10, JAMES STREET, LINCOLN

SCHEME OF ARCHAEOLOGICAL MITIGATION

NGR: SK 97773 72069 Planning ref.: 2008/1162/F

PCAS Job No.: 577 Site code: JSLW 09 Archive acc. no.: 2011.457

Report prepared for

York Sills Consulting Engineers

on behalf of Mr. and Mrs. B. Carr

by

R. D. Savage and J. Sleap

February 2012



Pre-Construct Archaeological Services Ltd
47, Manor Road
Saxilby
Lincoln
LN1 2HX
Tel. 01522 703800
Fax. 01522 703656
e-mail info@pre-construct.co.uk

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Summary

A programme of archaeological mitigation was implemented during a series of groundworks associated with the construction of a new dwelling on land at 10, James Street in the city of Lincoln.

The site lies within the Scheduled Ancient Monument area of the Roman city of Lindum Colonia and adjoins the Close Wall, which defined the medieval city's ecclesiastical district. It was formerly part of the gardens of Burghersh Chantry House, an 18th-century Listed Building which lies to the south of the site and had a medieval antecedent.

Two distinct construction phases, separated by a period of demolition and consolidation, were identified during the groundworks. The more recent phase could confidently be identified as part of a stable block associated with Burghersh Chantry House, which appears on 19th century Ordnance Survey mapping, and was demolished prior to the construction of a mid-20th-century bungalow that formerly occupied the site.

A group of earlier stone structures were recorded during trenching for ground beam foundations of the new house. These structures may represent outbuildings built at the same time as Burghersh Chantry House, in or around 1345, and demolished at the time of its rebuilding in the 18th century, which may well have incorporated a remodelling of its gardens.

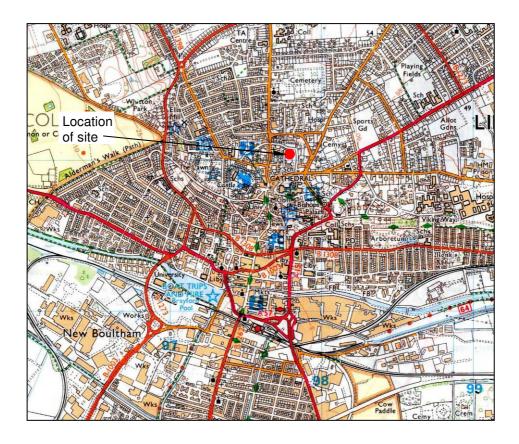


Figure 1: Site location plan at scale 1:25,000. The site is marked in red. © Crown copyright. All rights reserved. PCAS Licence No. 100049278.

1.0 Introduction

Pre-Construct Archaeological Services Ltd (PCAS) were commissioned by York Sills Consulting Engineers (on behalf of Mr. and Mrs. B. Carr) to carry out a programme of archaeological mitigation during groundworks for the construction of a house on the site of a former bungalow at 10, James Street, Lincoln.

The site lies within the Scheduled Ancient Monument area of the Roman city of *Lindum Colonia*, and adjoins the Close Wall, which defined the medieval city's ecclesiastical district.

2.0 Site location and description (figs. 1 & 2)

The site lies within the James Street and East Bight Character Area of the City of Lincoln. The Character Area is situated at the top of the north escarpment, directly north of the Cathedral, and as a result, many of the earlier buildings have religious associations. The area is enclosed on all sides by the rear of properties along the more major roads of Bailgate to the west, Church Lane to the north, Northgate to the east and Eastgate to the south. Two narrow roads with high boundaries, James Street and East Bight, provide access into and through the Character Area. The limited number of access points combined with the narrowness of the roads and the height of the boundaries make this area quite detached from the surrounding townscape. As a result, many aspects have survived relatively unchanged since the high Middle Ages, when these roads were first laid out, or even earlier, such as the section of wall from the upper walled Roman city (HCLa).

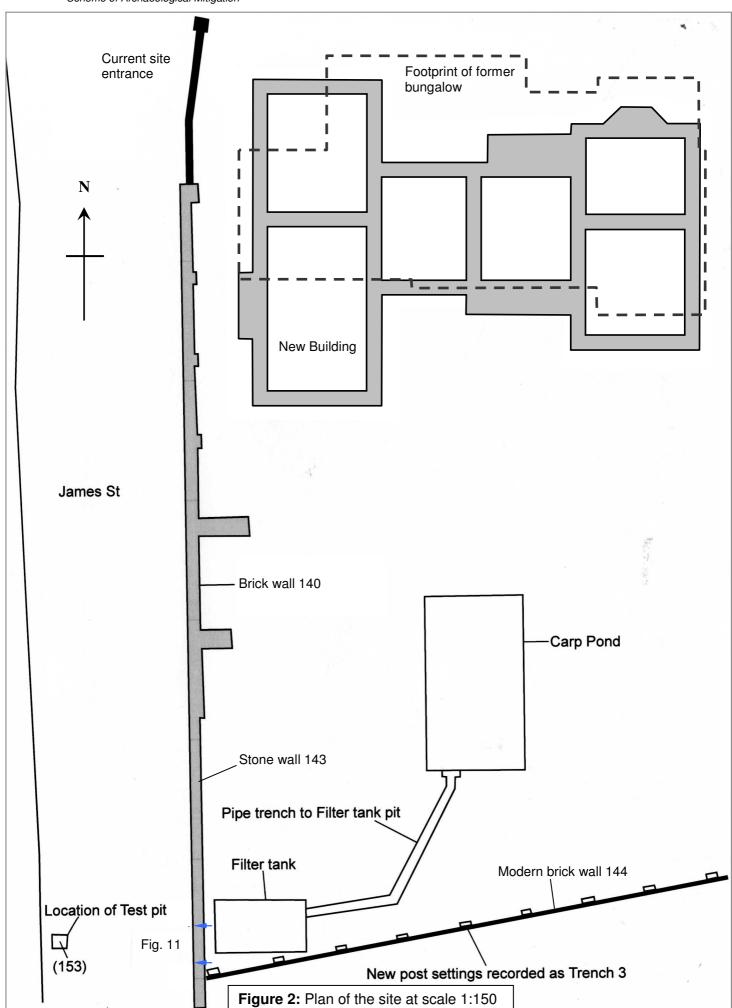
The site covers an area of $916m^2$, of which the building footprint occupies $164m^2$. The site is located on the east side of James Street , to the south of 16, James Street. To the north is the Close Wall, which forms the northern boundary of the site, with East Bight on its far side. To the east is an adjoining property, 12, James Street. The southern site boundary is formed by a modern brick wall dividing it from the Grade II Listed Burghersh Chantry House at 17, James Street. The western boundary, adjoining James Street itself, was also walled; this wall was of limestone at the south end, and otherwise of brick. The site was formerly part of the garden of Burghersh Chantry House, on which a bungalow (demolished as part of the current project) was built c.1966.

National Grid Reference: SK 97773 72069.

3.0 Geology and topography

The British Geological Survey records no drift geology in the immediate neighbourhood of the site. The exposed solid geology is mapped as undivided Crossi Bed Lincolnshire Limestone of the Jurassic era (BGS, 1973).

The site is positioned at the top of the southward-facing escarpment slope which falls from the high defensive situation of the castle and its Roman predecessor down to the River Witham; the site itself is level. The Ordnance Datum height of the site is approximately 67m OD (Rowe, 2008).



4.0 Planning background

Full planning permission (planning ref. 2008/1162/F) for the demolition of the bungalow and the construction of a new house was granted, subject to conditions requiring a scheme of archaeological mitigation, in accordance with the requirements of Planning Policy Statement 5, *The Management of Research Projects in the Historic Environment* (English Heritage, 2006).

The site lies within Lincoln Conservation Area 1 and Scheduled Ancient Monument Lincoln 115/11, Lindum Roman Colonia; Conservation Area Consent (ref. 2008/1179/CAC) and Scheduled Monument Consent (ref. HSD 9/2/14308) were granted with similar conditions.

During the progress of the groundworks, additional works, including the excavation of an ornamental carp pond with filter tank and associated water supply, were proposed, and the project specification was modified accordingly.

5.0 Archaeological and historical background

During the early years of the Roman occupation of Britain, at the end of the 1st century AD, a legionary fortress was constructed on the upper slopes of the north escarpment: as the frontier was pushed northwards to York, Lincoln became a *colonia*, a walled civilian settlement and administrative centre. James Street lies within the north-east corner of the former upper walled Roman city, and it is possible that the dogleg line of East Bight, which runs to the north of the site, may follow the course of a postulated Roman intramural wall, which may have run along the internal side of the defences (HCLa). Excavations at Cottesford Place, immediately south-west of the present development site, in 1956-7 identified a Roman bathhouse complex and possible shop buildings. At least two phases of extension to the bathhouse complex were identified, elements of which sealed an earlier street (Jones *et. al.* 2003).

