

**A REPORT TO
D C DEVELOPMENTS (LINCOLN) Ltd**

May 2005

**ALEXANDRA TERRACE,
LINCOLN**

**ARCHAEOLOGICAL
EVALUATION**

**PREPARED BY
MIKE JARVIS ARCHAEOLOGICAL SERVICES**

MJAS REPORT No.: 522

ALEXANDRA TERRACE, LINCOLN

ARCHAEOLOGICAL EVALUATION

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ALEXANDRA TERRACE, LINCOLN

ARCHAEOLOGICAL EVALUATION

NON-TECHNICAL SUMMARY

- On the 10th and 11th January 2005, Mike Jarvis Archaeological Services carried out an archaeological evaluation on land to the north of Alexandra Terrace on behalf of D C Developments (Lincoln) Ltd, in response to a condition placed on the granting of planning permission by the City of Lincoln Council.
- The primary objective of the evaluation was to expose and record a section across the Roman defensive ditch to assess the impact of the proposed development on the buried archaeological resource present on the site.
- Natural clay lay approximately 1.80m – 3.80m below ground level in this area.
- The evaluation revealed the Roman defensive ditch to be at least 9m wide and over 2m deep, although the full extent of the ditch was not revealed in the evaluation trench.
- For the most part, deposits recorded infilling the ditch were undated, although large quantities of Roman building debris were encountered.
- Overlying the ditch were west sloping dump deposits dating to the late medieval period.
- Deposits associated with the more recent use of the site took the form of extensive dumps of modern building rubble and associated debris.

ALEXANDRA TERRACE, LINCOLN

ARCHAEOLOGICAL EVALUATION

1.0 INTRODUCTION

On the 10th and 11th January 2005, Mike Jarvis Archaeological Services (MJAS) carried out an archaeological evaluation on land to the north of Alexandra Terrace, Lincoln (hereafter *the site*). The evaluation was undertaken on behalf of D C Developments (Lincoln) Ltd, in response to a condition placed on the granting of planning permission by the City of Lincoln Council. The planning application proposes that a row of six, three-storey residential properties be built on the site (Planning Application No.: 2002/0551/F).



Plate 1: General view looking south during the excavation of the trench (note the steepness of the hill-slope and the abundance of modern building material on the site).

2.0 SITE LOCATION AND BACKGROUND (Figs. 1 & 2)

The site lies on the north side of Alexandra Terrace at its junction with Victoria Street and is currently open land. To the west of the site lies No. 3 Alexandra Terrace, to the north, West Hill House and to the east Motherby Hill. National Grid Reference: SK 97350 71684.

The following archaeological background information has been extracted from the archaeological brief produced by the Heritage Team, City of Lincoln Council.

Most of the site is situated in the defensive ditch on the west side of the Upper Roman city, which was probably re-cut in the medieval period. Archaeological investigations have already taken place on the site, first in 1977 at the east side of the site (CLAU Code mh77) where

three trenches were excavated. Evidence was found for Roman and Saxon cuts, more likely to be pits rather than the ditch, and the inner lip of the medieval re-cut ditch. In 1991, (CLAU Code on403), four trial trenches were dug at various points across the site, with depths ranging from 2m to 4m, which revealed topsoil overlying stone rubble and natural clay, in 1989, an excavation carried out by a prospective developer revealed the outer scarp of one of the ditches c. 12m west of the inner edge.

Recent borehole data records natural clay at depths of between 0.3m and 0.5m.

It is likely that the site, in its location outside the city, was not developed for occupation until the mid 19th century. Marrat's maps of 1817 and 1848 gives the name of the general area west of Motherby Hill as Shooting Leas, and there are documentary references to Shooting Leas/Leys from the 17th to 19th centuries.

In addition, the draft Lincoln Urban Archaeological Assessment has classified the site as having the following potential research agendas:

- Prehistoric Era (-1000 - 60); Hillside springs, streams and pools.
- Roman Military Era (60 - 90); Hill slope area with springs and possible secular occupation.
- Roman Colonia Era (90 - 410); Suburban development north and west of the Upper city.
- Roman Colonia Era (90 - 410); Defences.
- Roman Colonia Era (90 - 410); Cemeteries.
- Early Medieval Era (410 - 850); Central elements of former Roman city and road network.
- High Medieval Era (850 - 1350); Quarries in the cliff face north-west of the city.
- High Medieval Era (850 - 1350); The Bishop's Garden Willingham.
- High Medieval Era (850 - 1350); Lower City Defences.
- Early modern Era (1350 - 1750); Quarries in the cliff face north-west of the city.
- Industrial Era (1750 - 1945); Enclosed pasture and meadow east and west of the city.
- Industrial Era (1750 - 1945); Mid and Late Victorian housing estates in Newport, Newland, Butwerk, Monk's Abbey, and east and south of Upper Wigford.

3.0 AIMS AND METHODOLOGY

The aims of the evaluation were to:

- provide information on the depth and quality, below the modern surface, of surviving archaeological deposits which would be affected by any proposed groundwork.
- provide information which will allow for the assessment of the possible scale of development impact on any remains and other information which might influence development design so that such impact can be avoided or minimised.

