

St Aldates Gas Mains Replacements Oxford



Archaeological Watching Brief Report



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Gas Main Replacement Works, St Aldates (A420), Oxford

ARCHAEOLOGICAL WATCHING BRIEF REPORT

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Front Cover: Trenching outside Christchurch College

SUMMARY

During June and July 2008 Oxford Archaeology (OA) carried out an archaeological watching brief in St Aldates, Oxford (Between NGR: SP 513 061- SP 514 056). The work was commissioned by Scotia Gas Networks, in advance of the replacement of the old iron gas mains by new plastic ones. The watching brief revealed stratigraphy indicative of earlier service trenching work although this redeposited material did contain building material indicative of substantial constructions in the area facing Brewers Lane. No other deposits or features of archaeological significance was observed.

1 INTRODUCTION

1.1 Scope of work

1.1.1 During June and July 2008 Oxford Archaeology (OA) carried out an archaeological watching brief in St Aldates (A420), Oxford City (Between NGR: SP 513 061 to SP 514 056). The work was commissioned by Scotia Gas Networks, in advance of the replacement of old iron gas mains with new plastic ones.

1.1.2 The work was undertaken as part of the mitigation strategy agreed with Paul Smith, the County Archaeological Officer representing Oxfordshire Highways, as part of the programme of road reconstruction and repair within Oxford City (OCAS, 2007).

1.2 Location, geology and topography

1.2.1 St. Aldates runs from the Thames crossing at Grandpont in the south, northwards to Carfax junction. It is one of the oldest roads in Oxford, being an axial street of the late Saxon burgh road grid. It is the only southern exit from the city leading to the river crossing from which the city is believed to have derived its name (Oxenford). The road slopes steeply to the river crossing with a fall of 9.0 metres between the highest and lowest sections. The highest point being Carfax Corner junction where it is 65.5 m OD falling to 61.3 m OD opposite Pembroke Street. Opposite Brewer Street the road surface lies at 58.9 m OD and is 56.5 m OD at the junction with Speedwell Street. It rises slightly to 57.5 m OD at Southbridge Row as it ramps up to Folly Bridge. The underlying natural geology is alluvium over 2nd Terrace Gravel deposits (Geological Survey of Great Britain, sheet no. 236).

1.3 Archaeological and historical background

1.3.1 St. Aldates is an axial street of the original Saxon planned street grid, and formed the primary southern approach into the 10th - 11th century Saxon burgh based on the traditional route of the Thames crossing (Oxon HER monument 6132). In the 11th century the timber crossing was replaced by a massive stone causeway (Grandpont) the remains of which survive within the core of the present Abingdon Road. The location of the late Saxon Southgate is assumed to have stood on the site of the later

medieval Southgate which was located in St. Aldates next to the south-west tower of Christ Church with the City Wall running along the north side of what is now Brewer Street. The gate was partially demolished in the early 16th century and the remaining fragment fell down in 1617.