Early Saxon settlement in Lincoln is poorly understood. Small quantities of pottery and other cultural debris identified in the Upper City suggest activity, though not necessarily actual settlement, within the former Roman defences. Activity appears to have moved outside the Roman city altogether in the mid-Saxon period, with occupation returning within the former city defences towards the mid-9th century (*ibid.*). The upper enclosure was certainly occupied upon the arrival of the Normans and the foundation of Lincoln Castle c.1068. The first castle occupied the full extent of the upper walled enclosure until mid-way through the 12th century, and its establishment would have entailed considerable alteration of the defences. Roads in the Character Area, including James Street and East Bight, were laid out during this period, and may in part follow the former lines of Roman roads (HCLa).

The former Roman defences continued in active use until serious structural damage to the cathedral in 1185 led to the construction of a new and larger cathedral between 1192 and the early 14th century, requiring the removal of a considerable part of Lincoln's upper city defences. In the early part of the 14th century the Close Wall was constructed around the cathedral, as well as many of its associated buildings. The wall formed new eastern defences for the city and, in addition, defined an ecclesiastical district within which members of the clergy were secure (HCLb). The wall survives in several places in the Character Area, such as along the south side of East Bight and the eastern boundary of the Bishop's House gardens, although parts were rebuilt later. Part of the Close Wall forms the northern boundary to the present development site (plate 1), but the moderate-sized, roughly hewn stone work appears to be a post-medieval rebuild (Rowe, 2008).

During the Middle Ages, several large buildings were constructed off James Street, parts of which survive in existing properties. Many of the properties were, and remain, associated with the Cathedral, such as the Burghersh Chantry House at 17 James Street and the Cathedral School Boarding House at 18 James Street. The large houses were located within substantial individual private gardens, the boundaries of which, possibly including some of the original stone boundary walls, survive in the modern townscape. Nos. 10-16 James Street occupy the former gardens associated with Burghersh Chantry House; the listing description for the house itself places its origin in 1345, noting that it was rebuilt in the mid-18th century and that a surviving medieval rear wing burned down in 1965 (BLB). Boundary walls, possibly contemporary with the properties, survive along James Street around and opposite Deloraine Court (HCLa).

Areas within the Close Wall continued to be developed and redeveloped through the 18th and early 19th centuries, although much of the area remains as open land, including gardens and greens. The former connection between James Street and East Bight was blocked around 1780. Development continued to a lesser extent during the remainder of the 19th century, with the construction of a handful of buildings within the Character Area (HCLb). Lease plans of 1840 show the gardens of Burghersh Chantry House with a stable block against the Close Wall in the north-western corner of the gardens, an orchard, a pigsty and a well; the well was observed at the rear of the contemporary 10, James Street during the archaeological evaluation carried out in 2008, and was recorded (as structure 103) during the present archaeological mitigation exercise. During the 1950s and 1960s a number of development plots were created along James Street from the gardens of existing house plots. The proposed development site is one of these plots, and occupies the former position of the stable block shown on 19th-century mapping (Rowe, 2008).

An archaeological evaluation was carried out at 10, James Street in 2008, in advance of an application for planning permission to demolish the 1960s bungalow then occupying the site and construct a new house. Three trenches were investigated, exposing post-medieval remains, including walls identified as those of the 19th century stable block, a cobbled surface and a deep demolition deposit (*ibid.*).

6.0 Methodology

The standing structure of the bungalow was demolished before the archaeological mitigation programme commenced. The floor slab of the bungalow was removed under archaeological supervision, using an 8-tonne 360° excavator fitted with a 0.8m toothed bucket (plate 2), and the footings were then machined out (plate 3).

Piles were drilled into position in the building footprint under archaeological monitoring; service trenches and ground beam slots were then excavated, using a 4-tonne 360° excavator fitted with a 0.65m toothless bucket for the larger trenches and a mini-digger with a 0.30m toothless bucket for the smaller ones (fig. 3; plate 4). The patio area for the new building was levelled, also using a toothless bucket, and the existing driveway was stripped in order to lay a new drive. The final phase of the groundworks consisted of the excavation of an ornamental fish pond with associated filter tank pit. All groundworks were carried out under archaeological supervision.

Any archaeological deposits or features encountered during the groundworks were recorded on standard PCAS context recording sheets and their position and orientation were plotted on a base plan. Features were cleaned by hand, sample excavated where possible, and drawn in plan and section at an appropriate scale, usually 1:20 or 1:50. Sample sections were also drawn in the ground beam slots and service trenches. A digital and colour slide photographic record was maintained (a selection from this record appears as Appendix 1) and an excavation site diary was also kept. Finds were stored in labelled finds bags prior to

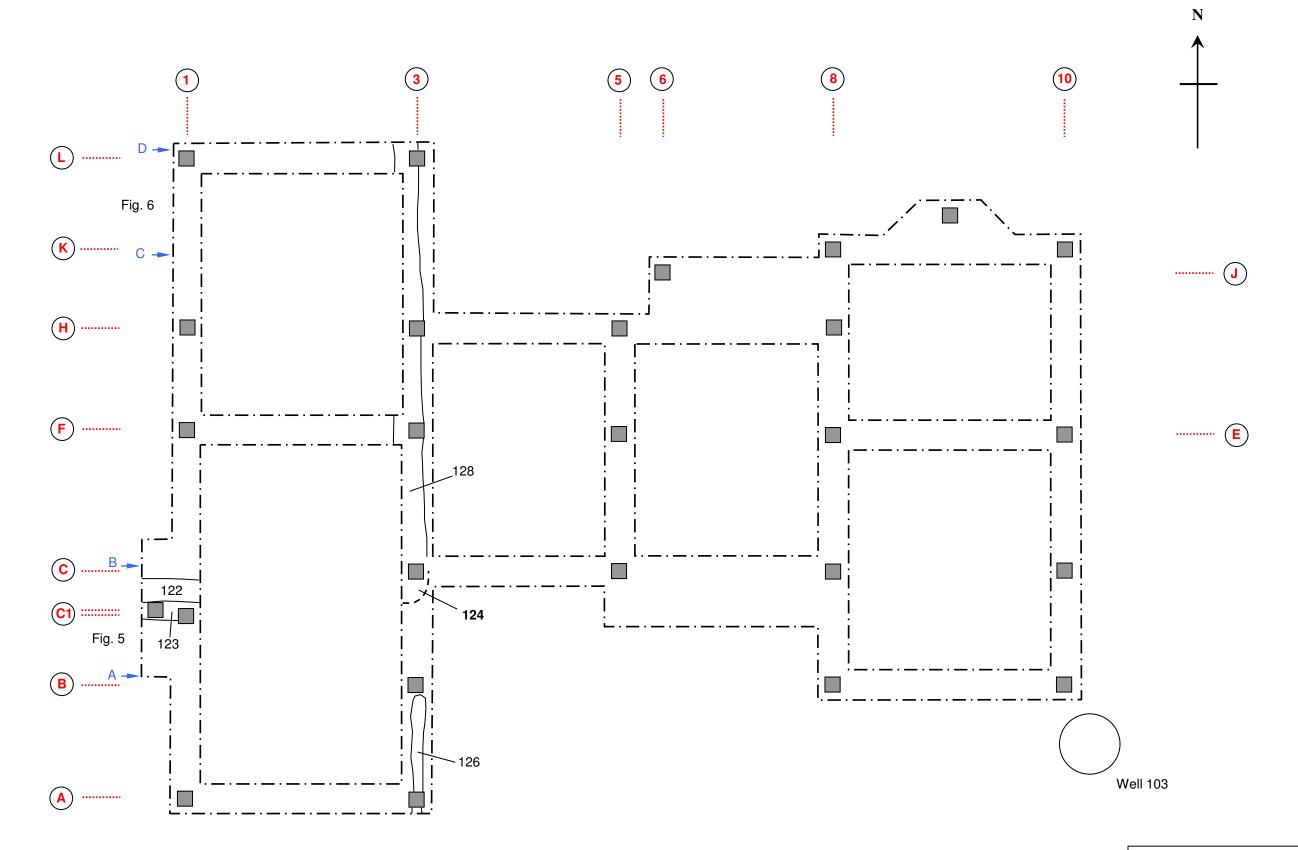


Figure 3: Plan of the ground beam and pile layout of the new building at scale 1:75, showing the locations of section drawings and major archaeological features. The piles are shown in grey and the pile runs are labelled in red.