- provide information that will allow the local planning authority to reconcile development proposals with their policy of preserving archaeological remains.
- provide site-specific archaeological information which (if necessary) would allow for the design and integration of timing and funding of any further archaeological work (or other mitigation strategy) which may be required in advance of, or during, any subsequent development programme.
- produce a project archive for deposition with the City and County Museum.
- provide information for accession to the Lincolnshire Historic Environment Record (HER formerly SMR) and the Lincoln Urban Archaeological Database (UAD).

Extent of Archaeological Methodology

The primary objective of the evaluation was to expose and record a section across the Roman defensive ditch known to lie beneath the eastern part of the site. Discussions with the City Archaeologist concluded that the evaluation could be undertaken primarily using a mechanical excavator with a toothless bucket. An east-west trench was dug at the southern end of the site where the slope of the hillside was less steep. The trench was nominally 18m long and 3m wide (at its widest point). Due to the depth of the trench (1.40m - 3.80m+), subsequent excavation by hand was limited to only those areas of the trench that could be safely assessed.

The archaeological record was secured by means of trench side notes, scaled drawings and plans. A photographic archive was also compiled.

4.0 RESULTS AND CONCLUSIONS

4.1 Results (Fig. 3 and Pls. 1 & 2)

Natural clay ([011]) was recorded 1.50m below ground level (39.31m OD) and as predicted, the evaluation trench revealed the defensive ditch cutting into the natural strata (base 38.14m OD). The ditch ([014]) was revealed to have a squat, U-shaped profile, measuring 9m across (visible). The west side of the ditch did not appear to rise above the height of the natural clay (39.31m OD) suggesting that the depth of the ditch at its outer edge was possibly no more than 1.80m. The eastern lip of the ditch was not recorded within the evaluation trench, lying further east beyond the trench section. The primary fill of ditch [012] was ([007]) an undated mound of limestone fragments in a pale brown mortar-rich sandy soil (top 39.78m OD) and included two very large, roughly dressed limestone fragments (see Pl. 2). Above [007] lay [006] a horizontal brown clay soil with frequent small angular limestone inclusions together with a single sherd of pot dating to between the 14th and 16th centuries (top: 40.31m OD).

Approximately 1m to the west of ditch [012] a further cut ([014]), similarly truncating the natural clay, was revealed. Cut [014] had a near vertical side and a flat base that extended west for 6.50m before running into the trench section (top: 39.31m OD, base: 38.76m OD). A deposit of stiff clay [010], possibly reworked natural with frequent small limestone and ironstone inclusions together with a single fragment of Roman brick, filled cut [014] (top 39.38m OD).

Above [010] lay [009], a light yellow/brown clayey soil (39.66m OD) with frequent flat limestone inclusions together with occasional tile fragments (12th-16th century). To its east sealing deposit [006] was [005], brown clay containing frequent small limestone fragments. Both [009] and [005] appeared contemporary (stratigraphically) however this area of the evaluation trench was very unstable and frequent collapses to the trench sections made accurate recording difficult.

Lying above [005] at the west end of the trench lay [004] a west-sloping deposit of silt clay with frequent limestone and tile fragments together with animal bone and several sherds of

pottery spanning the mid-14th to 16th century. Above [004] was [013] an undated deposit of fine brown silt.

A tapering, west-sloping deposit of sandy clay ([003/008]), containing frequent small angular limestone and tile dating to between the 12th and 16th centuries, sealed [013] (top - east: 42.55m OD, west: 39.66m OD). Above this was [002] an extensive (up to 1m+ thick) deposit of modern building debris that extended across the entire trench section (ground level - east - 43.24m OD, west - 39.86m OD).

4.2 Conclusions

The Alexandra Terrace evaluation has identified three broad chronological phases of occupation on the site spanning the Roman to modern periods.

Natural

Natural clay lay between 1.80m and 3.80m below existing ground level.



Plate II: One of the two roughly hewn limestone blocks removed from the bottom of the Roman ditch (scale is 1m).

Roman

The evaluation has indicated that the Roman defensive ditch is located approximately 2m below present ground level (in this part of the site) and although the full extent of the ditch was not revealed in the evaluation trench, the exposed section measured 9m+ wide and 2m deep.

The cut located to the west of the ditch may be Roman in origin, however without further investigation the date, form and function of this feature remains unclear.

Medieval

There was no evidence in the evaluation trench to suggest that a medieval re-cut to the earlier Roman ditch was present. Although it is possible that the ditch described above is medieval and the earlier Roman ditch may have been completely obscured.

The evaluation failed to provide a secure date for the earliest deposits infilling the ditch and was due in part to the unstable nature of the evaluation trench and the genuine lack of finds from excavated spoil, although a single sherd of 14th to 16th century pot was recovered from the latest deposit in this sequence. Overlying the infilled Roman ditch lay several west sloping deposits, one of which did yield a quantity of late medieval pot and tile.

Modern

Deposits associated with the more recent use of the site took the form of extensive dumps of modern building rubble and associated debris.

