

















# WATER MAIN LIFECYCLE REPLACEMENT, COUNTY HOSPITAL, HEREFORD

ARCHAEOLOGICAL WATCHING BRIEF EHE NO. EHE80364

commissioned by Quattro Design Architects

August 2018





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PROJECT TEAM:

Project Manager Luke Craddock-Bennett / Author Steve Thomson / Fieldwork Steve Thomson, Stuart Milby, Tom Cochrane, / Graphics Beata Wieczorek-Oleksy, Caroline Norrman

Approved by Luke Craddock-Bennett





### **PROJECT SUMMARY**

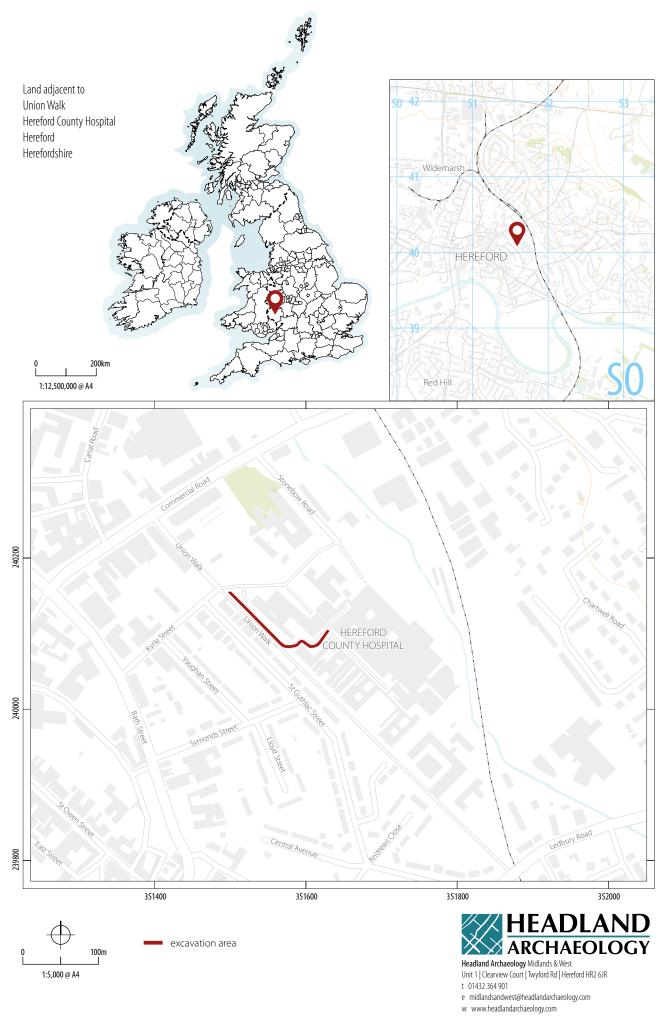
An Archaeological Watching Brief was undertaken by Headland Archaeology (UK) Ltd during groundworks associated with the replacement of water main pipes on the site of the County Hospital, Hereford. The investigation identified a single, undated, stone-built retaining or garden-wall foundation along with construction related deposits and made ground. No archaeological remains or features associated with the former priory or associated burial ground were recorded.

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### ARCHAEOLOGICAL WATCHING BRIEF

#### 1 INTRODUCTION

Quattro Design Architects commissioned Headland Archaeology to undertake an archaeological watching brief during groundworks associated with the replacement of a water main pipe on the County Hospital grounds, Hereford. The work was commissioned by Quattro on behalf of Sodexo Facilities Management. The replacement works necessitated the excavation of a trench approximately 0.45m wide to depths of approximately 0.80m below ground level.

#### 1.1 PROJECT BACKGROUND

A programme of water main replacement is being undertake across the County Hospital site.

In advance of the replacement works, two trial trenches were excavated in April 2017 to ascertain the location of existing services within the site. These works were undertaken by a sub-contractor on behalf of Sodexo and were monitored by Headland Archaeology (Bain 2017).

The site is located within the Hereford Area of Archaeological Importance. Appropriate documentation for the works under the Ancient Monuments and Archaeological Areas Act was submitted to the Archaeological Advisor. A written scheme of investigation (WSI) was prepared by Headland Archaeology (Craddock-Bennett 2018) and approved by the archaeological advisor to Herefordshire Council.