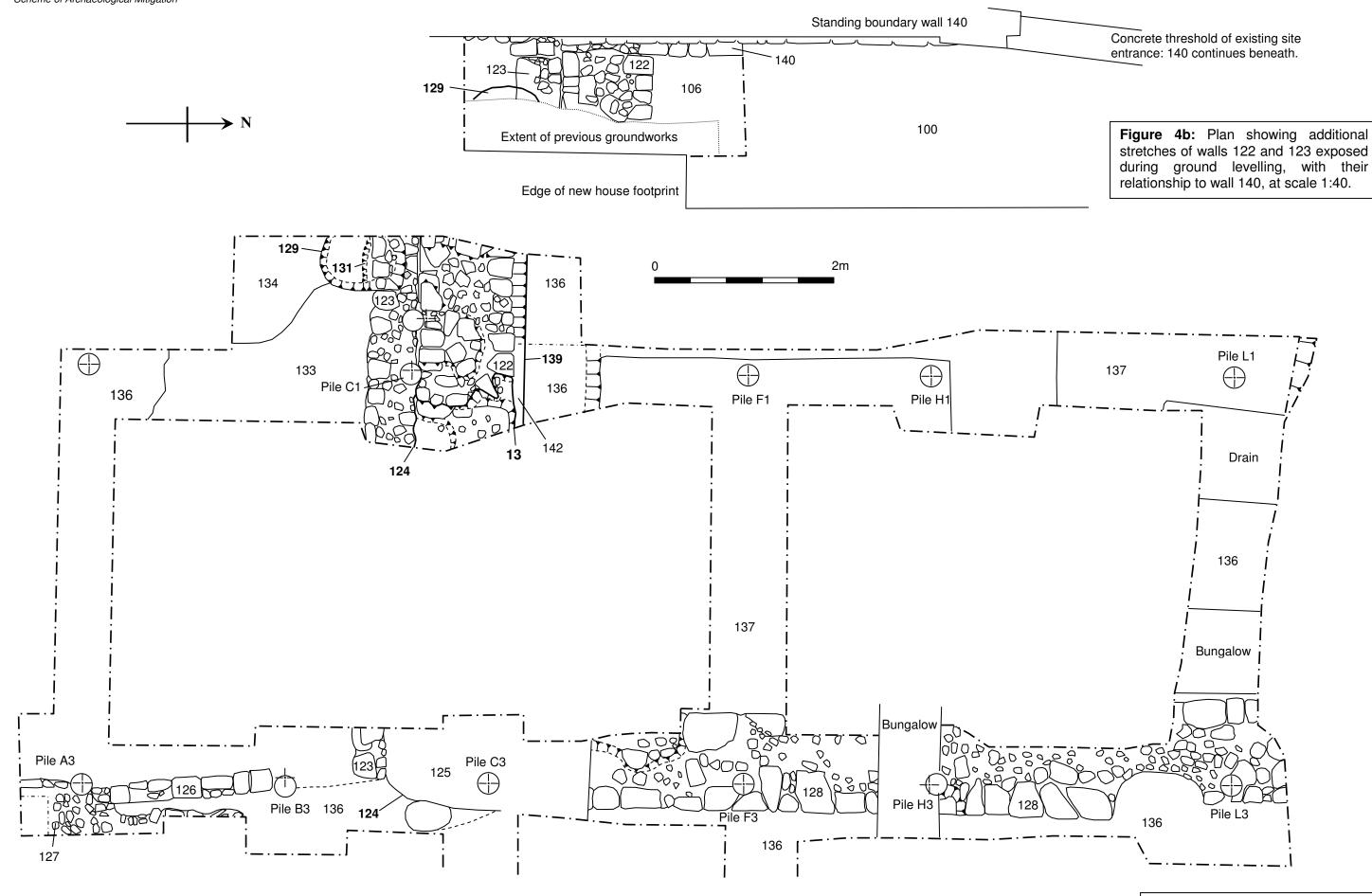


Figure 4a: Plan of the medieval walls exposed in the ground beam trenches, at scale 1:40.

their removal to the offices of PCAS for initial processing; the washed and marked finds were then dispatched to the appropriate specialists for assessment and reporting.

The archaeological mitigation scheme commenced on 14th September 2009 and was completed on 18th February 2011. Monitoring and recording were undertaken during the project by Phil Chavasse, Helen Holderness, Michael Rowe and Julian Sleap.

7.0 Results

7.1 The house footprint

At the base of the excavated ground beam trenches was layer 136, a coarsely gritty midbrownish-grey clayey silt with crushed limestone and limestone fragments. This layer may have been medieval, as it produced a sherd of 13th- to mid-15th-century pottery, while a flake of 17th- to 18th-century brick, also retrieved from this deposit, was small enough to be plausibly considered intrusive (appendix 3).

Cut into this deposit were the remains of a number of stone structures (fig. 4). Potentially the earliest of these was wall 123, a remnant of limestone block wall with a limestone rubble core, about 0.60m wide, which ran east-to-west roughly along the line of the C1 pile run. This wall could not be traced further east than pile run 3. To the south of the point beyond which wall 123 appeared to end were the fragmentary remains of another wall, 126. It is possible that the two walls formed a structure, but they were not precisely at right-angles to one another; the alignment of wall 126 was closer to north-north-west to south-south-east. Only a single course of wall 126 survived: the remains appeared to represent a limestone block facing, but no core could be identified. Wall 123 was abutted along its north side by the broader wall 122, which was roughly 1m wide and on the same alignment, and consisted of a limestone block facing with a rubble and earth core (fig. 5; plate 5). A construction cut for this wall, 139, could be identified: its fill produced 13th to early 14th century pottery, residual Roman pottery, animal bone and iron nails.

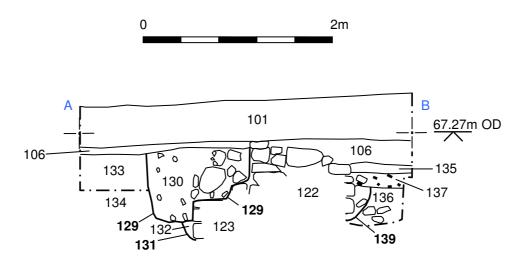


Figure 5: Walls 122 and 123 in section in the east-facing baulk of the ground beam slot at the western edge of the new house footprint, at scale 1:40. Section located on fig. 3.

Wall 122 may have formed a structure with wall 128, which was of similar construction and ran north-to-south along much of the length of pile run 3; a piece of Roman tile was retrieved from the core of this wall, although it was probably residual in this context (appendix 3). Wall

128 appeared to turn westwards in the vicinity of pile C3 as though forming a corner with wall 122: it had been robbed out at this point, but part of wall 123 survived, indicating that wall 128 did not extend further to the south. Wall remnant 126 was overlain by the remnants of layer 127, a possible yard surface chiefly composed of cobbles, with some limestone fragments. Although this layer overlay the wall, it did not extend to the west of it, suggesting that a boundary of some kind had continued to exist on this line.

Cobbled surface 127, along with the majority of the stone structures encountered in the house footprint, was sealed by the apparent demolition deposit 137, a greenish-grey gritty clayey silt containing CBM fragments tentatively identified as medieval, limestone rubble and lime mortar, and producing 13th to early 14th century pottery (appendix 3). This deposit had been cut by the robber trench **124** that had removed part of wall 128. Layer 137 was overlain by layer 135, which was tentatively interpreted on site as a former topsoil, and which produced late 17th to early 18th century clay tobacco pipe (appendix 5). Above the possible buried topsoil was a further cobbled surface, 141, consisting of compacted cobbles and pebbles with no matrix, which can probably be associated with the 19th-century stable block (fig. 6).

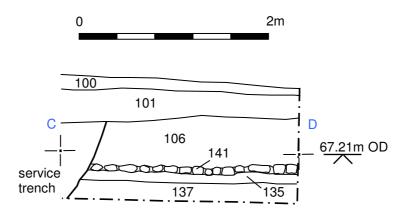


Figure 6: Section showing cobbled surface 141 at scale 1:40. Section located on fig. 3.

Directly to the south of walls 122 and 123, these deposits were not seen. In this area, basal horizon 136 was overlain by layer 134, which appeared to be a compacted clay surface about 50mm thick. This in turn was overlain by 133, a surface composed of compacted sand and crushed limestone (fig. 5); a single find, a fragment of 12th to 14th century jug handle, was retrieved from this deposit. Its relationship with wall 123 was difficult to ascertain, due to the presence of feature **129**, which may have been part of a later pit or the end of a robber trench and had separated the wall from the deposit in the exposed section (plate 5). The Project Officer on site suggested that it might have been contemporary with wall 123, and might have represented the bedding layer for a no longer extant tile floor. The fill of feature **129** contained a quantity of limestone rubble, lending substance to the suggestion that its purpose had been to retrieve usable building stone from wall 123. It produced both mid-14th to 15th century pottery and 17th to 18th century CBM (appendix 3): it is possible that the latter dates the feature itself, while the former was redeposited by its excavation.