5.0 DEVELOPMENT IMPACT ASSESSMENT (Figs. 4 & 5)

Although, this evaluation has provided some information to establish (approximately) the depth at which archaeological deposits are likely to be encountered, it must be noted that this information relates to the **localised nature** of the evaluation exercise. Geographical and topographical variations almost certainly exist on the site that will influence the survival of archaeological deposits. The slope of the hill, the presence of structures (notably Walnut House in the north-east part of the site) together with recent landscaping (the full extent of which is unknown) will all influence the level at which archaeological deposits are likely to be encountered.

The following table sets out depths, from existing ground level*, to the top of natural deposits and includes information from previous archaeological investigations/observations (mh77 and on403**) together with information from earlier geotechnical investigations** (borehole and trial pit – see Fig. 2).

Table 1: depths from existing ground level to natural.

Evaluation Trench	Natural
	1.80m – 3.80m
BH1	0.30m
BH2	0.30m
BH3	0.50m
BH4	0.40m
TH1	1.60m
TH2	0.15m
TH3	4.50m
MH77	1.00m
On403 TP1	2.00m+
On403 TP2	4.00m+
On403 TP3	3.00m
On403 TP4	2.00m

The evaluation has confirmed the eastern part of the site as the area most likely to contain archaeological remains. The development proposes that in this area ground level is to be reduced by up to c. 3.50m (at the far north end). However, this part of the site was previously occupied by Walnut House and although the extent to which this building has affected the buried archaeological resource is unclear, geotechnical investigations suggest that archaeological deposits have been destroyed to a depth of 4.50m+, well below the level of excavation indicated by the proposed development. The evaluation revealed natural up to 3.80m below ground level, again significantly below the level of any proposed development.

Therefore, while the development will impact upon archaeological deposits, the Roman ditch and its earliest fills will remain for the most part preserved *in situ*. Those deposits that lie above this level (west sloping dump deposits) are ascribed to the late medieval period onwards.

The extent and nature of deposits lying beneath the west part of the site is presently unclear, archaeological and geotechnical investigations indicate that natural clay lies only 150mm and 300mm below existing ground level, although a geotechnical trial pit excavated in the south-west corner of the site during August 1991 (TP1) suggested the natural clay lay 2.00m down.

Figs. 4 & 5 of this report are based on drawings provided by D C Developments (Lincoln) Ltd and are intended to provide provisional information regarding the likely extent of groundwork associated with the proposed development.

*Ground level as shown on figs. 4 & 5 has subsequently been raised and its profile remodelled. The full extent of this remodelling to the hill-slope is presently unclear.

**No detailed information is available to allow for the accurate plotting of the geotechnical trial hole and borehole investigations. For the purposes of this report, they have been pinpointed using the sketch location plans that accompanied each report.

6.0 ACKNOWLEDGEMENTS

MJAS would like to thank Mr. Kuno Jackson (D C Developments (Lincoln) Ltd) for commissioning the project. Thanks are also extended to Mr M J Jones (City Archaeologist, City of Lincoln Council) for his advice and guidance.

Project Team

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External Specialists

Jane Young	Post-Roman pottery and ceramic building material (freelance)
Barbara Precious	Prehistoric and Roman pottery (freelance)

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Figs. 4 & 5 of this report are based on drawings produced by John Halton Design Consultants.