- 1.3.2 Few observations of the primary late Saxon metalled street surface have been made in modern times. In 1980, during drainage works, Brian Durham recorded a primary metalling composed of non-calcareous pebbles on gravel outside No.7 St. Aldates at 2.15 metres below tarmac (approx. 61 m OD), while the same operation revealed a sparse scatter of small, irregular, non-calcareous pebbles at 1.8 metres depth (approx. 59.5 m OD) opposite No. 97 St. Aldates. This again lay directly on the natural gravel (Oxon HER monument 6630). During the same drainage operations, manhole trenching near the north-west buttress of Tom Tower, Christ Church, showed no early road surface. Limestone sets over a continuous grey layer above gravel was thought to date from foundations of Wolsey's college (*c.* 1524). A second manhole trench near Blue Boar Lane showed an early road surface and pits containing industrial rubbish (Oxon HER monument 6631). In his observations of old road surfaces made in 1896, Herbert Hurst noted that 'the accumulations of the old road [St. Aldates] gradually diminished in the S[outh] past the town hall.' He attributed this to erosion on the slope of the hill. The primary street surface of St. Aldates lies deepest at the Carfax junction where Hurst recorded a 'paved way' overlain by 3.5 metres of made ground.
- 1.3.3 Unlike the High Street, which has produced considerable, detailed evidence of the later medieval and post-medieval road levels and associated drainage systems, there is less information for St. Aldates. However, during the Trill Mill Stream excavation in 1882-5 at 89-91 St. Aldates, a salvage trench placed across the road for the insertion of a service produced what the site foreman described as "very hard stonework below the modern road which had a face on the west side." This could be a similar structure to the Grandpont causeway and possibly of similar date. The channel of Trill Mill Stream would have had to be bridged at this time. The 19th century? brick culvert constraining the Trill Mill stream also crossed under the road at this point (Oxon HER Event EOX 1662).
- 1.3.4 Towards the southern end of St. Aldates, Brian Durham recorded a section of the Grandpont causeway in the excavations at 33 St. Aldates in 1979. This was the first complete section to be observed, and shows the characteristics that were to be confirmed on a much larger scale during the Abingdon Road archaeological investigations carried out between 2002 and 2004 where the surface of the causeway was directly beneath the sub-base of the existing road. At 33 St. Aldates, the 4 metre wide stone causeway lay immediately under the modern road sub-base at about 56.8 m OD. The earliest dated evidence for a constructed ford was a corallian ragstone construction up to 7 m wide discovered during excavations at 65 St. Aldates in 1981 (Oxon HER monument 6500/Event EOX 1664). This was laid directly on the gravel riverbed and its surface was situated at just under 54 m OD. A radiocarbon date

obtained from loose wattles retrieved from the stonework suggested a construction date to before AD 1000. The 1991 BT Tunnel at the junction of Thames Street and St. Aldates revealed the foundations of Grandpont at about 3 m below modern ground level.

- 1.3.5 Evidence for timber crossing north of Folly Bridge (Grandpont) was also discovered during excavations at 33 St. Aldates and in the BT Tunnel. The latter investigation produced timbers that have been interpreted as bridge trestles and these produced a radiocarbon dating of cal AD 660-900. The timber piles discovered at 33 St. Aldates suggest a similar construction to the north.
- 1.3.6 In 1962/63, an archaeological excavation was undertaken on behalf of the Oxford Excavation Committee outside Christ Church College between a staircase of Tom Quad and St. Aldates. This revealed a massive rubble footing-wall 2.43 m thick, found at a depth of 1.52 m and was interpreted as the west wall of Wolsey's projected Great Chapel. Natural Gravel was encountered at 2.74 m. All early superficial levels appeared to have been removed in 1526 (Oxon HER monument 6453).
- 1.3.7 In *c.* 1890 during excavations for a drain opposite the great gateway of Christ Church, a gold ring, reported as Anglo-Saxon, was found in a coffin (Oxon HER find spot 3565).
- 1.3.8 The main implication for this programme of road works appears to be that, while most significant deposits at the northern end of St. Aldates are likely to be deeper than all impacts other than new drainage trenches, archaeological levels become progressively shallower moving southwards, with for example, the surface of Grandpont causeway lying immediately under the existing road sub-base in some parts.

2 PROJECT AIMS AND METHODOLOGY

2.1 Aims

- 2.1.1 To identify and record the presence or absence, extent, condition, quality and date of archaeological remains in the areas affected by the development.
- 2.1.2 To preserve by record any archaeological deposits or features that may be disturbed or destroyed during the course of the work.
- 2.1.3 To make available the results of the archaeological investigation.

2.2 Methodology

- 2.2.1 The excavations were carried out using two 3 tonne tracked excavators fitted with a 0.5 m or 0.8 m wide bucket. The watching brief was conducted as a series of site visits during and immediately after excavation of the trenches. The trenching was

conducted as a series of discrete sections each backfilled and resurfaced before the next section was started.

