LAND OFF ST ANNE’S LANE, NANTWICH, CHESHIRE

Timbers from St Anne’s Lane, Nantwich 2013

Oxford Archaeology North

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SUMMARY

RSK Environment Ltd commissioned Oxford Archaeology North (OA North), on behalf of PE Jones (Contractors) Ltd, to undertake an archaeological watching brief during groundworks associated with the installation of major services ahead of housing development on land off St Anne's Lane, Nantwich, Cheshire East (NGR SJ 64806 52356).

The watching brief (OA North 2013) showed the area to comprise made ground overlying a deep deposit of black waterlogged material, probably representing a prolonged series of floods dating from the Roman to the post-medieval period. This overlay natural clay and sand into which archaeological features of medieval, and potentially Roman date had been cut.

A palaeochannel, thought to be a channel leading into the River Weaver was recorded at the north-east end of the site. Within it was a large amount of worked wood apparently forming a revetment. The substantial timbers showed evidence of tool-marks suggestive of a Roman or medieval date. Thirteen of these timbers were lifted and have now been recorded in full. Samples from the three timbers selected as the most suitable for dendrochronological dating were submitted to a leading practitioner of the technique, but proved undateable.
ACKNOWLEDGEMENTS

Oxford Archaeology North is grateful to RSK Environment Ltd for commissioning this project. Species identification was undertaken by Denise Drury. The analysis and recording was undertaken by Christine Howard-Davis. Dendrochronological analysis was by Ian Tyers. Quality assurance was undertaken by Alan Lupton, who also managed the project.
1 INTRODUCTION

1.1 INTRODUCTION

1.1.1 In 2013, Oxford Archaeology North (OA North) were commissioned by RSK Environment Ltd, on behalf of PE Jones (Contractors) Ltd, to undertake an archaeological watching brief during groundworks associated with the installation of major services ahead of housing development on land off St Anne’s Lane, Nantwich, Cheshire East (NGR SJ 64806 52356).

1.1.2 The watching brief (OA North 2013) showed the area to comprise made ground overlying a deep deposit of black waterlogged material, probably representing a prolonged series of floods dating from the Roman to the post-medieval period. This overlay natural clay and sand into which archaeological features of medieval, and potentially Roman date had been cut. A palaeochannel, thought to form part of the River Weaver catchment was encountered at the north-east end of the site. Within it was a large amount of worked wood apparently forming a carefully constructed revetment. The substantial timbers showed evidence of tool-marks suggestive of a Roman or medieval date. Thirteen of these timbers were lifted and have now been recorded in full. Samples from the three timbers selected as the most suitable for dendrochronological dating were submitted to a leading practitioner of the technique, but proved undateable.

1.1.3 All the timbers were from a single context (8), excavated on the site in 2013 (OA North 2013), and interpreted by the excavator as a revetment bordering a natural palaeochannel, and, on stratigraphic grounds, possibly of Roman date.

1.2 METHODOLOGY

1.2.1 After an initial assessment (OA North 2013) the timbers remained in storage for several months, pending an opportunity to clean and record them in more detail. The dimensions of the timbers were recorded, and the bulk of the record comprises a brief written description supplemented by digital images recording salient points, for instance well-preserved toolmarks. The written record and the images are both retained within the site archive.
2 THE TIMBERS

2.1 INTRODUCTION

2.1.1 In total, 13 large fragments of oak timbers were recovered, all from context 8. Of these, six were examined for the preliminary assessment, but none were completely cleaned, as it was thought that the adhering clay would aid their continued preservation until decisions were made as to their future treatment. During the hiatus between successive elements of the project, the timbers were wrapped in black polythene and stored in cool, controlled conditions. Only six were stored submerged in water, the others being too large for OA North facilities. All 13 timbers were subsequently cleaned and recorded photographically for the purposes of this report. Three timbers were sampled for dendrochronological dating (Timbers 4, 5, and 7). As this is a destructive process, the remnant fragments of these timbers have already been discarded.