NOTE

THIS REPORT IS PRESENTED ON THE UNDERSTANDING THAT FURTHER INFORMATION MAY EMERGE, MJAS CANNOT THEREFORE BE HELD RESPONSIBLE FOR LOSS, DELAY OR DAMAGE ARISING OUT OF THIS REPORT.
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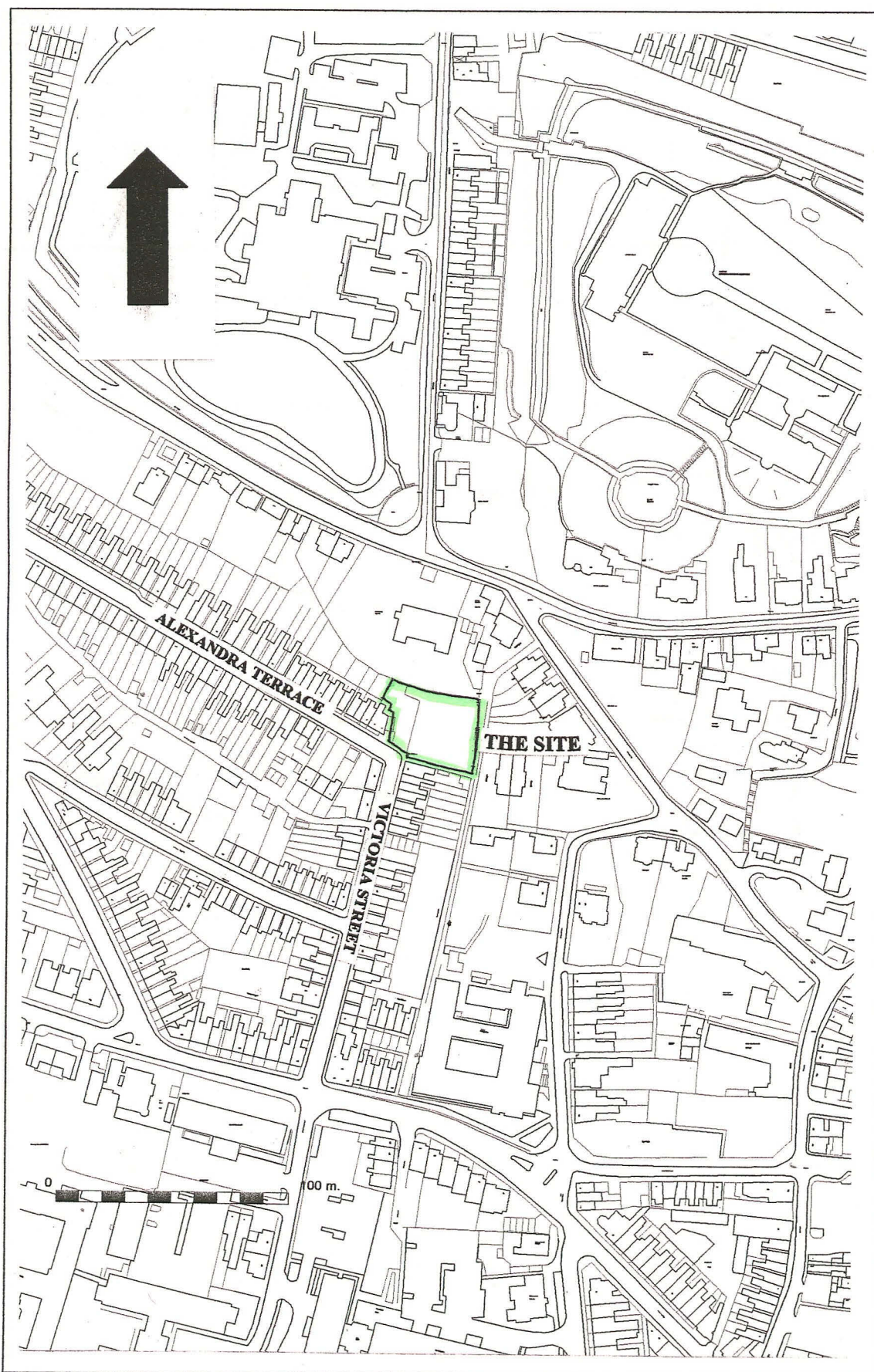


Fig. 1: Site location map (scale 1:2500).

