A REPORT TO JOYNES PIKE & ASSOCIATES LTD CONSULTING ENGINEERS M4/6

**MAY 2004** 

# ANCHOR STREET, LINCOLN

# ARCHAEOLOGICAL WATCHING BRIEF IN CONJUNCTION WITH GEOTECHNICAL INVESTIGATIONS

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# ANCHOR STREET, LINCOLN

# ARCHAEOLOGICAL WATCHING BRIEF IN CONJUNCTION WITH GEOTECHNICAL INVESTIGATIONS

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# ANCHOR STREET, LINCOLN

## ARCHAEOLOGICAL WATCHING BRIEF IN CONJUNCTION WITH GEOTECHNICAL INVESTIGATIONS

### NON TECHNICAL SUMMARY

- Between the 16 and 18 March 2004, Mike Jarvis Archaeological Services undertook an archaeological watching brief on behalf of Joynes Pike and Associates Ltd (Consulting Engineers) during the excavation of geotechnical trial pits at the above site location.
- □ Previous investigations on the site have revealed the presence of extensive deposits associated with the Roman, medieval, post-medieval and modern periods.
- □ The geotechnical investigation was designed to sample deposits associated with the site's post-19<sup>th</sup> century occupation and therefore little of the sites earlier archaeology was exposed, although a small assemblage of Roman and medieval Pottery and tile was recovered.
- The recent occupation of the site was associated with industrial use (food processing, brewing and heavy industry). The watching brief revealed evidence for this occupation in the form of widespread deposits of brick rubble and ash beneath concrete floor surfaces.
- Although the results of this watching brief have proved largely negative, an enhancement of knowledge of the area has been achieved with regard to the survival and extent of archaeological deposits. This information will be of value in future decision making in the management of the archaeological resource present on the site.

# ANCHOR STREET, LINCOLN

# ARCHAEOLOGICAL WATCHING BRIEF IN CONJUNCTION WITH GEOTECHNICAL INVESTIGATIONS

### **1.0INTRODUCTION**

Between the 16 and 18 March 2004, Mike Jarvis Archaeological Services (MJAS) undertook an archaeological watching brief on behalf of Joynes Pike and Associates Ltd (Consulting Engineers) during geotechnical trial pit investigations at the above site location.



Plate I: General view of the site looking north.

### 2.0 SITE LOCATION AND BACKGROUND

The site is located to the west of High Street and to the north of Gaunt Street. The Upper River Witham forms the western boundary of the site and Tanners Lane the north. National Grid Reference: SK 97167 70590 (Fig. 1 & Pl. I). Previous archaeological investigations on the site in 2002 (Trimble 2002) and 2003 (Jarvis 2003) revealed the site to contain potentially important evidence of Roman, medieval and post-medieval activity together with extensive remains associated with its more recent industrial use (see Fig. 2).

### 3.0 AIMS AND METHODOLOGY

The aims of the watching brief were:

- To produce an archive record of deposits and remains generally within the constraints of the groundwork contractors' programme and working methods with due regard to current health and safety legislation.
- To produce a report on the archaeological importance of the discoveries.
- To produce a project archive from which the potential for further study and academic research could be assessed.
- To provide information for accession to the County Sites and Monuments Record (SMR) and the Lincoln Urban archaeological Database (UAD).

The watching brief required the monitoring of 24 machine-excavated geotechnical trial pits (nominally 2m long and 600m wide- see Figs. 2 and 3). Trench depth varied depending upon the extent of post-19<sup>th</sup> century deposits. Six borehole also formed part of the geotechnical investigations, and although not monitored during the watching brief, the borehole results have been included in the report (see 4.0 and Appendix 5).

The archaeological record was secured by means of trench-side notes and scale drawings. A comprehensive photographic record was also compiled.

### 4.0 RESULTS AND CONCLUSIONS

#### TRAIL PIT RESULTS (Figs. 2, 3 and 4)

#### TP1

A deposit of mid-brown sand ([001]) with occasional inclusions of charcoal and tile fragments ( $12^{th}$  to  $15^{th}$  centuries) was revealed c. 1.10m below existing ground level (c. 6.00m OD). Overlying [001] was [026] an extensive deposit of ash and brick sealed by a layer of concrete (top - ground level (7.10m OD).