2.1.2 Timber lengths ranged from c 0.7m to 2.55m. It is understood that many were recovered by machine, from an excavation little more than 1m wide, and thus all the timbers between 0.7m and 1.6m can be regarded as uncontrolled or subjectively sampled parts of longer timbers. Where examined, the timbers seemed to be in fair to good condition, although surface preservation was very variable. All of the smaller timbers were broken and extensively splintered at one or both ends, making recognition of the conversion difficult or impossible.

2.2 TIMBER 1

2.2.1 Length 1.05m, now reduced to 700mm by the removal of one splintered end. The original scantling was probably between c 155mm and c 170mm each side, but this only survives to full its dimension in one place. It appears to be a boxed tangential outer split from a large tree, with possibly some sapwood remaining, although this could be an artefact of preservation.

2.2.2 Face A) Rippled surface, with shallow indents, but no surviving toolmarks.

Face B) Rippled surface, with two well-defined toolmarks, indicating the use of a curved-edged blade c 80mm wide.

Face C) Rippled surface, now cracked, no toolmarks.

Face D) Rippled surface, survives to more or less its full original width of c 170mm. Two partial toolmarks survive.

2.3 TIMBER 2

2.3.1 Length 1.18m, thickness 230mm; both ends are splintered. The original shape of this timber has been lost, and all surfaces are very eroded. There is, however, a long (470+mm), slightly curving rebate, between 25mm and 35mm deep, and 45mm wide, surviving in one part of the timber. Slightly eroded toolmarks survive in the groove, confirming its anthropogenic origin.
It is of a size to have served as a door threshold, the rebate serving to restrain the direction in which the door opened.

2.4 **TIMBER 3**

2.4.1 Length 1.29m, Width 200mm, Thickness 45+mm. Substantial (?) tangential split, probably an outer split, with sapwood potentially surviving along one edge. The inner face of the split has been dressed to produce a thick plank, and degraded toolmarks survive. One end is shattered and the surviving original end is bevelled, with a single angled axe cut.

2.4.2 Face A) Mostly badly eroded, but the original surface survives to c 550mm from the base. Surface rippled, but no obvious toolmarks.

Face B) Eroded, no toolmarks survive, c 65mm thickness.

Face C) Well-preserved toolmarks survive to c 1.05m from the point. Extensively rippled, with multiple toolmarks surviving. Evidence suggests the use of an almost straight blade, with a blade-width to c 120mm.

Face D) Eroded, no toolmarks survive, c 50mm thickness.

2.5 **TIMBER 4**

2.5.1 Original length 1.4m, reduced to 1.02m by removal of splintered end, Width 190mm, Thickness 160mm. Large squared timber with both heartwood and sapwood surviving, its well-dressed flat bottom suggesting use as a structural timber, possibly an upright post.

2.5.2 Face A) Eroded and cracked, with some post-excavation damage. There are some surviving toolmarks close to the putative base of the timber, where it is slightly reduced in scantling.

Face B) Eroded and cracked with only faint toolmarks surviving.

Face C) Badly eroded, no evidence survives.

Face D) The surface survives in good condition to c 550mm from the base of the post. The timber has been dressed by repeated tool-blows at a slight angle to the edge of the timber, presumably intended to reduce its width slightly. These are c 60mm apart, and made with an almost straight blade c 80mm wide.

Base) Well-preserved toolmarks were seen on the base during the preliminary assessment, indicating extensive trimming with a narrow-bladed tool (a straight-edged chisel?) c 15mm wide, presumably to achieve a flat base. These had not survived well and should be regarded as uncertain.

2.5.3 This timber was sampled for dendrochronological dating, but no date was obtained.
2.6 **TIMBER 5**

2.6.1 Length 1.66m; Width 270mm; Thickness 50-60mm. This is probably close to the original width and thickness of the plank, but one end is fragmentary and now has been broken away. This timber dried partially during storage. One outer edge retains sapwood, but the conversion is unclear. The cross-section is, however, markedly triangular which suggests a radial split, subsequently trimmed to produce a level surface for the plank.