Overlying the wall remnants was layer 104: a coarse, gritty mid-greyish-brown silt, possibly a made ground deposit. Towards the western end of the building, the material encountered was generally similar, but contained lenses of crushed limestone, and was recorded separately as deposit 106: 17th-century clay tobacco pipe was retrieved from this context (appendix 5). Above cobbled surface 141, a similar material incorporating loose cobbles derived from the underlying surface was recorded as 138. The area was sealed by former

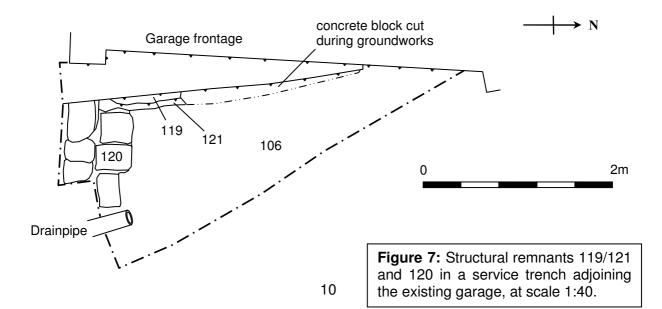
topsoil 101, from which 18th- to 19th-century pottery and moulded glass fragments were retrieved, overlain by 0.30m depth of made ground 100, representing the final levelling layer for the construction of the former bungalow.

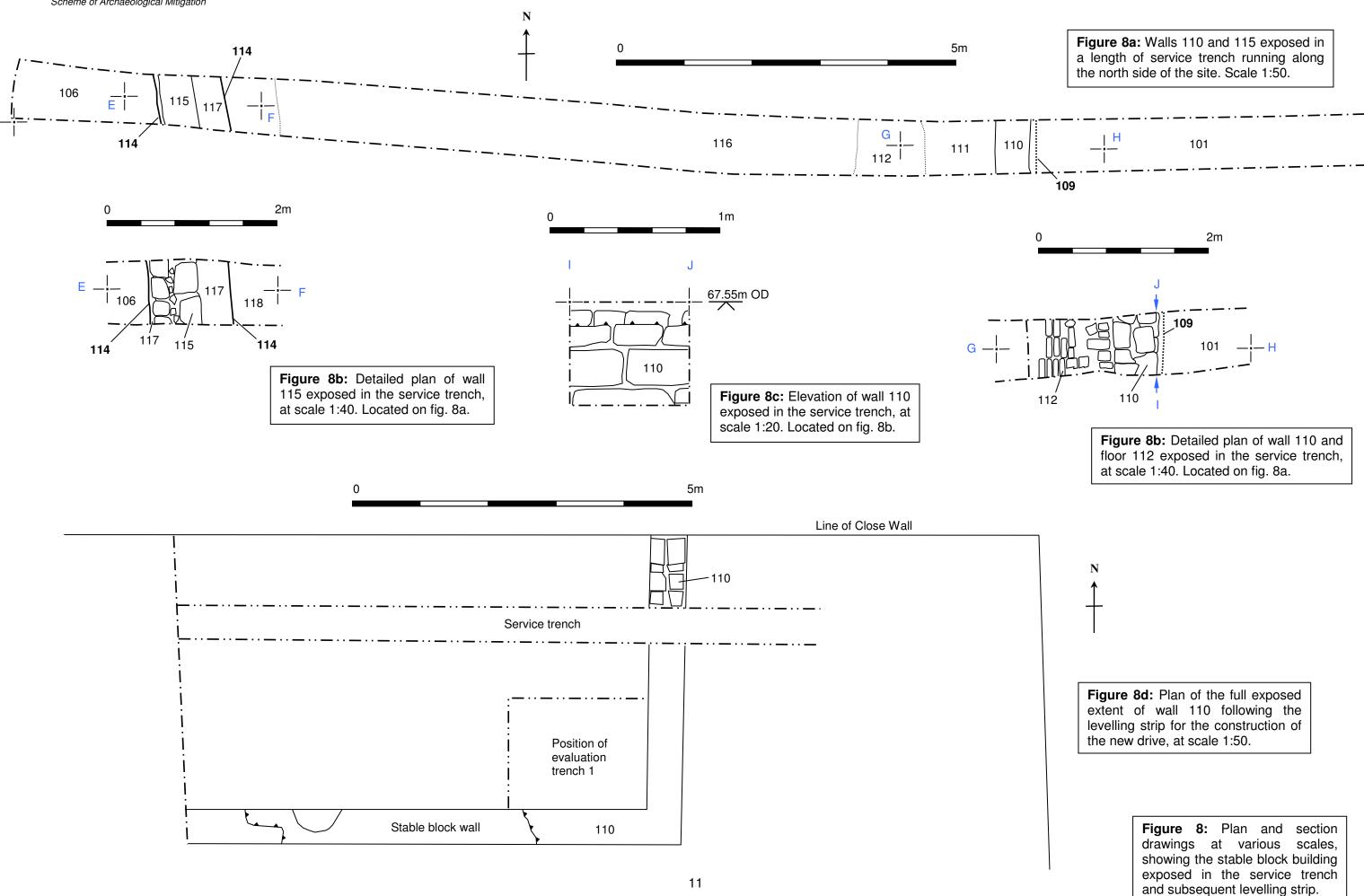
At the north-west corner of the former bungalow footprint, the buried topsoil 101 was cut by large linear feature 107, which was filled with brick and breeze block rubble: this was provisionally identified as a soakaway dug during the construction of the former bungalow. At the south-east corner, a post-medieval well was encountered during the initial site clearance. Well 103 was cylindrical, 1.50m in diameter, and chiefly constructed of limestone blocks with a band of handmade bricks towards the top and modern brickwork at the head (plate 6). Its fill, 105, consisted of garden refuse and accumulated leafmould, indicating that it had been in use until relatively recently. The well can be identified on 19th century mapping.

7.2 Service trenches and landscaping

The earliest deposit encountered in an east-to-west running service trench near the East Bight wall, to the north of the house footprint, was the yellowish-brown clayey silt deposit 118, which was excavated to a depth of 0.22m without being penetrated. This deposit was equated on site with the medieval demolition layer 137 seen in the house footprint, sealing the earlier stone structures.

Machine excavation of this trench encountered wall remnant 110 c. 5m from the eastern site boundary (fig. 8): this wall had already been located in Trench 1 of the evaluation, where it had been numbered 103 (Rowe, 2008). Wall 110 was built of limestone blocks; it was aligned north-to-south, and an external fair face could be identified on the eastern side. To the west of wall 110, apparently within the structure, was 111, a layer of hand-made bricks and limestone fragments, which appeared to have been laid to a level and might have represented a fragment of a heavily worn floor: the bricks were largely edge-set, which is normally done when a hard-wearing surface is required (plate 7). The truncated remnants of another north-to-south aligned limestone block wall, 115, were encountered 4.2m from the western end of the trench. Wall 115 lay in a wide construction cut, 114, but no dating evidence was retrieved from its fill; its position suggested an entrance to the building in line with the entrance in the East Bight wall. At the western end of the trench, adjoining the existing garage, wall remnants 120 and 119/121 were exposed (fig. 7). The limestone block wall stub 120 was aligned roughly east-to-west, and appeared to form part of the same structure as wall 110. The adjoining structure, consisting of brick wall 119 on stone footing 121, was roughly north-to-south aligned, but was neither perpendicular to wall 120 nor parallel to the existing garage structure; the brick portion of this structure overlay wall remnant 120, showing that it post-dated the demolition of the older wall.





Ground levelling for the laying of a new driveway subsequently exposed an additional length of wall 110, which was shown to abut the Close Wall; the south-eastern corner of the structure was revealed, with parts of the southern and eastern walls (fig. 8b; plate 8). This structure could be identified as part of the former stable block of Burghersh Chantry House, depicted on the 1889 1st edition 25" to the mile Ordnance Survey map of the city as an L-shaped block, consisting of three adjoining structures backing on to the west end of the Close Wall, with the most easterly of the structures extending further to the south than the others; a fourth structure on the western side, outside the present property boundary, closes James Street (old-maps.co.uk). The stable structure was sealed by a very recent demolition layer, 116, which extended under the drive for the former bungalow, but overlay made ground 100.

A further service trench alongside the eastern site boundary was recorded as Trench 2. This proved to lie entirely within the cut of a former service trench, and only disturbed material 201, chiefly redeposited garden soil, was recorded within it.