#### TP2 (Fig. 3)

Excavation of TP2 revealed [002] (6.85m OD – 600mm below ground level), a light-mid yellow/brown clayey sand with occasional charcoal and tile fragments (mid- $12^{th}$  to  $15^{th}$  century). Sealing [002] was [027] a north-south brick wall/foundation itself sealed by a layer of ash ([028]) overlain by a concrete floor (ground level - 7.45m OD).

#### TP3 (Fig. 3)

A deposit of grey/brown silt sand ([003] - 4.90m OD) containing occasional tile (late 12<sup>th</sup> to 15<sup>th</sup> century) and charcoal was revealed c. 950m below ground level. Immediately above [003], lay [004] a deposit of light yellow soapy material. Above [004] was ([029]) a 700mm thick layer of ash and brick sealed by a concrete floor (ground level - 5.85m OD).

### TP4

Excavation of TP4 revealed [005], brown sand soil, approximately 250mm below existing ground level (5.75m OD). Tile recovered from [005] dated to between the late  $12^{th}$  to  $15^{th}$  centuries. Deposit [005] was sealed by a layer of ash and brick rubble ([030] ground level – 5.95m OD).

#### TP5

Mid-grey/brown clayey silt, [006], with inclusions of occasional charcoal and small rounded pebbles was recorded at 5.61m OD (500mm below ground level). A single sherd of Roman pottery dating to the late  $3^{rd}$  to  $4^{th}$  century recovered from [006] is believed to be residual. Overlying [006] was ([031]) a 400mm thick deposit of brick rubble sealed by a concrete floor (ground level – 6.11m OD).

#### **TP6 (Fig. 3)**

The excavation of TP6 revealed [011] an undated deposit of dark grey-black fine silt with occasional charcoal flecks and small angular limestone fragments (5.59m OD – 650mm below ground level). A quarry tile floor ([060]) overlay [011] (c. 5.79m OD) and was in turn sealed by a deposit of brick and limestone ([032]). A sealing layer of concrete constituted existing ground level (6.24m OD).

#### TP7

Deposit [007], dark brown silt with occasional small limestone inclusions, lay at 6.32m OD (300mm below ground level). A single sherd of medieval (13<sup>th</sup> to 15<sup>th</sup> century) pottery was recovered from [007]. Sealing [007] was a layer of concrete that formed ground level ([033] - 6.62m OD).

#### TP8

The excavation of TP8 revealed deposit [008] (6.23m OD - same description as [007]). Deposit [008] was similarly sealed by a layer of concrete ([034] - 6.53m OD).

#### TP9

Deposit [009], dark brown silt with occasional charcoal and small limestone fragments was revealed at 5.51m OD (900mm below ground level. Overlying [009] was ([035]) an 800mm thick deposit of red/brown silt soil with frequent brick and ash. Sealing this deposit was a concrete floor (ground level - 6.41m OD).

#### **TP10**

The excavation of TP10 revealed ([010]) a deposit of dark grey/black silt with occasional charcoal and limestone inclusions (5.60m OD). Two quarry tile floors ([057]: 5.80m and [058]: 5.70m OD) overlay [010] and were in turn sealed by a deposit of limestone, slate and modern roof tile ([036]). An overlying concrete floor formed existing ground level (6.15m OD).

#### **TP11**

An undated deposit of dark grey/black silt ([012]) containing occasional charcoal and limestone fragments lay 250mm below ground level (6.09m OD). Overlying [006] was ([037]) a 250mm thick deposit of topsoil and ash (ground level - 6.34m OD).

#### **TP12**

Excavation of TP12 revealed ([013]) a deposit of mid-dark grey silt with small angular limestone fragments and occasional charcoal flecks, 800mm below ground level (6.71m OD). An east-west brick foundation ([038]) was present cutting through [013] on the northern side of the trial pit and was in turn sealed by a topsoil ([039] - ground level - 7.51m OD).

#### **TP13**

An undated deposit of mid-dark brown sandy soil with occasional limestone fragments ([015] - 6.66m OD) was revealed *c*. 400mm below ground level. This was sealed by [014], a 250mm thick layer of recent building debris. A topsoil ([040]) sealed [014] (ground level - 7.06m OD).

#### TP14 (Fig. 3)

Investigation of TP14 revealed ([016]) a deposit of pale-yellow/brown sand c. 600mm below ground level (6.44m OD). A fragment of roof tile dated to between the 12<sup>th</sup> to 15<sup>th</sup> centuries was recovered from this deposit. Sealing [016] was [041] an undated garden soil which was overlain by a topsoil deposit ([042]). A further layer of recently deposited soil ([043]) sealed the topsoil and formed the present-day ground surface (7.04m OD).