# 1.2 SITE LOCATION, DESCRIPTION AND SETTING

The site is located within the south-western extent of the grounds of Hereford County Hospital, along the south-western edge of

access roads south of the Fred Bulmer Building and centred around National grid reference SO 51688 40100 (Illus 1).

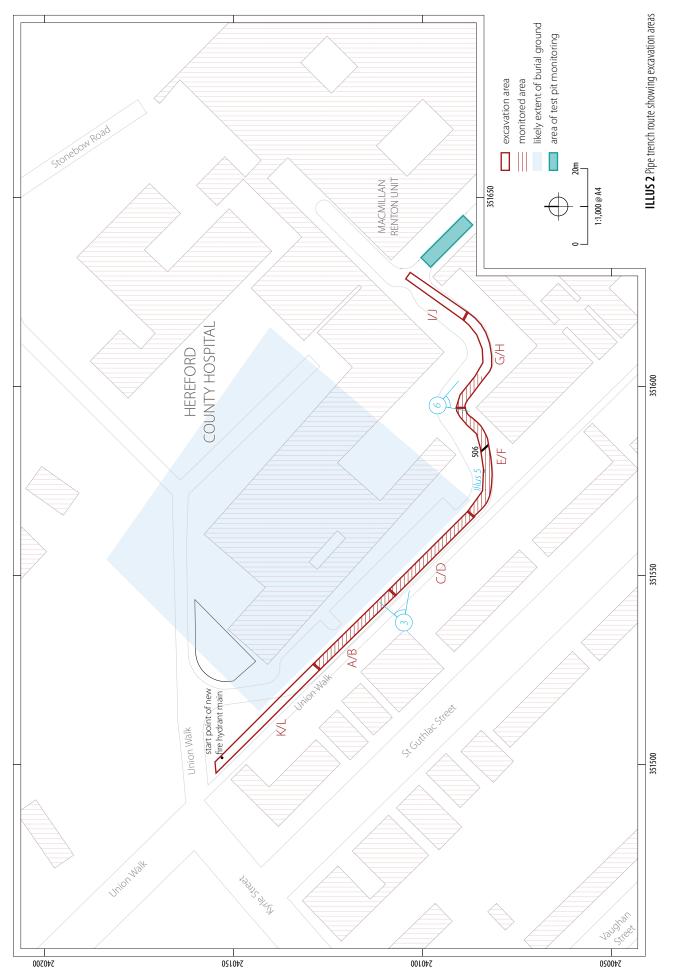
The recorded solid geology for the site is Raglan Mudstone Formation – Interbedded Siltstone and Mudstone, drift geology is identified as Glaciofluvial Sheet Deposits, Devensian - Sand and Gravel (NERC 2018). The soils are characterised as freely draining slightly acid loamy soils (Cranfield University 2018).

#### 1.3 ARCHAEOLOGICAL BACKGROUND

The focus of the site of St Guthlac's Priory, which was founded on the site in 1143AD and prospered until dissolution in 1539AD, is located within the County Hospital Grounds. The limits of the cemetery associated with the former priory, are thought to extend to the area just to the north and east of the location of the water main trench. Excavations undertaken in 2016 during the construction of a new temporary ward to the north-east of the current site identified six medieval inhumation burials at a depth of c2.0m below the existing ground level (Bain 2016).

In 1797 a new county gaol, designed by John Nash, was built to the west of the site and in 1834 the Hereford Union Workhouse was constructed in the vicinity. The development area now forms part of the County Hospital. Most of the gaol was demolished in 1930, and the bus station and a cinema now occupy the old gaol site, whilst the hospital has expanded to cover almost all of the remaining grounds of the priory, including the proposal area.

Archaeological investigations were undertaken when the Stonebow Unit was extended to the north-west in 1994 (Appleton-Fox 1994) with evidence for extensive disturbance in the form of a large number of linear pits, most dating from the 19th and 20th centuries.