2.6.2 Face A) Eroded, especially in the drier parts, there are three deep parallel scores running diagonally across this face but whether they have any significance is unclear (there are possibly others, but these survive in a less coherent state). Faint toolmarks survive in some places.

Face B) Badly eroded, but retains sapwood.

Face C) Badly eroded.

Face D) Badly eroded.

2.6.3 This timber was sampled for dendrochronological dating, but no date was obtained.

2.7 **TIMBER 6**

2.7.1 Length c 2.03m, Width 140mm, Thickness 40-45mm. The discrepancy in the length of this timber (originally recorded as c 1.6m) is accounted for by the fact that it was curved, which was not apparent when the timber was partially wrapped. The timber is in poor condition with all surfaces eroded. The sub-triangular cross-section suggests a radial split, but no heartwood or sapwood survives. The timber was broken, and only the best-preserved fragment, c 0.9m long, was retained.

2.7.2 Face A) Mostly badly eroded, but poorly-preserved toolmarks survive in one small area.

Face B) Eroded, no toolmarks survive, c 45mm thickness.

Face C) Eroded, no toolmarks survive.

2.8 **TIMBER 7**

2.8.1 Length 2.55m, Width 130mm, Thickness 140mm. All surfaces very badly preserved, and original squared cross-section barely survives. Boxed trunk conversion, with some sapwood and heartwood remaining. When cut in order to sample for dendrochronology, the central part of the timber disintegrated completely, but elsewhere it was internally in good condition.

2.8.2 All surfaces eroded and badly cracked, so not recorded in detail.

2.8.3 This timber was sampled for dendrochronological dating, but no date was obtained.
2.9 **TIMBER 8**

2.9.1 Length 680mm, Width 145mm, Thickness 40mm. Both ends are heavily splintered. Plank, but with all surfaces degraded to some degree, and one original edge lost. Despite this, some tool marks, possibly axe marks, survive from dressing the timbers. The conversion is not clear but is probably a tangential split.

2.9.2 Face A) Approximately 530mm of the original surface survives, and is only slightly abraded. It is characteristically rippled with many overlapping shallow, slightly rounded tool-marks, possibly indicating the use of an adze. The blade used was slightly convex, and individual cut-marks suggest its width to have been c. 60mm. Faint signatures were visible on some of the cuts, and there is no reason to believe that more than one tool was used.

Face B) Original edge lost, now uneven and splintered.

Face C) Abraded but with noticeable diagonal striations.

Face D) Badly abraded.

2.10 **TIMBER 9**

2.10.1 Length 875mm, Width 140mm, Thickness 135mm. Both ends splintered. All surfaces badly degraded. Probably a boxed ¼ or 1/8 conversion, but this is not clear, and one corner is now badly eroded, giving a sub-triangular profile.

2.10.2 All faces are badly eroded, and were not recorded in detail.

2.11 **TIMBER 10**

2.11.1 Length 820mm; Width 103mm; Thickness 65mm. Very abraded, both ends splintered. All surfaces badly degraded. Probably originally an unmodified quarter split.

2.11.2 Face A) Appears unmodified, or is so badly degraded that it appears curved.

Face B) Eroded and abraded, no tool marks survive.

Face C) Ragged, probably undressed split.

2.12 **TIMBER 11**

2.12.1 Length 690mm; Width c. 180mm; Thickness 80-90mm. Very eroded, but appears to be outer tangential split. Some lighter wood is probably sapwood, but it is too poorly preserved for certainty.

2.12.2 Face A) Eroded and damaged, it retains the natural curve of the trunk. Marks on the surface are probably peri-excavation damage.
Face B) Probably a rough, or partly dressed tangential split. Poor quality wood with a trimmed branch visible and very sinuous grain.

2.13 **TIMBER 12**

2.13.1 Length 820mm; Width 175mm; Thickness 115mm. Boxed trunk with, probably, a sawn base. Surfaces survive well and toolmarks are frequent. It appears, at the base, to be cut down to form an almost square tenon, c 140mm long, and 130mm x 109mm. Major structural timber. Some sapwood survives.