#### **TP15**

The excavation of TP15 revealed ([017]) an undated deposit of dark brown silt with frequent small angular limestone fragments (5.16m OD – 750mm below ground level). Sealing [017] was ([044]) a series of thin sand and silt layers overlain by ([045]) a 500mm thick deposit of ash, clinker and slag. A concrete floor sealed [045] (ground level - 5.91m OD).

#### **TP16**

The earliest deposit encountered in TP16 was [018], light-mid brown sand with small limestone inclusions (top -5.15m OD). A sherd of  $13^{th}$  to  $15^{th}$  century glazed pottery and a fragment of roof tile dating to the mid- $12^{th}$  to mid- $13^{th}$  centuries was recovered. A 650mm wide, north-south concrete foundation ([046]) cut in to [018]. This was sealed by a concrete floor that formed ground level (5.90m OD).

#### **TP17**

A deposit of mid-brown sand/silt ([019]) with occasional charcoal and small limestone fragments together with two sherds of 13<sup>th</sup> century pottery and a fragment of similarly dated roof tile, lay 750mm below ground level (5.46m OD). Sealing [019] was an extensive (600mm-thick) deposit of mid-dark brown ashy clay with frequent brick rubble ([047]). This was sealed by a concrete floor that formed ground level (6.21m OD).

#### **TP18**

The excavation of TP18 revealed ([020]), an undated deposit of light-mid brown fine sandy soil at 5.22m OD (900mm below ground level). Cut in to [020] was a 500mm wide, vertically sided east-west cut sealed by a series of deposits ([048]) associated with inert drainage pipes. A layer of ash and brick ([049]) sealed [048] and was in turn overlain by a concrete floor (top - 6.12m OD).

#### **TP19**

TP19 revealed [021], an undated deposit of light-mid brown fine sand, 800mm below ground level (5.26m OD). Sealing [021] was ([050]) an extensive deposit of ash and brick rubble sealed by a concrete floor (top - 6.15m OD).

#### **TP20**

Investigation of TP20 revealed undated deposit [022] (mid-brown coarse sand soil with frequent small rounded pebbles and infrequent animal bone) 1m below ground level

(5.15m OD). Sealing [022] was ([051]) an 800mm thick deposit of ash and clinker sealed by a concrete floor surface (ground level – 6.15m OD).

#### TP21 (Fig. 3)

TP21 revealed ([023]) an undated deposit of light yellow/brown slightly clayey sand with occasional small limestone fragments and infrequent animal bone inclusions, 500mm below ground level (5.65m OD). Above [023] was [052], a dark grey ash and sand layer sealed by a deposit of ash and brick rubble ([053]). A concrete floor sealed the latter (6.15m OD).

#### TP22 (Fig. 3)

The earliest deposit encountered was ([024]) a mid-brown silt/sand with occasional charcoal and limestone fragments together with infrequent animal bone (5.53m OD – 500mm below ground level). Overlying [023] was ([054]) a layer of mid-brown silt with brick inclusions sealed by a concrete floor (ground level - 6.03m OD).

#### **TP23**

A deposit of mid-brown sand ([025]) with occasional charcoal flecks, small limestone fragments, infrequent animal bone together with two sherds of  $13^{th}$  century pot, lay at 5.99m OD (300mm below ground level). Above [025] was a layer of brick and limestone ([055]) overlain by a layer of tarmac (ground level – 6.29m OD).

#### **TP24**

Investigation of TP24 was based on the discovery of ([056]) a large steel tank/trough (c. 500mm wide, 4m+ long and at least 750mm deep) bounded by a brick structure ([059] - foundation?). The machine investigation of the tank revealed it to contain ash and clicker together with various corroded metal objects. The function of the tank/trough is unknown (ground level – 6.44m OD).

Table 1: Trial Pit data showing OD height of existing ground level and the top of pre-19<sup>th</sup> century deposits.

