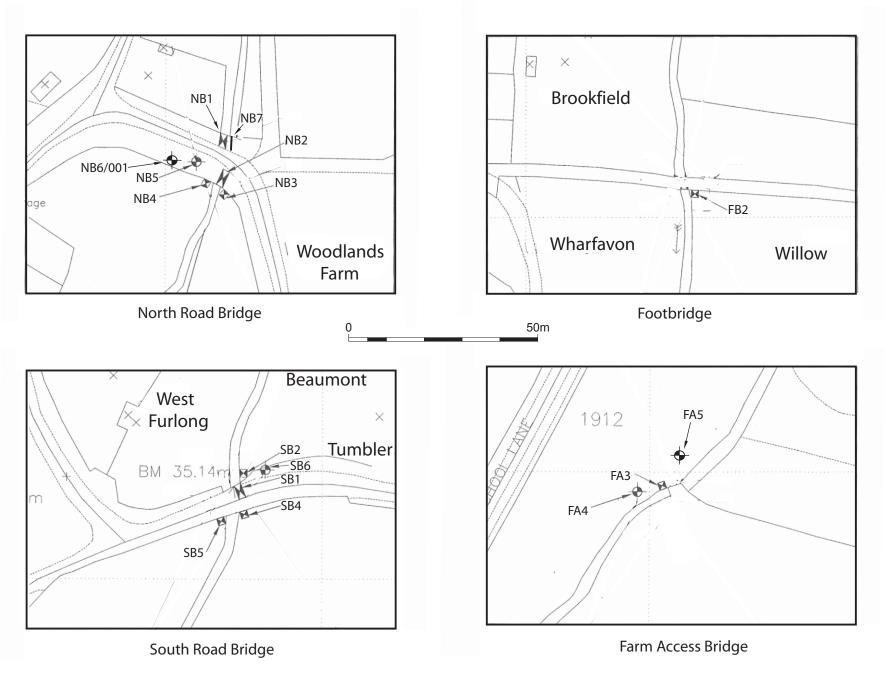
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HEAS 2004a *Requirements for an archaeological desk-based and field assessment at North Littleton, Worcestershire,* Historic Environment and Archaeology Service, Worcestershire County Council unpublished document valid until 25th February 2005

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Location of test pits and boreholes (based upon Arup dwg no S00-102)