**ILLUS 3** General view excavation of trench in progress, looking northeast **ILLUS 4** General stratigraphy, excavation area C/D, looking north-east

In order to inform the current project two engineering test pits were excavated to ascertain the make-up of below ground deposits (Bain 2017). No artefactual finds were recovered from either of the trial pits and no archaeological features or deposits were observed, however, this may be due, in part, to the limited scale of the works undertaken.

#### 2 AIMS AND OBJECTIVES

The objectives of the archaeological watching brief are outlined within the WSI. The primary objectives were:

- To ensure the excavation and recording of any archaeological remains that would be disturbed by the groundworks;
- To produce and deposit a satisfactory archive and disseminate the results of the work via grey-literature reporting and publication as appropriate.

The results of the investigation will be used to describe the significance of heritage assets potentially affected by the development with the resulting archive (finds and records), organised and deposited with Hereford Museums Service to facilitate access for future research and interpretation for public benefit.

#### 3 METHOD

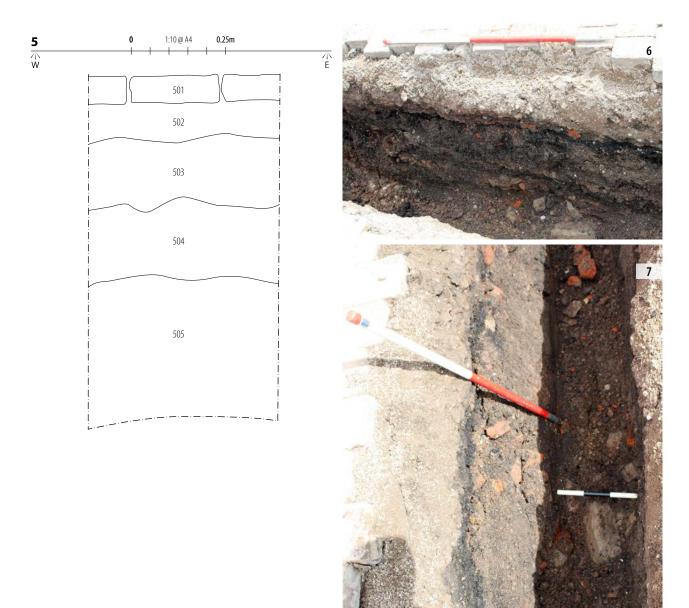
The fieldwork was conducted in accordance with the above mentioned WSI and in accordance with the following documents:

- Code of Conduct (Chartered Institute for Archaeologists, 2014a)
- Standard and Guidance for an Archaeological Watching Brief (Chartered Institute for Archaeologists, 2014b)

Groundworks associated with the water main replacement comprised open cut trenching in sections measuring 0.45m wide to a depth of c. 0.80m below current ground level. Four test pits, located to confirm the presence of services and ground conditions, were also excavated to the rear of the main hospital building.

The pipeline route was broken down into excavation segments identified by an alphabetic code (E/F, G/H etc) (Illus 2). Archaeological monitoring and recording utilised this system to locate any identified archaeological remains and deposits and facilitate recording, with annotated plans of the route and segments produced and retained within the archive.

The archaeological works were carried out intermittently between the 21st March 2018 and 14th May 2018, as dictated and required by the groundwork programme. All groundwork excavations were undertaken using a tracked 360° mini-digger mechanical excavator fitted with a 0.45m wide bucket to required formation level depths (Illus 3). Excavations were archaeologically monitored and halted, where appropriate, to allow investigation and recording of potential archaeological remains, before continuing to the required formation depths. During the course of trenching, at approximately the midpoint of Area G/H, an active, modern plastic pipe water main was identified. Subsequent appraisal of this resulted in a decision to utilise this supply relative to the project's requirements, with no



**ILLUS 5** South facing section, general stratigraphy excavation area E/F **ILLUS 6** General view stratigraphy excavation area E/F, looking south-east **ILLUS 7** Plan view of wall foundation [506]

further trench excavation or groundworks requiring archaeological monitoring. Illustration 2 shows the areas excavated prior to this decision being taken.