Trial Pit	Ground Level OD	Top of Pre-19 <sup>th</sup> Century Deposits
TP1	7.10m OD	6.00m OD
TP2	7.45m OD	6.85 m OD
TP3	5.85m OD	4.90 m OD
TP4	5.95m OD	5.70 m OD
TP5	6.11m OD	5.61m OD
TP6	6.24m OD	5.59m OD
TP7	6.62m OD	6.32m OD
TP8	6.53m OD	6.23m OD
TP9	6.41m OD	5.51m OD
TP10	6.15m OD	5.60m OD
TP11	6.34m OD	6.09m OD
TP12	7.51m OD	6.71m OD
TP13	7.06m OD	6.66m OD
TP14	7.04m OD	6.44m OD
TP15	5.91m OD	5.16m OD
<b>TP16</b>	5.90m OD	5.60m OD
TP17	6.21m OD	5.46m OD
<b>TP18</b>	6.12m OD	5.22m OD
<b>TP19</b>	6.06m OD	5.26m OD
<b>TP20</b>	6.15m OD	5.15m OD
TP21	6.15m OD	5.65m OD
TP22	6.03m OD	5.53m OD

TP23	6.29m OD	5.99m OD	
TP24	6.44m OD	N/A	

#### SUMMARY OF BOREHOLE RESULTS (Fig. 2 and Appendix 5)

#### BH1

Borehole 1 revealed natural sand 2.80m below ground level (3.11m OD). Lying above natural were deposits of clayey soils and ash with inclusions of brick and wood (ground level - 5.91m OD).

#### BH2

The investigation of borehole 2 revealed sand believed to be natural at 4.30m OD (1.90m below ground level). Above natural lay deposits of ash and brick rubble (ground level – 6.20m OD).

#### BH3

Deposits of orange sand (natural) were revealed 1.80m (4.81m OD) below ground level. Overlying natural was clay and ash deposits with brick inclusions (ground level – 6.61m OD).

#### BH4

Orange silt sand (natural) lay 2.80m (3.49m OD) below ground level above which was a series of deposits containing sandy silt, ash, clinker and brick rubble (ground level – 6.29m OD).

#### BH5

Deposits of dark brown silt (natural) were encountered at 5.22m OD (2.10m below ground level). Above natural were deposits of concrete, ash and clayey silt with brick inclusions (ground level – 6.11m OD).

#### BH6

Natural deposits (orange/brown sands) occurred, 2.15m (3.93m OD) below ground level. Overlying natural was deposits of concrete, sand and ash with brick inclusions (ground level – 6.08m OD).

Table 2: Borehole data showing estimated OD height of natural below existing ground level.

Borehole	Ground Level OD	Natural? OD	Depth
BH1	5.91m OD	3.11m OD	2.80m
BH2	6.20m OD	4.30m OD	1.90m
BH3	6.61m OD	4.81m OD	1.80m
BH4	6.29m OD	3.49m OD	2.80m
BH5	7.32m OD	5.22m OD	2.10m
BH6	6.08m OD	3.93m OD	2.15m

In conclusion, the localised nature and limited scope of the geotechnical investigations has resulted in little exposure of the site's pre-19<sup>th</sup> century archaeological resource. The small quantity of datable material recovered similarly provides little insight into the nature of these earlier deposits, however, previous investigations on the site suggest that the pre-19<sup>th</sup> century deposits encountered during this investigation date to the post-medieval period.

Post-19<sup>th</sup> century deposits revealed during the investigations suggest widespread levelling of the site has taken place and corroborates findings made during earlier investigations on the site. Some brick-built structures were recorded as was extensive evidence of the sites more recent industrial use (concrete floors associated with the former Anchor Street Works extend across most of the site).

The borehole investigation similarly provides little interpretative information relating the archaeological content of the site, although it has revealed south-west sloping natural deposits to lie between 1.80m and 2.80m below ground level.

Although the results of this watching brief have proved largely negative, an enhancement of knowledge of the area has been achieved with regard to the survival and extent of archaeological deposits on the site. This information will be of value in future decision making in the management of the archaeological resource.

### 5.0ACKNOWLEDGEMENTS

MJAS would like to thank Joynes Pike and Associates Ltd (Consulting Engineers) for funding the watching brief and post-fieldwork analysis. Thanks are also extended to Mr Michael Jones (City Archaeologist, City of Lincoln Council).

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Fig. 2 of this report is based on a borehole & trial trench location drawing supplied by Joynes Pike and Associates Ltd (Consulting Engineers).

### 6.0 BIBLIOGRAPHY

Jarvis, M 2003, The Former Anchor Street Works, Anchor Street, Lincoln, Archaeological Evaluation, CLAU Report 515

Trimble, R 2002, Geotechnical Survey at the Former Anchor Street Works, Anchor Street, Lincoln, CLAU Report 510

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.