An additional stretch of walls 122 and 123 was exposed during levelling of the ground between the new house footprint and the western site boundary. The potentially medieval stone walls were seen to be interrupted by the existing site boundary wall 140, a north-to-south aligned brick wall on a stepped limestone block footing (plate 9); this wall continued northwards below ground across the current site entrance on to James Street.

7.3 Fish pond and associated groundworks

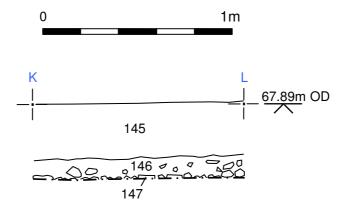
The earliest deposit encountered in the excavation for an ornamental fish pond was metalled surface 147, which was seen only at the north-western corner of the pond (fig. 9; plate 10); 16th- to 17th-century pottery and 17th and 17th-18th century clay tobacco pipe fragments were retrieved from this layer, suggesting an association with the grounds of Burghersh Chantry House. This deposit may represent a fragment of a network of curving paths depicted in this part of the garden on the 1889 1st edition Ordnance Survey 25" map of the city (old-maps.co.uk). The metalled surface was overlain by levelling layer 146, a mixture of sandy silt and mortar 0.10m deep, below the 0.60m deep topsoil layer 145: this layer was also exposed at the base of the pipe-trench connecting the fish pond and the filter tank pit. A single sherd of 19th to 20th century stoneware was retrieved from layer 146, while topsoil 145 produced 19th century pottery as well as redeposited earlier material (appendix 3).

At the base of the associated filter tank pit was gravel path surface 148: this directly underlay topsoil 145. In this area, the topsoil was so deep that it was not penetrated at the west side of the tank excavation. This area is shown as being occupied by trees on the 1st edition 25" OS map (old-maps.co.uk), which may explain the depth and irregular horizon of the topsoil here.

7.4 Other groundworks

A row of four post-holes was excavated under archaeological supervision along the southern site boundary, adjoining the modern brick retaining wall 144, which was numbered but not recorded (fig. 2). The post-holes, which were recorded as comprising Trench 3, were approximately 0.50m deep: only disturbed material 301, chiefly redeposited garden soil, was seen in them.

A trial pit was hand-excavated at the western edge of James Street, opposite the south-western corner of the site (fig. 10; plate 11). The earliest layer encountered was deposit 153, a possible make-up layer comprising sandy silt with small brick and limestone fragments. This was overlain by a possible earlier road surface, 150, consisting of loose-laid bricks in a matrix of dark brown sandy silt. The trial pit was sealed by a deteriorated asphalt road surface, 149, which was overlain by 151, an accumulation of modern topsoil.



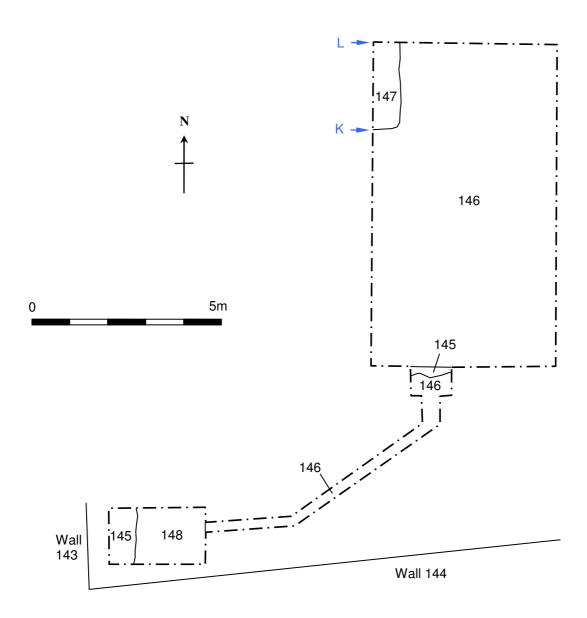


Figure 9: Plan of the fish pond and filter tank at scale 1:50, with a sample section at scale 1:20.

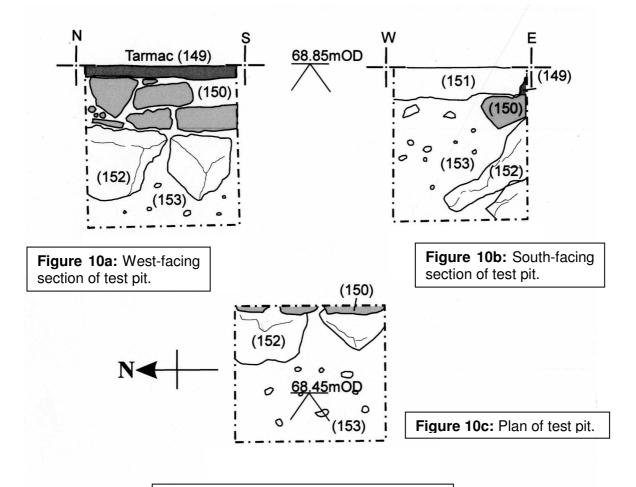
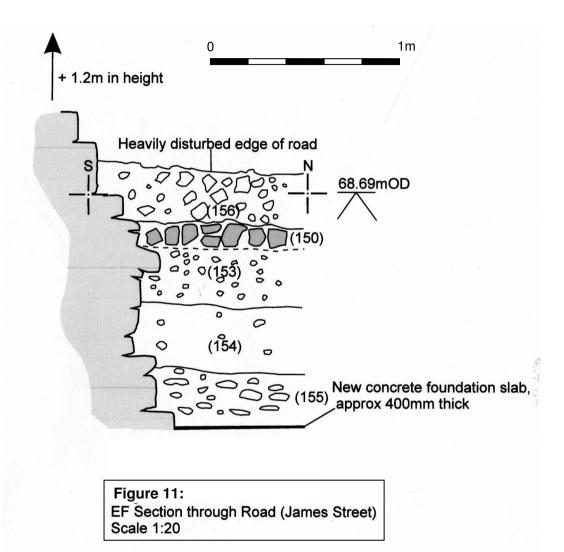


Figure 10: Plan and sections of the test pit in James Street, at scale 1:10.

An exposed section through the edge of James Street, on the western side of the foundations of wall 143, the stone-built southern portion of the western boundary wall, was recorded during works to repair and reconstruct the wall (fig. 11; plate 12). At the level of the foundation base was deposit 155, consisting of large, flat limestone fragments in a matrix of light greyish-brown sandy silt: this deposit was excavated to a depth of 0.22m without being penetrated, and produced no datable material. Overlying 155 was sandy silt deposit 154, below another sandy silt layer which could be identified as layer 153, already observed in the trial pit. The possible earlier road surface 150, already recorded in the trial pit, was also seen again in this section, overlying layer 153. The uppermost layer was 156, a mixture of sandy silt and brick rubble. No construction cut for the wall itself was observed during the recording process. A section through the stone wall itself was also recorded. Re-used architectural fragments were noted within the upper part of the structure, which was otherwise composed of coursed, but undressed, limestone blocks, originally set in lime mortar but repointed with modern cement. The limestone blocks were chiefly used as a facing material, with the core of the wall largely composed of a mixture of limestone fragments and lime mortar (fig. 12).



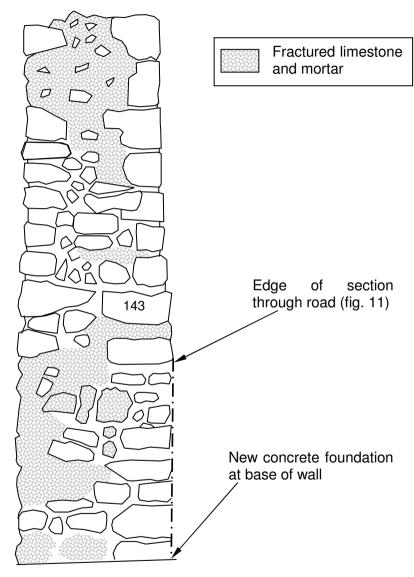


Figure 12: North-facing section through wall 143 near its junction with modern brick wall 144, at scale 1:20.

8.0 Discussion and conclusions

Two distinct construction phases, separated by a period of demolition and consolidation, were identified during the groundworks. The more recent phase could confidently be identified as part of the stable block associated with Burghersh Chantry House, which appears on 19th century Ordnance Survey mapping, and was demolished prior to the construction of the mid-20th-century bungalow whose demolition opened this project.