Exposed deposits and archaeological remains were recorded on Headland Archaeology pro forma record sheets with identified features and deposits (contexts) assigned a unique number. Section drawings of identified remains and the general stratigraphy of the site were produced at a scale of 1:10 with locations recorded on an annotated scale plan of the route of the water pipe trench. A black and white film photographic record was compiled with a graduated metric scale visible, supplemented by colour digital photographs.

All recording followed standard archaeological guidelines as set out by the Chartered Institute for Archaeologists (CIfA).

#### 4 RESULTS

A description of the general stratigraphic sequence identified is followed by a description of features recorded. A summary of all recorded contexts is given as Appendix 1.

#### 4.1 GENERAL STRATIGRAPHY

A level of consistency in the stratigraphic sequence across the route of the pipeline was observed (Illus 5), with the present stone cobbled road surface (eg (501) and make up layers (502) and (503) overlying disturbed clayey silts (eg (504), containing frequent cbm fragments, coal, mortar and glazed ceramics (not retained). Similarly, deposits such as (505) appeared to represent disturbed and reworked subsoil deposits. Within the southern extent of Area E/F, a similar deposit (1007) (Illus 4) displayed less disturbance, containing less modern debris and was interpreted as a possible garden soil or subsoil.

Lying at a depth of between 0.70m and 0.90m below ground level, pinkish or reddish-brown sandy clay gravels (eg (509) were recorded and are likely to represent geological, fluvial deposits.

Test pits excavated at the eastern end of the site displayed a similar sequence of road surface and associated setting deposits (eg 400) overlying silty clays with brick and modern debris (401) which in turned sealed red-brown fluvial gravels (402). No archaeological remains or deposits were identified in the test pit area.

#### 4.2 ARCHAEOLOGICAL REMAINS

Within excavation Area E/F (Illus 2) an east-west oriented sandstone wall foundation (506) (Illus 7), measuring 0.45m wide was recorded at a depth of approximately 0.80m below ground level. A light grey, gritty, sandy lime mortar bonded the stones, which measured between 0.09m and 0.26m in length. Only a single course was exposed in plan and no specific foundation cut was observed.

#### 4.3 MODERN FEATURES

Also located within Area E/F, an indeterminately shaped cut [508] was recorded in the trench section and truncated the wall foundation (506). The cut was greater than 0.60m deep and wide, with its full extent outwith the limits of the water pipe trench. The cut contained layers of dumped modern debris (507) including tile, brick, modern glazed ceramic, cinders and clinker which extended across at least 7m of the length of the trench (Illus 6). The feature was interpreted as relating to demolition and/or construction on the site.

#### 5 DISCUSSION

The site displayed a generally high level of disturbance with made ground and levelling deposits identified across the monitored areas. Below the present road surfaces and levelling deposits, relatively modern made ground, likely to derive from reworked subsoils and demolition/construction debris was evidenced, with only limited survival of undisturbed subsoils observed. The disturbance was particularly evidenced in the form of a construction or demolition cut within Area E/F. The extent of the disturbance, particularly in this area would suggest something such as a large construction or landscaping cut, potentially associated with the construction of hospital buildings. Whilst not retained, finds observed were generally ceramic building materials, glazed pottery (including blue and white transfer printed ceramic) and modern plastic and metal debris. No cultural material of an earlier provenance was observed.

The only earlier feature, a sandstone wall foundation (506) was truncated by this later activity. The foundation seemed relatively insubstantial, unlikely to relate to any major building and is most likely to have represented a garden or retaining wall or an ephemeral building, possibly associated with the former workhouse on the site, though no dateable material was recovered which could suggest a potential date.

Whilst the investigation suggested a high degree of disturbance in the area, with only relatively modern finds observed, it must be noted that the trench afforded very limited exposure of deposits below ground and that the potential for archaeological remains to survive outwith the limits of the trenching remains. Although no human remains were identified during the current works, the limited depth of the trench (0.80m) when considered in relation to the anticipated depth of burials within the site (2.0m), means that no conclusion regarding the extent of the burial ground can be determined from the project.

#### 6 CONCLUSION

Archaeological investigation during the groundworks associated with the construction of a water main replacement at Hereford County Hospital identified a single stone wall foundation, possibly related to the former workhouse. Extensive construction and/or demolition related deposits were identified overlying fluvial gravels. No features or deposits associated with remains of the former priory were observed.