- 2.2.2 A plan showing the extent of the excavations was maintained at a scale of 1:500 (Fig. 2) and any sections recorded were drawn at a scale of 1:20. All excavations were photographed using colour slide and black and white print film. A general photographic record of the work was also made. Recording followed procedures detailed in the *OA Field Manual* (ed D Wilkinson, 1992).

3 RESULTS

3.1 Description of deposits

- 3.1.1 The different sections of the watching brief will be described separately, followed by an overall discussion and interpretation.

North End of St Aldates, adjacent to Blue Boar Street

- 3.1.2 A trench approximately 1.2 m deep by 1 m wide was excavated 20 m south of the junction between Cornmarket Street and St Aldates exposing an existing cast iron gas main (Fig. 2, Section 1).
- 3.1.3 The base of the trench cut 0.35 m into a layer of dark grey-brown clay silt (5). This deposit contained numerous fragments of stone and sub-angular brick fragments and probably represents a layer of made ground. This was overlaid by a 0.25 m deep layer of red-brown clay silt (4) containing gravel and small stone fragments. This was also a layer of made ground, possibly dredged river material. Sealing this was a 0.3 m deep layer of grey-brown clay silt containing many medium to large fragments of stone (3). This material appears to be demolition debris and represents another layer of made ground.
- 3.1.4 Overlying this was a 0.12 m deep layer of crushed stone (2), the hardcore base for the present day tarmac road surface (1).
- 3.1.5 The trenching within this section appears to have over-excavated the existing service trench exposing a fresh section face.

Trenching opposite Pembroke Street

- 3.1.6 The trenching in this area measured 1.1 m deep by 0.9 m wide (Fig. 2, Section 2).
- 3.1.7 The base of this trench encountered a layer of dark red-brown clay silt (10) containing gravel, brick and stone fragments, cutting 0.3 m deep into its surface. This represents a layer of made ground, probably containing demolition debris from the surrounding area. Overlying this was a 0.55 m deep layer of red-brown clay silt (9) containing a high percentage of gravel and small to medium stone fragments indicative of demolition debris.

- 3.1.8 This was sealed by a 0.12 m thick reinforced concrete slab (8) forming the base for the tarmac road surface (1).

Trenching Opposite Brewers Street

- 3.1.9 The trenching within this area was 1.3 m deep and up to 2 m wide exposing an existing gas main and side spurs (Fig. 2, Section 3).
- 3.1.10 Within this area the trenching cut 0.18 m deep into the surface of a dark grey-brown silt clay containing a large percentage of gravel (7), a probable layer of made ground. This was overlaid by a 0.8 m deep layer of grey-brown silt clay (6) containing fragments of stone building material, including ashlar blocks. This deposit represents a layer of made ground but probably also includes demolition debris from the immediate area.
- 3.1.11 Overlying this was a layer of crushed stone (2) 0.12 m deep forming the hardcore base for the current tarmac road surface (1).

Trenching between Rose Place and Speedwell Street

- 3.1.12 The trenching in this area measured 1 m deep by 0.9 m wide (Fig. 2, Section 4).
- 3.1.13 At the base of this trench a layer of dark red brown silt clay containing a high percentage of gravel (10) was encountered, the trench cutting 0.2 m deep into the top of this layer. This was a probable layer of made ground, possibly dredged river material similar to layer 4. Overlying this was a 0.2 m deep layer of light reddish-brown silt clay containing gravel (11), a layer of made ground. This was overlaid by a 0.2 m deep layer of red-brown clay silt containing gravel (9), another layer of made ground similar to layers 11 and 10.
- 3.1.14 Within this area layer 9 was sealed by a 0.2 m thick concrete slab (8), forming the base for the 0.12 m thick tarmac road surface (1).