The earlier structures encountered in the ground beam trenches for the construction of the new house can be dated to roughly the 13th to 14th century, and were overlain by a demolition layer containing material of the same date and a topsoil apparently dating to the 17th to 18th century. Assuming that the finds from the demolition layer were redeposited, these dates can provisionally be pegged to the known history of Burghersh Chantry House. The earlier stone structures may represent outbuildings built at the same time as the main house, in or around 1345, and demolished at the time of its rebuilding in the 18th century, which may well have been associated with a remodelling of its gardens.

9.0 Effectiveness of methodology

The methodology employed during the scheme of archaeological mitigation achieved its primary objective, of preserving *in situ* and by record two phases of archaeological remains associated with the history of Burghersh Chantry House; causing the minimum of disruption to the construction process.

10.0 Acknowledgements

PCAS Ltd would like to thank Mr. and Mrs. Carr and York Sills Consulting Engineers for this commission.

11.0 Site Archive

The project archive is currently held at the offices of PCAS Ltd, Saxilby, Lincolnshire, and will be deposited with The Collection (formerly the Lincoln City and County Museum) by June 2012.

12.0 Bibliography

British Geological Survey, 1973, *Lincoln: England and Wales 1:50,000 Series sheet 114, Solid and Drift Provisional Edition.* BGS, Keyworth, Nottingham.

British Listed Buildings Online (BLB) entry for Burghersh Chantry House consulted 21/02/12 at http://www.britishlistedbuildings.co.uk/en-486056-burghersh-chantry-17-lincoln

Heritage Database for Lincoln (HCLa), *James Street and East Bight Character Area*, consulted 3/12/11 at http://www.heritageconnectlincoln.com/character-area/james-street-and-east-bight/44/overview

Heritage Database for Lincoln (HCLb), *Cathedral and Close Character Area*, consulted 27/10/11 at http://www.heritageconnectlincoln.com/character-area/cathedral-and-close/45/description

Jones, M. J., 2002, *Roman Lincoln: Conquest, Colony and Capital*. Tempus Publishing Ltd., Stroud, Gloucestershire.

Jones, M.J., Stocker, D. and Vince, A., 2003, *The City by the Pool: Assessing the archaeology of the city of Lincoln*. Oxbow Books, Oxford.

Ordnance Survey, 2006, *Lincoln, Sleaford, Metheringham and Navenby: Explorer 1:25 000 Series*. Ordnance Survey, Southampton.

Ordnance Survey, 1889 1st edition and 1907 2nd edition 25" to the mile mapping, consulted online at http://www.old-maps.co.uk.

Rowe, E., 2008, 10, *James Street, Lincoln, Lincolnshire: Archaeological Evaluation Report.* Unpublished client report for Pre-Construct Archaeology (Lincoln).

Appendix 1: Colour Plates



Plate 1: General shot of the north side of the site post-demolition, looking north-east from the James Street entrance towards the scheduled boundary wall.



Plate 2: Removing the concrete floor slab of the demolished bungalow, looking south towards Lincoln Cathedral.



Plate 3: Working shot during removal of the old bungalow footings, looking west towards the top of James Street from the north-east corner of the site.



Plate 4: Excavation of the ground beam slots for the new building, following the installation of the piles (foreground and centre), looking west.



Plate 5: Walls 122 and 123 exposed at the western edge of the building footprint, with small pit 129, looking north. The photo board is resting on compacted floor surface 133.



Plate 6: Well 103, showing the modern brick well head above the original limestone and brick construction.



Plate 7: Limestone stable wall 110, with brick floor fragment 111, exposed in the service trench, looking north.



Plate 8: The northernmost structure of the stable block, adjoining the Close Wall, exposed during ground levelling to the north of the new building footprint, looking west.



Plate 9: Further fragments of walls 122 and 123 exposed to the west of the house footprint, showing their relationship to existing boundary wall 140, looking north-west.



Plate 10: Metalling layer 147 exposed in the corner of the fish pond excavation, looking north.



Plate 11: Excavation of a test pit at the western edge of James Street, looking north towards the new building.



Plate 12: The exposed section behind the foundations of the western site boundary wall, looking east.

Appendix 2: Context Summary

Context No.	Туре	Description	Finds/Dating
100	Layer	Made ground for construction of former bungalow, 0.30m deep	Modern
101	Layer	Dark brownish-grey gritty former topsoil below layer 100; 0.30m deep; contains frequent coke flecks/fragments	Pottery, fragments of moulded glass, clay pipe stem, animal bone – 18 th to 19 th century
102	Cut	Construction cut for well 103	
103	Structure	Cylindrical well, chiefly of limestone blocks, with a band of handmade bricks towards the top and modern brickwork at the head. Diameter 1.50m; exposed to a depth of 0.90m.	Post-medieval
104	Layer	Mid-greyish-brown coarse gritty silt, possibly made ground, below buried topsoil 101; exposed to a depth of 0.10m	Post-medieval
105	Fill	Fill in well 103: garden refuse and accumulated leafmould	Modern
106	Layer	Mid-greyish-brown coarse gritty clayey silt with lenses of crushed limestone, possibly made ground, below buried topsoil 101 at W end of building; exposed to a depth of 0.40m.	17 th century clay tobacco pipe
107	Cut	Possible E-W aligned linear feature adjoining old footings at NW corner of bungalow; 1.80m wide x 0.80m deep; provisionally identified as a soakaway, dug during construction of 1960s bungalow	Modern
108	Fill	Brick and breeze block rubble filling cut 107	Modern
109	Cut	Construction cut for wall 110, cutting layer 101	
110	Structure	Remains of limestone block wall, aligned N-S with external face to E; below layer 116; part of stables shown on 1840 OS map	19 th century
111	Layer	Layer of hand-made bricks and limestone fragments, 0.11m deep: probably a heavily worn stable floor	
112	Layer	Dark brownish-grey coarse gritty clayey silt with frequent fragments of coke and moderate limestone fragments; below 111; 0.18m deep	
113	Layer	Mid-greyish-brown coarse gritty clayey silt below layer 112 to W of wall 110; 0.18m deep	
114	Cut	Construction cut for wall 115, cutting layer 118	
115	Structure	Remains of limestone block wall, aligned N-S, 12m W of wall 110; below layer 116; part of stables shown on 1840 OS map	
116	Layer	Mid-yellowish-brown coarse gritty silt with frequent brick rubble and moderate limestone fragments, below modern drive; 0.60m deep; possible demolition deposit	
117	Fill	Mid-greyish-brown clayey silt fill of construction trench 114, overlying wall footings 115	
118	Layer	Mid-yellowish-brown clayey silt at base of service trench; excavated to a depth of 0.22m	
119	Structure	Remnant of N-S aligned brick wall on stone footing 121; not exactly perpendicular to wall 120	
120	Structure	Remnant of limestone block wall, ENE-WSW aligned; appears to be tied into structure 121	
121	Structure	Limestone block wall footings below wall 119	

Context No.	Туре	Description	Finds/Dating
122	Structure	Remnant of limestone block wall with limestone rubble core, E-W aligned, parallel and adjacent to wall 123	
123	Structure	Remnant of limestone block wall with limestone rubble core, E-W aligned, parallel and adjacent to wall 122	
124	Cut	Robber trench truncating wall 122	16 16
125	Fill	Dark brownish-grey gritty clayey silt fill of robber trench 124	17 th century and 18 th -19 th century clay tobacco pipe
126	Structure	Remnant of N-S aligned limestone block wall, only 1 course remaining, below surface 127	
127	Layer	Cobble layer with some limestone fragments: possible yard surface. Overlies but does not extend to W of wall remnant 126.	
128	Structure	Remnant of N-S aligned limestone block wall with rubble and earth core: return of wall 122	Roman tile retrieved from rubble core
129	Cut	Sub-circular pit, 0.90m x 0.80m x 0.74m, adjacent to wall 123, cutting fill 132 and layer 133	
130	Fill	Mid-brownish-grey gritty clayey silt fill of pit 129; contains frequent CBM, crushed limestone and limestone rubble	Mid-14 th to 15 th century pottery; possibly intrusive 17 th to 18 th century CBM; animal bone
131	Cut	E-W aligned construction cut for wall 123	
132	Fill	Mid-brownish-grey coarse gritty silt fill of cut 131	11-
133	Layer	Mid-yellowish-brown mixture of sand and crushed limestone, forming a compacted surface, possibly contemporary with wall 123	Fragment of 12 th to 14 th century jug handle, recorded as RF 1
134	Layer	Mid-greenish-grey compacted clay layer, possible surface, 0.05m thick, below surface 133	
135	Layer	Dark brownish-grey gritty silt with frequent charcoal flecks, 0.15m deep: possible buried soil below cobbled surface 141	Late 17 th to early 18 th century clay tobacco pipe
136	Layer	Mid-brownish-grey coarse gritty clayey silt with crushed limestone and limestone fragments: lowest horizon reached in beam slot trenches	13 th to mid-15 th century pottery; possibly intrusive 17 th to 18 th century brick; animal bone
137	Layer	Mid-greenish-grey gritty clayey silt containing CBM fragments, limestone rubble and lime mortar, 0.40m deep: possible demolition layer	13 th to early 14 th century pottery; CBM – medieval?
138	Layer	Mid-brownish-grey coarse gritty clayey silt containing cobbles derived from layer 141, 0.27m deep	
139	Cut	Construction cut for wall 122, cutting layer 136	
140	Structure	Brick wall on stepped limestone block footing, aligned N-S, abutting walls 122 and 123	
141	Layer	Surface of compacted cobbles and pebbles with no matrix, below layer 138	Post-medieval
142	Fill	Mid brownish-grey coarse gritty clayey silt with limestone fragments and possible deteriorated lime mortar inclusions, filling construction cut 139	13 th to early 14 th century pottery; Roman pottery; animal bone; iron nails
143	Structure	Standing limestone block boundary wall, including re-used architectural fragments; damaged during development	
144	Structure	Modern brick retaining wall abutting wall 143: numbered but not recorded	
145	Layer	Dark brown silty sand topsoil in carp pond area, 0.60m deep	19 th century (earlier pottery also present)