2.13.2 Face A) Abraded, with some faint ?axe faceting towards the base.

Face B) Abraded, but a single good toolmark, showing use of a wide-bladed tool c 100mm wide and with a slightly curving blade.

Face C) Surfaces abraded and eroded, retain rippling but no clear toolmarks. There is, however, a pressure mark c 168mm from the base, which could indicate how far the tenon was inserted into its mortise.

Face D) Well-preserved surfaces with good axe-facetting on the tenon, showing multiple facets using a blade c 90mm wide. Elsewhere the surface is more rippled, perhaps indicating the use of an adze for dressing.

2.14 **TIMBER 13**

2.14.1 Length 610mm; Width 113-165mm; Thickness 45-49mm. Trapezoidal plank fragment, possibly sawn tangential conversion. All surfaces eroded.

2.14.2 Face A) Eroded, but some rippling survives and there is a single well-preserved toolmark close to base.

Face B) Badly eroded, probably undressed split.

Face C) Badly eroded, probably undressed split.

Face D) Eroded, but clearly partly dressed and trimmed. The end is cut to a bevel with a wide-bladed tool, probably an axe with a blade 80+mm wide. The long toolmarks might imply the wood was worked green, which might be expected. There is an area of wear and horizontal scratching between 120 and 140mm from the bevelled point on Face D.

2.15 **CONCLUSIONS**

2.15.1 It is clear that all of the timbers are worked, and that in places, details of the tools used have survived, in the form of toolmarks on the dressed surfaces. It is probable that the tools used to dress the timbers were axes of various blade widths, but two tools, one of blade width c 80mm and the other of blade width c 120mm can probably be postulated. Rippled surfaces on at least two of the timbers implies the use of an adze for fine dressing. Evidence for the
use of a chisel on the base of Timber 4 is now less certain, but it seems likely that the base of Timber 12 was sawn.

2.15.2 The conversion of individual timbers is varied, with both radially and tangentially converted planks, and boxed whole and quartered trunks, and at least one quartered but otherwise un-dressed trunk. Many of the timbers were carefully dressed, and where surfaces survived in good condition, they were rippled as a result of using an axe, or less likely an adze, to produce good, flat, surfaces. This care and the apparent quality of the wood, all oak (D Drury pers comm) might suggest that the timbers were not originally intended for use in a revetment or drain lining, but there was nothing in the surviving timbers to suggest any re-use of timbers from more complex or prestigious structures, except for compression marks around the bases of Timbers 4 and 12, suggesting that they might have served as upright tenons in a mortised cill beam within in a timber-framed structure.

2.15.3 The scantling of individual timbers is comparable to those used for other Roman structures, including brine pits, in the town (see, for instance, Arrowsmith and Power 2012), but it must be said that they would not be out of place in medieval structures either. The use of relatively small, boxed trunks is, however, often seen as a medieval and later practice, as fewer large timbers were available. Similarly the tools used, identified as axes of several blade-widths, adzes and a wide-bladed chisel, could be expected at any time from the Roman period until the Early Post-Medieval period at least. Radial and tangential conversion were used in both Roman and later timber-working, although, certainly to the north, in Lancashire, there seems to have been a preference for radial conversion during the Roman period, perhaps originating in an extant late Iron Age tradition (pers comm).