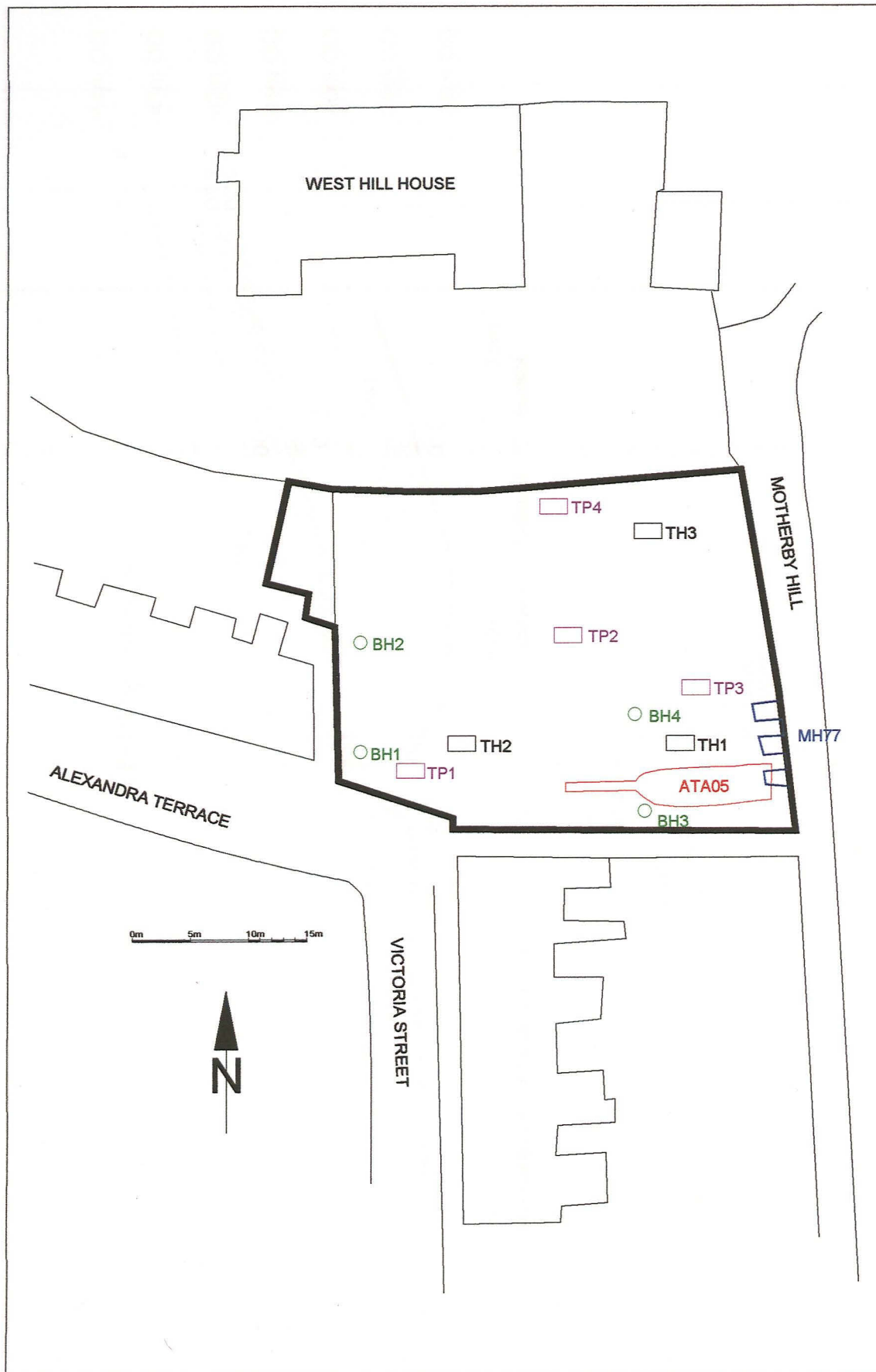


Fig. 2: Evaluation trench, trial hole and borehole location plan (scale 1:500).

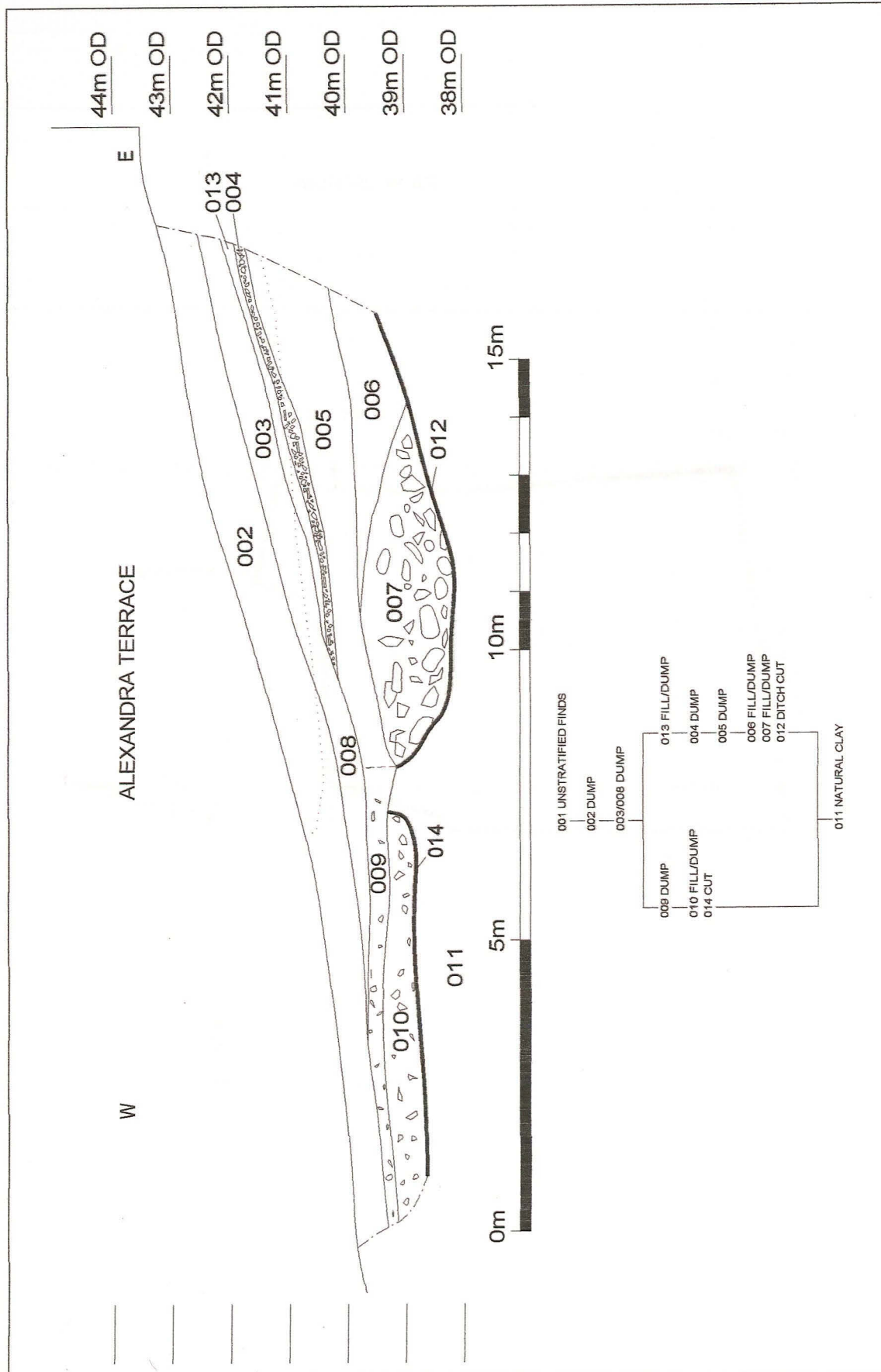


Fig. 3: Trench section and stratigraphic matrix (Scale 1:100).