Context No.	Туре	Description	Finds/Dating
146	Layer	Mottled mid-brown and yellowish-brown mixture of sandy silt and mortar below topsoil 145, 0.10m deep	19 th to 20 th century
147	Layer	Metalled surface of small stones compacted into a bed of mid reddish-brown clayey silt, 0.05m deep, below layer 146 in fish pond	16 th to 17 th century pottery; 17 th century and 17 th -18 th century clay tobacco pipe; animal bone
148	Layer	Gravel path surface in a matrix of dark greyish- brown silty sand, below topsoil 145 in filter pit; not excavated	
149	Layer	Deteriorated asphalt road surface below layer 151	Modern
150	Layer	Loose-laid bricks in a matrix of dark brown sandy silt, 0.15m deep: possible earlier road surface below 149	17 th to 18 th century CBM
151	Layer	Accumulation of dark brown sandy silt topsoil over deteriorated asphalt 149, 0.07m deep	
152	Layer	Deposit of bricks and square granite cobbles in mortar below layer 153	17 th to 18 th century CBM
153	Layer	Light greyish-brown sandy silt with frequent small brick and limestone fragments, 0.32m deep, below layer 150: possible make-up layer	
154	Layer	Light greyish-brown sandy silt, 0.38m deep, below layer 153	
155	Layer	Large, flat limestone fragments in a matrix of light greyish-brown sandy silt, excavated to a depth of 0.22m but not penetrated, below layer 154	
156	Layer	Mid- to dark greyish-brown sandy silt with frequent brick rubble, 0.30m deep, overlying layer 150 adjacent to road	
201	Fill	Disturbed material, chiefly redeposited garden soil, filling an earlier service trench within which Trench 2 lies. Excavated to a depth of 0.50m.	Post-medieval (contained redeposited Roman pottery)
301	Fill	Disturbed material, chiefly redeposited garden soil, adjoining brick retaining wall 144. Excavated to a depth of 0.50m.	Post-medieval
401	Layer	Dark loamy silt with frequent brick and clinker fragments, 0.30m deep	19 th -20 th century
402	Layer/	Layer of brick fragments, 0.12m deep – possible surface or hard-standing	19 th century
403	Layer	Dark brown silt with small limestone fragments – possible buried topsoil – 0.30m deep	
404	Layer	Mid-greyish-brown silt with frequent small limestone fragments, 0.32m deep	
405	Layer	Mid-greyish-brown silt, resembling 404 but with rare limestone fragments, 0.28m deep	
406	Layer	Mid-greyish-brown silt, resembling 404 but with occasional limestone fragments, 0.20m deep	

Appendix 3: The Ceramic Finds

by Dr Anne Irving

THE POTTERY

Introduction

All the material was recorded at archive level in accordance with the guidelines laid out in Slowikowski *et al.* (2001), Darling (1994) and Lincolnshire County Council's *Archaeology Handbook*. The pottery codenames (Cname) are in accordance with the pottery type series for Lincolnshire. A total of 28 sherds from 27 vessels, weighing 506 grams was recovered from the site.

Methodology

The material was laid out and viewed in context order. Sherds were counted and weighed by individual vessel within each context. The pottery was examined visually and using x20 magnification. This information was then added to an Access database. An archive list of the pottery is included in Archive Catalogue 1, with a summary in Table 1. The pottery dates from the Roman to the early modern period.

Condition

Most of the sherds are in fairly fresh condition, with five showing signs of abrasion.

Results

Table 1. Summary of the Pottery

Period	cname	Full name	Earliest date	Latest date	NoS	NoV	W (g)
Roman	GREY	Miscellaneous Grey ware	Roman	Roman	4	4	62
Saxo- Norman	SNLS	Saxo-Norman Lincoln Sandy Ware	970	1080	1	1	4
Medieval	LSWA	Lincoln Glazed ware Fabric A	1100	1500	2	2	167
	LLSW	Late Lincoln Glazed ware	1350	1500	2	2	24
	LSW2	13th to 14th century Lincoln Glazed Ware	1200	1320	3	2	58
	LSW2/3	13th to 15th century Lincoln Glazed Ware	1200	1450	1	1	19
	LSW3	14th to 15th century Lincoln Glazed Ware	1280	1450	1	1	6
Post-	CIST	Cistercian-type ware	1480	1650	2	2	31
medieval	HUM	Humberware	1250	1550	1	1	9
	BL	Black-glazed wares	1550	1750	3	3	66
Early	BS	Brown stoneware (generic)	1680	1850	1	1	21
Modern	CREA	Creamware	1770	1830	1	1	13
	ENPO	English Porcelain	1750	1900	2	2	6
	PEARL	Pearlware	1770	1900	1	1	1
	SWSG	Staffordshire White Saltglazed stoneware	1700	1770	1	1	6

Period	cname	Full name	Earliest date	Latest date	NoS	NoV	W (g)
	WHITE	Modern whiteware	1850	1900	2	2	13
				TOTAL	28	27	506

Range

All of the ware types present at James Street are common in assemblages from Lincoln.

Potential

All of the pottery is stable and poses no problem for long-term storage. No further work is required on the assemblage.

CERAMIC BUILDING MATERIAL

Introduction

All the material was recorded at archive level in accordance with the guidelines laid out by the ACBMG (2001) and to conform to Lincolnshire County Council's *Archaeology Handbook*. A total of 62 fragments of ceramic building material, weighing 8314 grams was recovered from the site.

Methodology

The material was laid out and viewed in context order. Fragments were counted and weighed within each context. The ceramic building material was examined visually and using x20 magnification. This information was then added to an Access database. An archive list of the ceramic building material is included in Archive Catalogue 2, with a summary in Table 2.

Results

Table 2, Summary of the Ceramic Building Material

Cname	Full name	NoF	W (g)
BRK	Brick	3	1489
CBM	Ceramic building material	2	32
FLOOR	Floor tile	1	57
NIB	Nibbed tile	10	807
PNR	Peg, nib or ridge tile	44	5153
RTIL	Roman tile	2	776
	TOTAL	62	8314

Condition

Overall the fragments are in fresh condition and comprise large fragments.

Range

Roof tiles, bricks and a single floor tile are present in the assemblage.

Potential

All the material is stable and poses no problem for long-term storage. No further work is required on the assemblage.

Provenance

Residual Roman pottery and a single fragment of tile were present in layer (201), wall [128], fill of construction cut [139] and layer (145).

Medieval pottery and tile came from a fill of soakaway [107], wall [122], robber cut [124], pit [129], surface (133), fill of construction cut [139] and layers (136), (137) and (138).

Post-medieval and early modern material is associated with layers (145), (146) and surfaces (147) and (150/51).

Spot Dating

The dating in Table 3 is based on the evidence provided by the finds detailed above.