Fig. 1: Site location map (scale 1:5000).

chor Street, Lincoln tion with Geotechnical Investigations



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Fig. 3: Example trial pits sections TP2, 3, 6, 14, 21 and 22 (scale 1:50).



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# ANCHOR STREET, LINCOLN

# ARCHAEOLOGICAL WATCHING BRIEF IN CONJUNCTION WITH GEOTECHNICAL INVESTIGATIONS

### **APPENDIX 1: ARCHIVE DETAILS**

SITE NAME: Archaeological Watching Brief at Anchor Street, Lincoln

SITE CODE: ANSB04

MJAS REPORT No: 521

NGR: SK 97167 70590

PROJECT TYPE: Watching Brief (in conjunction with geotechnical investigations)

PROJECT DATE: 16th - 18th March 2004

PLANNING APPLICATION No.: N/A

SMR No.: N/A

·

CIVIL PARISH: Lincoln

MUSEUM ACCESION No.: 2004.74

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

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

# ANCHOR STREET, LINCOLN

# ARCHAEOLOGICAL WATCHING BRIEF IN CONJUNCTION WITH GEOTECHNICAL INVESTIGATIONS

### APPENDIX 2: CONTEXT SUMMARY

Context	Trial Pit	Description
001	1	Firm-friable compaction, mid red/brown fine sand with
		occasional roof tile fragments and infrequent charcoal flecks.
002	2	Firm compaction, light-mid yellow/brown clayey sand with
		occasional tile fragments and charcoal flecks.
003	3	Firm-friable compaction, light-mid grey/brown silt sand with
		occasional tile and charcoal flecks.
004	3	Firm compaction, yellow/cream deposit (residue of animal
		processing?)
005	4	Firm-friable compaction, light brown silt sand with occasional
		tile and small angular limestone fragments.
006	5	Firm compaction, mid grey/brown clayey silt with occasional
		charcoal flecks and small rounded pebbles.
007	7	Firm-friable compaction, dark brown silt with occasional small
001		angular limestone fragments.
008	8	Firm-friable compaction, dark brown silt with occasional small
000		angular limestone fragments.
009	9	Friable, dark brown silt with occasional small angular limestone
000		fragments and charcoal flecks.
010	10	Firm-friable compaction, dark grey/black fine silt with occasional
010		charcoal flecks and small angular limestone fragments.
011	6	Firm-friable compaction, dark grey/black fine silt with occasional
		charcoal flecks and small angular limestone fragments.
012	11	Firm-friable compaction, dark grey/black fine silt with occasional
0.2		charcoal flecks and small angular limestone fragments.
013	12	Firm-friable compaction, mid-dark grey silt sand with occasional
		small angular limestone fragments and charcoal flecks.
014	13	Very loose compaction, brick rubble, mortar, slate etc.
015	13	Firm compaction, mid-dark brown sandy soil with occasional
		small angular limestone fragments.
016	14	Loose compaction, pale vellow/brown sandy soil.
017	15	Firm plastic dark brown silt with frequent small angular
		limestone fragments.
018	16	Friable light-mid brown silt sand with occasional small angular
010	10	limestone fragments.
019	17	Friable mid-brown fine sand with occasional small angular
015		limestone fragments and charcoal flecks.
020	18	Friable light to mid-brown fine sandy soil
021	19	Friable, light to mid-brown fine sandy soil.
022	20	Very friable mid-brown coarse sand with frequent small
022	20	rounded nebbles and occasional animal bone.
023	21	Friable light vellow/brown slightly clavey fine sand with
020	41	occasional small angular limestone fragments and infrequent
		animal hone
024	22	Firm-friable compaction mid-brown silt with occasional animal
		bone, charcoal and small angular limestone fragments.

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025	23	Friable, mid-brown sand soil with occasional small angula limestone fragments, charcoal and infrequent animal bone.
026	1	Ash, brick, slag etc.
027	2	Brick foundation.
028	2	Ash.
029	3	Ash, brick, slag etc.
030	4	Ash and brick rubble.
031	5	Brick rubble.
032	6	Brick and tile.
033	7	Brick rubble.
034	8	Concrete.
035	9	Red/brown silt with ash and brick.
036	10	Stone, slate, tile etc.
037	11	Topsoil/ash mix.
038	12	Brick foundation.
039	12	Topsoil.
040	13	Topsoil.
041	14	Garden soil.
042	14	Topsoil.
043	14	Recent overburden.
044	15	Sand/silt lens's.
045	15	Ash, clinker, slag etc.
046	16	Concrete foundation.
047	17	Mid-dark brown, ashy clay sands with brick rubble.
048	18	Sandy soil.
049	18	Ash/brick mix.
050	19	Ash, brick etc.
051	20	Ash, clinker etc.
052	21	Dark grey/brown ashy sand.
053	21	Black ash.
054	22	Brown silt sand with gravel and brick.
055	23	Brick and limestone mix.
056	24	Steel tank/trough.
057	10	Quarry tile floor.
058	10	Quarry tile floor.
059	24	Brick surround/foundation.
060	6	Quarry tile floor.