2.16 DENDROCHRONOLOGICAL DATING

2.16.1 The presence of both sapwood and heartwood on several of the oak timbers prompted their sampling for dendrochronological assay, but although two of the three samples submitted had an appropriate number of rings available, they proved impossible to date, matching neither local nor regional tree-ring curves.
3 RECOMMENDATIONS FOR CONSERVATION AND STORAGE

3.1 CONSERVATION

3.1.1 None of the timbers warrant conservation.

3.2 DISCARD

3.2.1 It is recommended that all of the timbers be discarded.
BIBLIOGRAPHY


OA North 2013 Land off St Anne’s Lane, Nantwich, Cheshire: Archaeological Watching Brief, Unpubl client report
Timber 1

Before cleaning
Timber 1

Poorly preserved timber, both ends reduced to fibres. Preservation patchy, with only restricted areas retaining toolmarks. Original scantling probably c.155mm x 155mm, now slightly less. Conversion unclear but possibly boxed quarter, based on curvature of visible rings.
Timber 1; face A

Slight indentations seen on Face A
Timber 1; face B

Modern saw mark

Area of tool marks

Detail of surviving toolmarks
Timber 1; face C

Modern saw-mark
Timber 1; face D

Detail of surviving toolmarks
Timber 2

Before cleaning
Very poorly preserved timber, possibly originally a radial split. All surfaces now badly degraded, except for a deep groove which survives on face C, and is 35mm wide, 45mm deep, and 470mm long. Toolmarks make it certain that it is a deliberate modification, perhaps identifying the piece as from a threshold.
Timber 2; face A

Surface badly eroded
Timber 2; face B

All surfaces except for groove are badly eroded

Abraded toolmarks within the groove
Timber 2; face C

Surface badly eroded
Timber 3

Before cleaning
Timber 3

Large timber, one end shattered. Now drying but one side remains well-preserved. The bevelled original end is axe-cut, apparently with a single blow. The two narrow faces (C and D) were too badly preserved to warrant record. Some suggestion of surviving sapwood, but the conversion appears tangential, despite slightly trapezoidal cross-section which would otherwise imply a radial split.
Timber 3; face A

Abraded faceting at original end of timber

Abraded toolmarks survive to c 550mm from original end of timber
Timber 3; face B

Abraded toolmarks at original end

Toolmarks survive to c 1.05m from original end. Straight-edged blades up to c 120mm wide
Timber 3; faces C-D

Faces C-D badly eroded, not recoded in detail

- Face C: eroded, possible sapwood visible. Thickness 65mm
- Face D: eroded. Thickness c 50mm
Timber 4

Before cleaning
Timber 4

Originally well-preserved, this timber had degraded slightly in storage. Although now cracked, the wood itself remained well-preserved, with sapwood surviving. Small areas of toolmarks survived on some surfaces. At its most substantial the timber scantling was 190mm x 160mm, but towards the base this had been reduced to 130mm x 120mm to form a tenon. The timber was flat-bottomed, with numerous small, narrow-bladed chisel marks. Conversion is boxed trunk. Presumably structural.
Timber 4

Face A

Face B

Face C

Face D

Pl. 19
Timber 4; face A

Surfaces now eroded and cracked. Some surviving toolmarks near base, where the timber has been reduced in scantling.

Post-excitation damage

Eroded toolmarks
Timber 4; face B

Face cracked and heavily eroded, only faint toolmarks survive.
Timber 4; face C

Badly eroded, no toolmarks survive
Timber 4; face D

Some 550mm survives relatively uneroded. Repeated toolmarks indicate the use of an almost straight blade c 80mm wide. The marks are c 60mm apart, set at an angle to the edge of the face.
Timber 4; base

Possible chisel marks seen prior to cleaning
Timber 5

Before cleaning
Timber 5

Large trapezoidal-sectioned plank, partly dried. Surfaces badly eroded. Conversion unclear, but markedly asymmetrical section implies a radial split. Some sapwood survives. Now in two fragments.
Timber 5; face A

Detail of surviving toolmarks
Timber 5; faces B-D

Faces B-D badly eroded, not recorded in detail

- Face B: eroded, but possible sapwood visible. Thickness 55mm
- Face C: eroded, no sapwood visible. Thickness 60mm
- Face D: badly eroded
Timber 6

Before cleaning
Timber very poorly preserved and broken (0.9m long fragment discarded). Only a small area of toolmarks survives on face A, none on faces B or C. Some peri-excavation damage. Dressed radial split.
Timber 6, face A