#### 7 REFERENCES

Bain K 2016 Temporary Emergency Ward, County Hospital, Hereford: Archaeological Watching Brief and Excavation [unpublished client document] Headland Archaeology, Ref. EWHH

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Cranfield University 2018 Cranfield Soil and Agrifood Institute Soilscapes <a href="http://www.landis.org.uk/soilscapes/">http://www.landis.org.uk/soilscapes/</a> accessed 20 February 2018

Natural Environment Research Council (NERC) 2018 *British Geological Survey* <a href="http://www.bgs.ac.uk/">http://www.bgs.ac.uk/</a> accessed 20 February 2018

### 8 APPENDICES

### APPENDIX 1 CONTEXT SUMMARY

/ \I I L	יוטוא	T CONTEXT SOMMAN				1
Area	Context	Description	L (m)	W (m)	D (m)	Interpretation
A/B, C/D	1000	Cement/concrete blocks up to 0.235 x 0.16 x 0.80m	-	=	0.08	Present road surface
A/B, C/D	1001	Light reddish-brown pea gravel and sand	-	=	0.10	Setting deposit for 1000
A/B, C/D	1002	Red gravels	-	-	0.35	Made ground
A/B, C/D	1003	Mid-yellow brown clay containing frequent gravel	-	-	0.13	Made ground
A/B, C/D	1004	Mid brown gravel	-	-	0.20	Redeposited gravels - made ground
A/B, C/D	1005	Mid greenish brown clay and gravel	-	-	0.30	Redeposited gravels and clays – made ground
A/B, C/D	1006	Mid reddish-brown silty gravels	-	-	>0.20	Probable fluvial deposit
A/B, C/D	1007	Mid-brown silty clay containing occasional cinders, coal and CBM fragments	-	-	0.30	Possible buried garden soil
E/F	501	Cement/concrete blocks up to .235 x .16 x .80m	_	_	0.08	Present road surface
E/F	502	Light reddish-brown pea gravel and sand	-	-	0.10	Setting deposit for 501
E/F	503	Mid grey gravel	-	-	0.20	Made ground
E/F	504	Dark greyish brown slightly sandy, clayey silt containing frequent mortar fragments, charcoal, occasional cbm fragments and gravel	-	-	0.20	Levelling deposit
E/F	505	Dark reddish-brown sandy clay containing frequent sub-angular stones and occasional coal, charcoal and mortar fragments	-	-	>0.40	Re-worked subsoil
E/F	506	Sandstone wall foundation E-W orientation, 0.45m wide	-	0.45	-	Wall foundation
E/F	507	Mixed, dark brown and black brick, stone and sandy clay - dumped deposits - fill of $508$		>0.60	>0.60	Dumped deposits
E/F	508	Partially exposed cut, steep sides	-	>0.60	>0.60	Probable demolition or construction related cut
E/F	509	Light pinkish brown sandy clay and gravel	_	_	-	Probable subsoil deposit
E/F	510	Reddish brown gravel and coarse sand	-	-	>0.25	Geological deposit
TP1	100	Present tarmac ground surface and made ground comprising setting deposits and various dumped modern deposits $$	-	-	1.80	Made ground
TP1	101	Mid-reddish-brown gravel	-	-	>0.20	Fluvial deposit
TP2	200	Present tarmac ground surface and made ground comprising setting deposits and various dumped modern deposits $$	-	-	1.80	Made ground
TP2	201	Mid-reddish brown gravel	-	-	>0.20	Fluvial deposit
TP3	300	Present tarmac and levelling/setting deposits	-	-	0.30	Present ground surface
TP3	301	Mid-greyish brown silty clay containing construction/demolition debris	-	-	1.00	Made ground
TP3	302	Mid-reddish brown gravel	_	-	>0.50	Fluvial deposit
TP4	400	Present tarmac and levelling/setting deposits	-	-	0.30	Present ground surface
TP4	401	Mid greyish brown silty clay containing construction/demolition debris, brick concrete frags etc.	-	-	0.50	Made ground
TP4	402	Mid-reddish brown gravel	-	-	>1.00	Fluvial deposit