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#### **APPENDIX 3: FINDS REPORTS**

#### ROMAN POTTERY By B J Precious

The pottery has been recorded to the basic archive level according to the guidelines laid down by the Study Group for Roman Pottery using the computer codes and pottery recording system of the City of Lincoln Archaeology Unit (CLAU), and sherd count and weight in grams (g) as the measures.

#### The Roman pottery

This site produced five sherds weighing 104g of Roman pottery from four contexts ([006]: TP5; [019]: TP17; [024]: TP22; and [025]: TP23). The pottery is in fair condition. The average sherd/weight is over average at 20.8g, indicative of relatively fresh deposition; but this includes a single sherd profile from a triangular-rimmed dish from [006], weighing 60g. There are no sherd joins.

The Roman assemblage is predominantly later Roman in date, which corresponds well with the principal groups from previous excavations at the former Anchor Street Works (Precious: August 2003). Most of the pottery consists of grey wares similar to those produced at the Swanpool kilns during the later Roman period, and are mainly domestic, cooking wares.

Context [006] produced the single vessel mentioned above in grey ware (GREY, BTR) similar to that of the Swanpool kilns that operated from the later 3rd to the 4th century. There is a trace of an indentation that might be part of a Romano-Saxon design of mid to late 4th century date.

A similar rim form, but from a bowl rather than a dish, in a dark grey, burnished fabric came from [019] (BBT, BTR). The form and fabric resembles black-burnished types of later 2nd to at least the 3rd century date, but is residual with post-Roman pottery. Context [024], from a trial pit close to Context [006] (TP5), also produced grey wares similar to those from the Swanpool kilns, including a flanged bowl with a low bead (BFBL) and a fragment of a cooking pot with acute, burnished lattice decoration (CP, LA), dating from the later 3rd to the 4th century.

The smallest sherd, an undiagnostic body sherd from a grey jar (GREY, J), came from TP23 in the center of the site – Context [025]. It is also associated with post-Roman pottery and is broadly dated from the 2nd to the 4th century.

The pottery is in stable condition and should be retained for further work.

#### References

Precious, B J in Jarvis, M 2003, The Former Anchor Street Works, Anchor Street, Lincoln, Archaeological Evaluation, CLAU Report 515 Precious, B J in Trimble, R 2002, Geotechnical Survey at the Former Anchor Street Works, Anchor Street, Lincoln, CLAU Report 510

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### **APPENDIX 4: FINDS ARCHIVE**

#### **POST-ROMAN POTTERY ARCHIVE**

Context	Cname	Full Name	Form Type	Sherds	Weight	Decoration	Part	Description	Date
007	LSW2/3	13th to 15th century Lincoln Glazed Ware	jug	1	22		BS	reduced glaze; reduced int	13th to 15th
010	LSW2/3	13th to 15th century Lincoln Glazed Ware	pipkin	1	6		BS	ridged shoulder; glaze	13th to 15th
018	LSWA	Lincoln Glazed ware Fabric A	jug	1	7		BS		13th to 15th
019	LSW2	13th to 14th century Lincoln Glazed Ware	jug	1	14	applied vert scales between applied vert strips	BS		13th
019	LSW2	13th to 14th century Lincoln Glazed Ware	jug	1	5	applied vert fe notched strips	BS	possibly overfired	early to early/mid 13th
025	LSW2	13th to 14th century Lincoln Glazed Ware	jug	1	11	multi applied vert strips	BS	misfired cu glaze	13th
025	LSW2	13th to 14th century Lincoln Glazed Ware	jug	1	3	fe applied dec ?	BS	pocked glaze	early to mid 13th