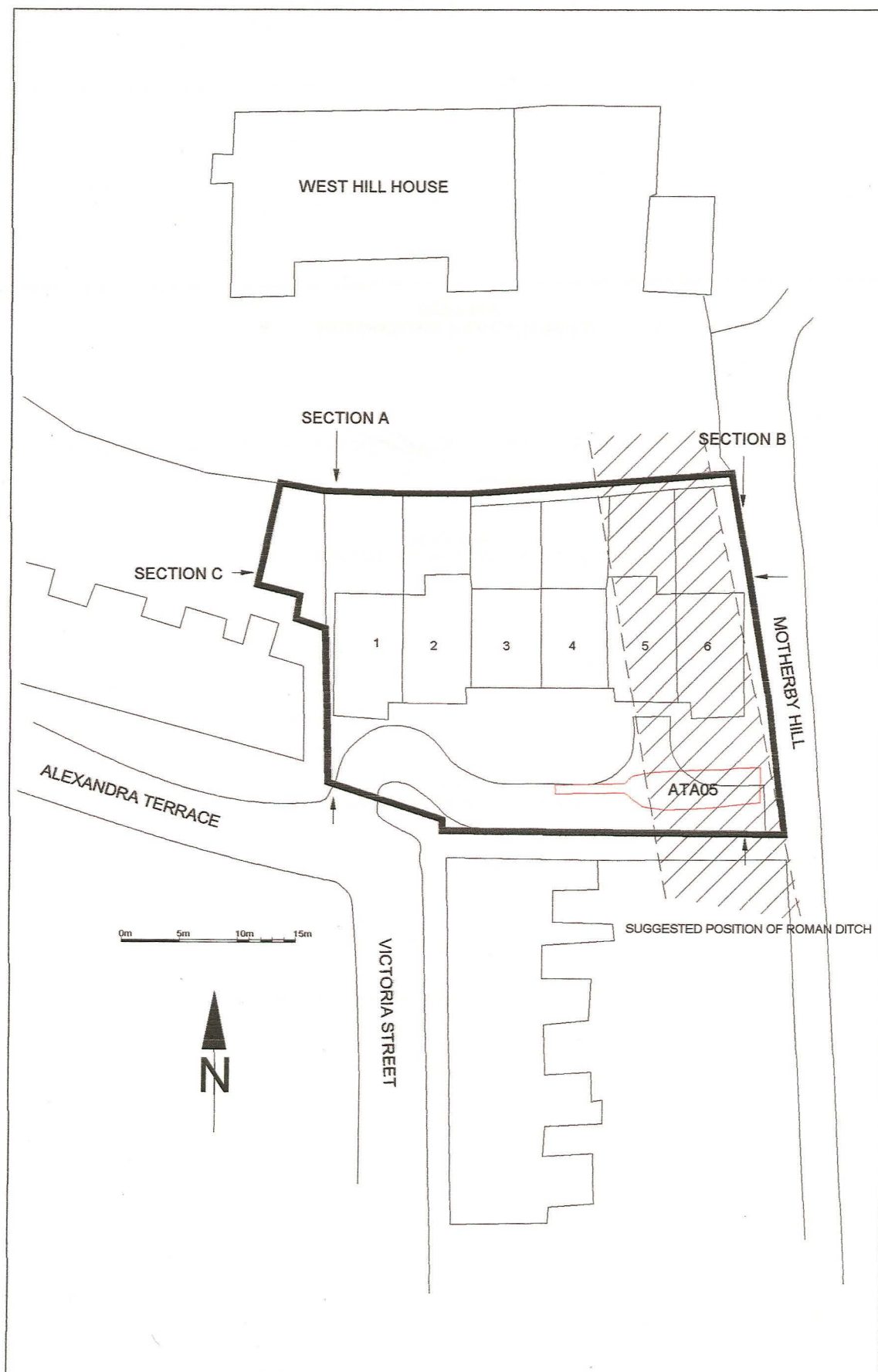


Fig 4: Proposed site layout with evaluation trench located (scale 1:500).