3.2 Finds

- 3.2.1 The only dating evidence encountered during the course of the watching brief was post-medieval in date and included brick and salt glazed sewer pipe fragments. The presence of these finds was noted but they were not retained. No earlier dating evidence was recovered.

3.3 Palaeo-environmental remains

- 3.3.1 No deposits suitable for palaeo-environmental sampling were observed during the course of the watching brief.

4 DISCUSSION AND CONCLUSIONS

- 4.1.1 The watching brief observed successive layers of made ground below St Aldates. The few pieces of dating evidence observed suggest that this material had been deposited

during the late 18th, 19th-and 20th-centuries and comprised of a mixture of terrace gravel (probably from cellar excavations), material dredged from the river and demolition debris from the Georgian and Victorian redevelopment of the city centre.

- 4.1.2 The absence of earlier archaeological deposits may be explained by the limited depth of excavation, typically 1.1 m, whereas archaeologically significant layers were encountered at 3.5 m below the current ground level at the junction between St Aldates and the High Street (Hurst, 1896) rising to 1.8 m below the current ground level adjacent to No. 97 St Aldates (Brian Durham, 1980), substantially below the depth of impact of this phase of works.
- 4.1.3 The presence of large fragments of stone building material within the layers of made ground between Pembroke Street and Brewers Street suggest the possibility of substantial stone buildings in this area, but they may also have originated from the demolition of the Saxon/Medieval Southgate and the medieval city wall known to have been located in the area of Brewers Street in the 17th-century.
- 4.1.4 No significant archaeological deposits or features were observed during the course of the watching brief.

APPENDICES

APPENDIX 1 ARCHAEOLOGICAL CONTEXT INVENTORY

<i>Context</i>	<i>Type</i>	<i>Depth</i>	<i>Comments</i>	<i>Finds</i>	<i>Date</i>
1	Layer	0.12 m	Modern tarmac road surface	-	C20th
2	Layer	0.15 m	Crushed stone hardcore base for tarmac road surface	-	C20th
3	Layer	0.3 m	Made ground	Stone, brick	C19th/ C20th
4	Layer	0.25 m	Made ground	Stone	C19th/ C20th
5	Layer	> 0.35 m	Made ground	Brick	C19th
6	Layer	0.8 m	Made ground	Stone, brick	C19th/ C20th
7	Layer	> 0.18 m	Made ground	Brick, stone	C19th
8	Layer	0.2 m	Concrete slab, base for road	-	C20th
9	Layer	0.55 m	Made ground	Stone, brick	C19th/ C20th
10	Layer	> 0.3 m	Made ground	Stone, brick	C19th
11	Layer	0.2 m	Made ground	-	C19th

APPENDIX 2 BIBLIOGRAPHY AND REFERENCES

IFA, 2001 *Standard and Guidance for Archaeological Watching Briefs*

OA, 2000 OA Environmental Guidelines for sampling

OA, 2008 Gas Main Replacement Works, St Aldates (A420), Oxford City: Written Scheme of Investigation for an Archaeological watching Brief

OAU, 1992 *Field Manual (ed. Wilkinson D)*

OCAS, 2007 Design Brief for Archaeological Watching Brief - St. Aldates (A420) Road Works, Oxford City

APPENDIX 3 SUMMARY OF SITE DETAILS

Site name: Gas Main Replacement Works, St Aldates (A420), Oxford City

Site code: OXGAS 08

Grid reference: SP 513 061 - SP 514 056

Type of watching brief: Machine excavation of service trenches

Date and duration of project: Between June and July 2008, 5 site visits

Area of site: Total area monitored, c.800 m²

Summary of results: The watching brief observed thick deposits of post-medieval made ground below the current road surface. The depth of excavation was such that archaeologically significant deposits were not impacted.

Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with Oxfordshire county Museum Service in due course.