#### **TILE ARCHIVE**

Context	Cname	Full Name	Fabric	Sherds	Weight	Description	Date
001	PNRDISC	Discarded peg, nib or ridge tile	1	4	591g	flat roofer; 2 lower corners; same tile	late 12th to 15th
002	PNRDISC	Discarded peg, nib or ridge tile	1	4	268g	flat roofer	late 12th to 15th
002	PNRDISC	Discarded peg, nib or ridge tile	7	2	107g	flat roofer	mid 12th to mid 13th
003	PNRDISC	Discarded peg, nib or ridge tile	1	1	46g	flat roofer; thin tile	late 12th to 15th
003	PNRDISC	Discarded peg, nib or ridge tile	1	1	76g	flat roofer; corner	late 12th to 15th
003	PNRDISC	Discarded peg, nib or ridge tile	1	1	45g	flat roofer	late 12th to 15th
005	PNRDISC	Discarded peg, nib or ridge tile	1	1	88g	flat roofer; corner	late 12th to 15th
005	PNRDISC	Discarded peg, nib or ridge tile	1	2	207g	flat roofer	late 12th to 15th
009	RTILDISC	Discarded Roman tile		1	68g	probably TEG	Roman
016	PNRDISC	Discarded peg, nib or ridge tile	1	3	173g	flat roofer	late 12th to 15th
018	PNRDISC	Discarded peg, nib or ridge	7	1	117g	flat roofer	mid 12th

		tile					to mid 13th
019	PNRDISC	Discarded peg, nib or ridge tile	1	1	50g	flat roofer	late 12th to 15th

#### **ROMAN POTTERY**

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Context	Fabric	Form	Decoration	Novess	Drawing no.	Alter	Comments	Sherds	Weigh
006	grey	DTR	В				rim base prof; indent? rosa?; spool	1	60g
006	zdate						13-4c		
006	777						TP5		
019	bbt	BTR	В			abr	rim bkn; girth	1	14g
019	zdate						12-3c+/postro		4
019	777						TP17		
024	arev	BFBL				abr	flange rim bkn girth	1	18g
024	grey	CP	LA				bs	1	9g
024	zdate						13-4c		
024	777						TP22		
025	arev	J					bs	1	3g
025	zdate						2-4c/postro		
025	777						TP23		

# ANCHOR STREET, LINCOLN

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# ARCHAEOLOGICAL WATCHING BRIEF IN CONJUNCTION WITH GEOTECHNICAL INVESTIGATIONS

### **APPENDIX 5: BOREHOLE LOGS**



A member of the Van Elle Group of Companies

Kirkby Lane, Pinxton, Nottinghamshire NG16 6JA Telephone: 01773 580580 Fax: 01773 862100

### FACTUAL GROUND INVESTIGATION REPORT

Anchor Street, Lincoln Contract:

1 April 2004 Date:

Client: Joynes Pike & Associates

Job No. G40161

A.J. Analysed By 6/5/12

Date

Offices at: Essex, Berkshire, Norfolk, Surrey, Sheffield, Manchester, Scotland Web site address: www.van-elle.co.uk E-mail address: info@van-elle.co.uk Company Reg. No: 2590521 V.A.T. Reg. No: 706 37 3736



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# BOREHOLE LOG

Project	chor St	reet (ir	coln								Ĩ	BC	REF	HOLE	ENG
Job No g4(	0161	Di	ate 3	0-03-04 0-03-04		Ground	Level (m)	Co	-Ordinates	0			Bł	-11b	
Contractor				<i></i>			5					Sheet	t 1 .		
SAMPL	ES & 7	ESTS	-					STR	ATA						Ę
Depth	Type No	Test Result	Wate	Reduced Level Le	gend	Depth (Thick- ness)			DES	CRIPTION	I			Jeology	nstrumer
					***	0.20	MADE GR	ROUND	reinforced	concrete)					T
0.50-0.60	D					(0.65)	MADE GR	COUND (	ash)	bound mai	terial)				
1.00-1.20	D				×	- 0.95	MADE GR	OUND (	ash.clay.br	ick and stor	ne)				
1.20-1.70	В	N9			$\bigotimes$	1.30	MADE GR	OUND (	soft white o	chalk)					
					$\bigotimes$	(0.40)	MADE GR	OUND (	silt with cru	ished brick	)				
1.70-1.90	D				***	1.90	MADE GR	OUND (	Firm brown	clayey silt	.)				
1.90-2.00 2.00-2.50	D B	N3/ 0.304					MADE GR shells)	OUND (	soft black c	layey silt w	vith crushed	brick, wood	and		
			11		*	2.80									
2.80-2.90	D	210	÷÷	×	×	-	Loose wet g	grey silty	SAND				-+		
3.00-3.50	D	N9		×	× .	(0.70)									
				× .	· ·	5.50	Medium der	nse silty f	ine grained	SAND			-+		÷E
4.00		N9		×	×				_						
				×	×										
				×	*:‡	(2.35)									·目
5.00		NII		×	×: E	.									目
				× .	× . :										
				×	×	5.85									
5.85-5.90 5.90	D	N16	Γ	0.0	0		Medium den	ise brown	SAND and	GRAVEL	,				E
				.0 0	00	(0.85)									E
				.O.	000	6.70									E
				×××	×	7.00	Soft with dar	rk stainin	g clayey SI	LT					目
7.00		N18		0.0	°OE	1.00	Medium den	se brown	SAND and	GRAVEL	with occas	ional thin silt			Ē
				0.0	°.		Dands								目
				0.0	4										E.
				00	0					_					目.
Boring	g Progr	ess and	Wat	er Observa	tion	IS	Cl	hiselling	3	Water	Added	GEI	NER	AL	
Date T	ime	Depth	Dep	oth Dia. mi	m	Dpt	From	To	Hours	From	То	REN	<b>MAR</b>	.KS	
										z					
All dimension Scale	ns in met 1:50	res Cli	ent	Joynes Pik	e A	ssociates	Method	l/				Logged By			
							Fiant O	200				D	Evan	S	