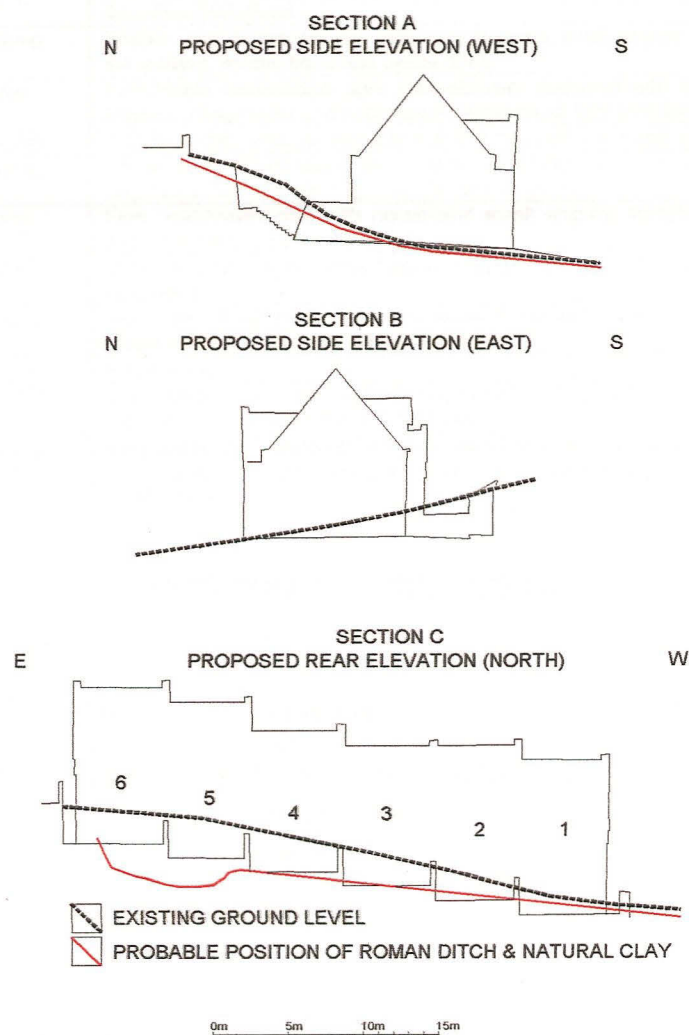


Fig. 5: Sections showing proposed development and existing ground level (scale 1:500).

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ARCHAEOLOGICAL EVALUATION

APPENDIX 1 – CONTEXT SUMMARY

Context	Type	Description
001	N/a	Unstratified finds from the site.
002	Modern dump	Loose compaction, mid-dark brown clay sand with frequent brick rubble, glass, plastic etc.
003	Dump	Firm-friable compaction, mid yellow/brown sandy clay with frequent small angular limestone inclusions.
004	Fill/dump	Friable, dark brown silt/clay with very frequent small angular limestone fragments, tile, pottery, animal bone and oyster shell.
005	Dump	Firm-friable compaction, light yellow/brown clay/sand with frequent small angular limestone fragments and occasional fragments of light pink/brown mortar.
006	Fill/dump	Compact; mid yellow/brown clay soil with frequent small iron and limestone pieces.
007	Fill/dump	Loose, pale brown sandy/mortar with very frequent small – very large limestone fragments. Some of the larger blocks are roughly hewn.
008	Dump	Firm, mid-brown clay with occasional small angular limestone fragments, oyster shell and infrequent tile fragments.
009	Dump	Very firm/stiff, light yellow/brown clayey soil with frequent flattish limestone inclusions.
010	Fill/dump	Very firm, light brown clay (re-worked natural?) with frequent small angular limestone and occasional small seashells.
011	Natural	Natural clay.
012	Ditch cut	Cut – appears U-shaped with 45 degree sides. Approximately 8m wide and 2m deep (visible). East side of ditch cut not found.
013	Fill/dump	Very friable, dark brown silt with infrequent small limestone inclusions.
014	Cut	Cut – west side visible only, steep slightly concave side with a flat base (full extent west n/a).

APPENDIX 2 – FINDS LISTS

Roman Pottery

Context	Fabric	Form	Dec	Comments	Sherds	Weight
001	CR	F?		BS; 1-2C	1	4g
001	SHEL	CLSD	HM	BS NECK; POSS DWSH; M3C+	1	4g
001	SAMCG	D		FLAKE; 120-150	1	5g
001	ZDATE			120-200+		
001	ZZZ			MIX DATES? POSS LATER		

Tile

Context	Cname	Full Name	Fabric	Sub Type	Frgs	Weight	Description	Date
001	PNR	Peg, nib or ridge tile	1		1	275g	flat roofer; corner	mid 12th to 16th
001	PNRDISC	Discarded peg, nib or ridge tile	1		2	95g	flat roofer; mortar	mid 12th to 16th
001	PNRDISC	Discarded peg, nib or ridge tile	1		1	8g	flat roofer; braded; mortar	mid 12th to 16th
001	PNRDISC	Discarded peg, nib or ridge tile	1		1	6g	flat roofer; abraded	mid 12th to 16th
001	PNRDISC	Discarded peg, nib or ridge tile	7		2	89g	flat roofer	mid 12th to 13th

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001	RTILDISC	discarded Roman tile			3	122g	abraded	Roman
001	IMBDISC	imbrex (discarded)			1	36g	abraded	Roman
001	PNRDISC	Discarded peg, nib or ridge tile	1		1	76g	flat roofer	mid 12th to 16th
003	PNRDISC	Discarded peg, nib or ridge tile	7		1	14g	flat roofer; mortar	mid 12th to 13th
003	PNRDISC	Discarded peg, nib or ridge tile	1		3	81g	flat roofer	mid 12th to 16th
004	PNRDISC	Discarded peg, nib or ridge tile	7		3	73g	flat roofer	mid 12th to 13th
004	PNRDISC	Discarded peg, nib or ridge tile	1		1	7g	flat roofer; very abraded	mid 12th to 16th
004	NIB	nibbed tile	1	4C	1	90g	soot patch on underside	14th to 16th
004	PNR	Peg, nib or ridge tile	1		2	185g	flat roofer	mid 12th to 16th
004	PNRDISC	Discarded peg, nib or ridge tile	7		1	20g	flat roofer; abraded	mid 12th to 13th
004	PNRDISC	Discarded peg, nib or ridge tile	7		1	35g	flat roofer; mortar	mid 12th to 13th
004	PNRDISC	Discarded peg, nib or ridge tile	7		1	142g	flat roofer; mortar	mid 12th to 13th
004	RTILDISC	discarded Roman tile			2	145g		Roman
004	PNRDISC	Discarded peg, nib or ridge tile	1		4	88g	flat roofer	mid 12th to 16th
004	PNRDISC	Discarded peg, nib or ridge tile	1		2	101g	flat roofer; mortar	mid 12th to 16th
004	PNR	Peg, nib or ridge tile	1		1	86g	flat roofer; mortar	mid 12th to 16th
009	RTILDISC	discarded Roman tile			1	110g		Roman
009	PNRDISC	Discarded peg, nib or ridge tile	7		1	50g	flat roofer	mid 12th to 13th
009	PNRDISC	Discarded peg, nib or ridge tile	1		2	52g	flat roofer	mid 12th to 16th
009	PNRDISC	Discarded peg, nib or ridge tile	1		1	25g	flat roofer; mortar	mid 12th to 16th
009	NIB	nibbed tile	1	4D	1	53g	mortar	late 13th to 14th
010	RBRK	Roman brick			1	380g	mortar; reused ?	Roman