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Figure 1: Site location

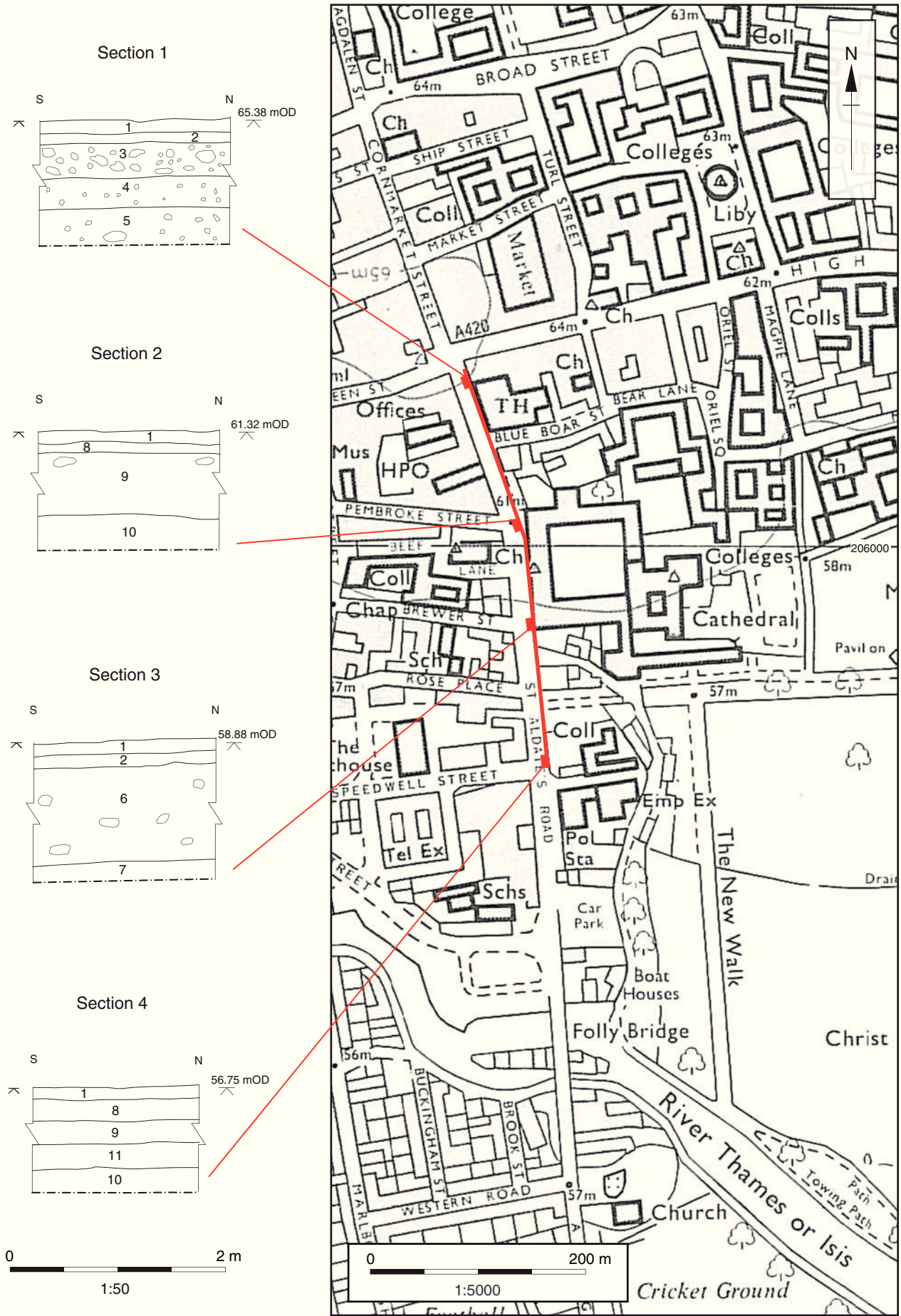


Figure 2: Extent of trenching and location of sections 1, 2, 3 and 4



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