Toolmarks and possible excavation damage
Timber 6; faces B-C

Faces B-C badly eroded, not recoded in detail

- Face B: eroded, some excavation damage
- Face C: eroded, no sapwood visible. Thickness 45mm
Timber 7

Before cleaning
Timber 7

Boxed trunk with some sapwood surviving, but now very badly eroded, cracked, and lacking surfaces. Cut in three for sampling and as central portion shattered it was discarded.
Timber 7; face A

All surfaces cracked and badly eroded.
Timber 7; faces B-D

- Face B eroded and not fully recorded
- Face C eroded and not fully recorded
- Face D eroded and not fully recorded
Timber 7; sawn cross-section
Timber 8

Possibly tangentially split timber, both ends now splintered and shredded, and one original edge missing, but face A very well-preserved. Faces B-D all abraded.
Timber 8

Plank fragment, both ends shattered and one edge lost. Thickness 45-60mm. Face A is extremely well-preserved, and there is an area, c 530mm long, with multiple rounded toolmarks all with faint signatures indicating use of a single blade, c 60mm wide. Face C is eroded but retains some evidence of marked diagonal striations, perhaps damage rather than a result of wood-working. Conversion not clear, probably tangential.
Timber 8; face A

Well-preserved toolmarks and surface rippling.

Note fine parallel marks of tool signature.
Timber 8; faces B and D

• Face B now broken and splintered, not original edge

• Face D is the original edge, but now very eroded and abraded
Timber 8; face C

Series of diagonal scratches, cause unknown
Timber 9

Before cleaning
Timber 9

Quarter trunk with rounded and eroded natural surface surviving on one side and two split and dressed surfaces, both now too eroded for the survival of toolmarks. Sapwood survived poorly.
Timber 9; face A

Surface badly eroded
Timber 9; faces B and C

Probably recent damage
Timber 9; cross-section

Cross-section, probably a quartered trunk, with no surviving evidence that split surfaces were further dressed.
Timber 10

Before cleaning
Timber 10

Quartered timber, badly eroded and probably undressed.
Timber 10; face A

Probably unmodified, retaining natural curve of timber
Timber 10; faces B-C

- Face B abraded with no surviving toolmarks
- Face C ragged split
Timber 11

Before cleaning
Timber 11

This appears to be a split trunk, but this might be the effect of severe erosion removing the softer elements, for instance the sapwood. What survives of the sapwood suggests that it might originally have been a tangential split.
Timber 11; face A

This face appears curved, it is eroded and has some recent damage.
Timber 11; face B

Face B shows evidence of trimmed branches, but otherwise seems undressed, with the sinuous grain showing. Shows some recent damage.
Timber 12

Before cleaning
Timber 12

Good quality, flat-based timber, probably oak, sapwood survives. Top shattered and does not survive to full original length. Surfaces range from abraded to very well-preserved (see individual timber faces). Dressed down to a narrower base, pressure lines suggest it to be a tenon, from a large mortise and tenon joint, probably from timber framing.
Timber 12; face A

Face A, generally abraded, but slight evidence of axe-faceting at base. Possible sapwood visible.
Timber 12; face B

Generally abraded, but with single good wide-bladed tool mark where timber reduced in width, c 100mm wide slightly curving blade
Timber 12; face C

Possible pressure line

Possible carpenter’s mark
Timber 12; face D

Well-preserved tool facets using blade 90+mm in width

Tool signatures visible
Timber 12; flat base

Possible sapwood

Boxed trunk conversion
Timber 13

Before cleaning
Timber 13

All faces generally eroded. Probably tangential split, or possibly sawn tangentially.
Timber 13; face A

Badly eroded, only rippling survives to indicate that this was originally dressed. One good toolmark survives close to end, and there is an area of wear beginning c 120mm from the end.
Timber 13; faces B-C

Faces B and C are both eroded. Both are probably tidied rough splits.
Timber 13; face D

Toolmarks suggest wide-bladed axe with blade 80+mm wide

End bevelled, with toolmarks clearly visible
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