Table 3. Spot dates

Cxt	Date	Earliest Horizon	Latest Horizon	Comment
108	13th to 15th	MH4	MH18	Date on CBM
122	13th to 14th	MH4	MH8	Date on CBM
125	13th to 15th	MH4	MH10	Date on CBM
128	Roman	R	R	Date on single fragment of CBM
130	Mid 14th to 15th	MH8	MH10	Date on a single sherd
133	12th to 14th	MH1	MH10	Date on a single sherd
136	13th to mid 15th	MH4	MH9	Date on a single sherd
137	13th to early 14th	MH4	MH6	Date on a single sherd
142	13th to early 14th	MH4	MH6	
145	19th	EMH	EMH	
146	19th to 20th	EMH	EMH	Date on single sherd
147	16th to 17th	PMH1	PMH6	
150/151	17th to 18th	PMH4	PMH10	Date on CBM
201	Roman	R	R	

Abbreviations

ACBMG	Archaeological Ceramic Building Materials Group
BS	Body sherd
CRM	Ceramic Building Material

CBIVI Ceramic Building Materia

CXT Context

LHJ Lower Handle Join
NoF Number of Fragments
NoS Number of sherds
NoV Number of vessels

TR Trench

W (g) Weight (grams)

References

~ 2010, *Lincolnshire Archaeological Handbook* [internet]. Available at http://www.lincolnshire.gov.uk/ section.asp?catId=3155

Darling, M., 1994, Guidelines for the Archiving of Roman Pottery, Study Group for Roman Pottery [internet]. Available at http://www.sgrp.org.uk/05/Contents.htm

Slowikowski, A. M., Nenk, B., and Pearce, J., 2001, Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics, Medieval Pottery Research Group Occasional Paper 2

Young, J., Vince, A.G. and Nailor, V., 2005, A Corpus of Saxon and Medieval Pottery from Lincoln (Oxford)

Archive Catalogues

		gue 1, Potte							
Cxt	Cname	Form	NoS	NoV	W	Part	Decoration	Description	Date
101	0107		1.		(g)	50			400
101	CIST	Jug	1	1	25	BS			16th
101	ENPO	Cup	1	1	5	BS			
101	ENPO	Cup/	1	1	1	BS	Blue		
		drinking					handpainted		
		bowl					design		
101	LLSW	Jug/jar	1	1	14	BS			
101	SWSG	Hollow	1	1	6	Base			
101	WHITE	?	1	1	1	BS	Transfer		
							print		
130	LLSW	Jug	1	1	10	BS		CU spec	
133	LSWA	Baluster	1	1	154	Handle		Strap combed	
		jug?						handle; triple	
								pressing at	
								UHJ	
136	LSW2/3	Jug	1	1	19	Base			
137	LSW2	Jug	1	1	42	Handle		Oval handle;	
								abraded	
142	GREY	Flagon	1	1	1	Rim	Burnished		
142	LSW2	Jug	2	1	16	BS	Rilled	Concretion	
142	LSWA	Jug	1	1	13	Rim		Upright rim;	
								ridged	
145	BL	Bowl	1	1	56	BS			17th
									to
									18th
145	CIST	?	1	1	6	Base			16th
145	CREA	Jar	1	1	13	Rim			
145	GREY	Jug/ jar	1	1	44	BS	Burnished		
							arc		
145	GREY	Jar	1	1	8	Rim		Abraded	
145	PEARL	?	1	1	1	BS	Blue slip		
							banded		
145	WHITE	Plate	1	1	12	Rim	Transfer		
							print		
146	BS	Hollow	1	1	21	Base			
147	BL	Drinking	2	2	10	BS			
		vessel							
147	HUM	Cistern?	1	1	9	Rim		Internal soot	
147	LSW3	Jug	1	1	6	BS			
147	SNLS	?	1	1	4	BS		Soot	
201	GREY	Jar/ bowl	1	1	9	Base		Soot; very	
								abraded	

Archive Catalogue 2, Ceramic Building Material

Cxt	Cname	Fabric	Form	NoF	W (g)	Description	Date
108	PNR	Fabric 1 & 7		4	786	Flat roofer; some mortar	
122	NIB	Fabric 7	Moulded round nib	5	239	Mortar	
125	PNR	Fabric 7		4	254	Flat roofers; some mortar	
128	RTIL			1	744	Mortar	Roman
130	BRK	Oxidised; fine sandy		1	71	Flake; handmade	17th to 18th
130	FLOOR	Oxidised sandy		1	57		
130	NIB	Fabric 7	Moulded round nib	2	113		
130	PNR	Fabric 1		5	214	Some mortar; flat roofer	
130	PNR	Fabric 7		18	1038	Some mortar; flat roofer	
130	RTIL			1	32	Flake; ?ID	Roman?
136	BRK	Fine sandy		1	94	Flake; strike marks; flake; handmade	17th to 18th
137	NIB	Fabric 7	Moulded round nib; cut back	1	246	Upper right hand corner	
137	NIB	Fabric 1/7	Triangular nib; cut back	1	128	Upper right hand corner	
137	PNR	Fabric 1 & 7		6	713	Flat roofer; some mortar	
145	PNR	Fabric 7		1	78	Flat roofer	
146	PNR	Fabric 1 & 7		6	2070	Flat roofers; some mortar	
147	CBM			2	32		?
147	NIB	Fabric 1	Moulded round nib	1	81		
150/152	BRK	Shale	55mm	1	1324	Sand moulded; handmade	17th to 18th

Appendix 4: The Faunal Remains

by L.L Keal

Introduction

A total of 13 fragments (106.6g) of animal bone were recovered by hand during a watching brief at 10 James Street, Lincoln. The faunal remains were recovered from former topsoil 101, pit fill 130, layer 136, the fill of a construction cut 142 and a metalled surface 147. The earliest of these deposits was 142, which has been spot-dated to the 13th to early 14th century; 136 was spot-dated to the 13th to mid-15th century; 130 to the mid-14th to 15th, and surface 147 to the 16th to 17th century. Buried topsoil 101 produced pottery from the 18th and 19th centuries (appendix 3). The archive below was produced with reference to published catalogues (Schmid 1972; Hilson 2003).

Condition

The overall condition of the remains was good, averaging grade 2 on the Lyman criteria (1994). Two fragment of long bone from deposit (142) showed evidence of incomplete burning, being discoloured black in places. A single rib fragment from deposit (136) displayed three cut marks, though no evidence for pathology or gnawing were noted on the remains.

Results

Table 1: Summary of fragments

Context	Taxon	Element	Side	No:	Weight	Comments
101	Cattle	Metatarsal	L	1	28.9g	Juvenile
130	Medium mammal	Vertebra	М	1	1.3g	
	Medium mammal	Rib	?	1	2.1g	
136	Large mammal	Rib	?	1	12.1g	Cut marks present
	Medium mammal	Radius	?	1	11.8g	
142	Pig	Metatarsal	L	1	9.7g	2 nd metatarsal. Juvenile.
	Medium mammal	Long bone	?	2	3.5g	Burnt, black in places.
	Medium mammal	Scapula	?	2	1g	•
147	Cattle	Vertebra	М	1	26.3g	Juvenile
	Medium mammal	Long bone	?	1	3.0g	
	Large mammal	Rib	?	1	6.9g	

Summary

Due to the small size of the assemblage, the remains provide little information, save the presence and use of the animals on site.

References

Hilson, S. 2003 Mammal Bones and Teeth: An introductory guide to methods of identification. (London)

Lyman, RL, 1994 *Vertebrate Taphonomy*. Cambridge Manuals in Archaeology (Cambridge) Schmid, E, 1972 *Atlas of Animal Bones* (Amsterdam, London, New York: Elsevier)

Appendix 5: Clay tobacco pipe report

By Kevin Trott

Introduction

A total of 12 fragments of clay tobacco pipe bowls and stems weighing 80 grams were recovered from four contexts at 10 James Street in Lincoln. The assemblage consists of 4 fragmented polished bowls with milled lips and plain feet, and 8 polished plain stems.

Context	Туре	Date Range	Description/Notes
106	Plain stem	17 th century	-
106	Plain stem	17 th century	Mortar adhering
125	Plain stem	17 th century	Heat-affected
125	Plain stem	18-19 th century	Mouthpiece
135	Plain stem	17 th century	-
135	Bowl	1660-1690	Mann Type 101
135	Bowl	1660-1690	Mann Type 101
135	Bowl and stem	1670-1700	Mann Type 122
135	Bowl	1690-1720	Mann Type 148
147	Plain stem	17 th century	-
147	Plain stem	17 th century	Heat-affected
147	Plain stem	17-18 th century	-

Table 1: Clay Tobacco Pipe Inventory

Description

The vast majority of the clay pipe assemblage is relatively fresh and unabraded. The excavated examples however show some signs of post-depositional fractures and breaks as well as older breakages with soil adhering.

The clay tobacco pipe assemblage from 10 James Street is largely later 17th to early 18th century in date with a single example of 18th/19th century date from context 125.

References

Oswald, A. 1975. *Clay Pipes for the Archaeologist.* British Archaeological Reports **14** Mann, J.E. 1977. *Clay Tobacco Pipes from Excavations in Lincoln 1970-1974.* Lincoln Archaeological Trust Monograph **XV-1**

Appendix 6: OASIS summary