Post-Roman Pottery

Context	Cname	Full Name	Sub Fabric	Form Type	Sherds	Vessels	Weight	Decoration	Part	Description	Date
004	TOY	Toynton Medieval Ware		jug ?	2	1	33g		BS		late 13th to 15th
004	TB	Toynton/Bolingbroke wares		jug/jar	1	1	17g		BS		mid 15th to 16th
004	TOY	Toynton Medieval Ware		jug	1	1	7g		BS		late 13th to 15th
004	TB	Toynton/Bolingbroke wares		jug	1	1	5g		BS		mid 15th to 16th
004	TB	Toynton/Bolingbroke wares		jug/jar	1	1	17g		BS	soot ext	mid 15th to 16th
004	LSW3	14th to 15th century Lincoln Glazed Ware		jug	1	1	4g		BS		14th to 15th
004	LMX	Late Medieval Non-local fabrics	OX/R; fine sandy; hard	jar	1	1	12g		BS	abundant fine subround to round quartz; ?east anglia source	14th to 16th
004	LSW3	14th to 15th century Lincoln Glazed Ware		small jug	1	1	28g		base		14th to 15th
004	BOU	Bourne D ware		small pedestal vessel; cup/salt ?	1	1	35g		base	possibly faceted	mid 15th to 16th
004	TB	Toynton/Bolingbroke wares		jug/jar	1	1	14g		BS		14th to 16th
006	DUTR	Dutch Red Earthenware		large cooking pot/pipkin	2	1	27g		BS	soot ext	14th to 16th
001	NOTS	Nottingham stoneware		large vessel; open ?	2	1	50g		BS		18th to 19th
001	TOYII	Toynton Late Medieval ware		jug	1	1	23g	applied horizontal thumbbed strip	BS		mid 15th to mid 16th
001	LSW4	15th century Lincoln Glazed Ware	C	jug	1	1	16g		BS	internal deposit; not St. Marks	early to mid 16th
001	CMP	Coal Measures Purple fabrics		jug/jar	1	1	24g		BS		15th to 16th
001	LLSW	Late Lincoln Glazed ware		open; bowl ?	1	1	24g		BS	? Or LSW4	late 14th to 15th
004	TORK	Torksey ware		small jar	1	1	12g		base	soot	10th to mid 11th
004	CMO	Coal Measures Orange		jug/jar	1	1	53g		BS		15th to

Post-Roman Pottery

004	POTT	fabrics Potterhanworth-type Ware		?	1	1	8g		base	soot		16th 13th to 15th
004	LMLOC	Late Medieval local fabrics	reduced; fine sandy; hard	jug/jar	1	1	16g		rim	wear mark on int & ext rim edge		mid 15th to 16th
004	LLSW	Late Lincoln Glazed ware		jar/urinal	1	1	20g		rim			late 14th to 15th
004	LLSW	Late Lincoln Glazed ware		small jar/jug	1	1	7g		base	int & ? Ext white deposit		late 14th to 15th
004	BOU	Bourne D ware		jug/jar	1	1	7g		BS	very abraded; burnt		mid 15th to 16th
004	BOU	Bourne D ware	smooth	jug/jar	1	1	10g		BS			mid 15th to 16th
004	BOU	Bourne D ware		jug/jar	1	1	9g		BS	internal deposit ?		mid 15th to 16th

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ARCHAEOLOGICAL EVALUATION

APPENDIX 3 – CONTEXT SUMMARY

SITE NAME: Alexandra Terrace, Lincoln

SITE CODE: ATA05

MJAS REPORT No: 522

NGR: SK 97350 71684

PROJECT TYPE: Evaluation

PROJECT DATE: 10th – 11th January 2005

PLANNING APPLICATION No.: 2002/0551/F

SMR No.: N/A

CIVIL PARISH: Lincoln

MUSEUM ACCESSION No.: 2005.3

ARCHIVE PRESENT LOCATION: MJAS, 1 Torrington Road, Lincoln, LN2 2DP

ARCHIVE FINAL LOCATION: The City and County Museum, Friars Lane, Lincoln