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	BO	RE	HO	LE	LO	G
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Project	hor St	reet I in	ncoln								ž	BORE	HOLE	E No
Job No		D	ate 2	0.02.04	1	Ground I	Level (m)	C	o-Ordinates	0	· · · · ·	В	H1b	
g40	161		3	0-03-04	ŧ					0				
Contractor							-					Sheet		
											2	2	of 2	
SAMPLE	ES & 1	TESTS	er					ST	RATA					nt/
Depth	Type No	Test Result	Wate	Reduced Level	Legend	Depth (Thick- ness)			DES	CRIPTION	1		Geology	nstrume
8.00		N19			0.00	(2.80)	Medium bands (co	dense bro ontinued)	wn SAND a	nd GRAVE	EL with occ	asional thin silt		
9.10		N24			0.0.0 0.0.0 0.0.0 0.0 0.0 0.0 0.0 0 0.0 0 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<u> </u>								
9.80-10.00 10.00	D	N38			0.00	- <u>9.80</u>	Dense ora	inge brow	m sandy GR.	AVEL				
11.00- 11.50	D	N41				-(2.35)								
12.15- 12.20 12.20	D	N41			0.0.0 0.0.0 	12.15	Stiff becor	ning very	stiff LIAS (	CLAY				
13.40	2 0.	N50/ 0.298				(2.85)								
14.50		N50/ 0.222		-		15.00								
15.00		N50/ 0.065			-									<u> </u>
Boring	g Progr	ess and	l Wat	er Obse	rvation	ns	(	Chiselli		Water	Added	CENT		
Date T	ime	Depth	De	Casing oth   Dia	a. mm	Water Dpt	From	To	Hours	From	То	REMA	RKS	
							14.7	15	1 hour					
All dimensior Scale	ns in met 1:50	tres Cl	ient	Joynes	Pike A	ssociates	5 Metho Plant	od/ Used				Logged By D Eva	ns	



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<b>BOREHOLE</b> L	<b>OG</b>
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Project	chor St	eet I in	coln								7		BORE	HOLE	EN
Job No	0161	Da	ate 2	27-03-04	1	Ground I	Level (m)	(	Co-Ordinat	tes ()			В	H2b	
Contractor	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		2	.0-05-0-	T	I							Sheet 1	of 2	
SAMPL	ES & 1	ESTS						ST	RATA					1	lt/
Depth	Type No	Test Result	Wate	Reduced Level	Legend	Depth (Thick- ness)			D	ESCRIPTIC	N			Geology	nstrume
						0.20	MADE C	ROUN	D (concret	e)					Ī
0.50-1.00	B					<u> </u>	MADE G	ROUNI	D (ash) D (ash, bri	ick and sandy	v silt)				
0.75-0.85	D					C (0.50)									
						-	MADE G	ROUNI	O (layered	brick)					
1.20-1.30	D	N28/				(1.00)									
1.50-1.70	D	0.076				E									
1 90-2 10	D	NI7				1.90	Loogo val	lassiah h		TD					
1.90-2.10						(0.70)	Loose yei	lowish b	orown SAN	ND					
						2 60									E
2.60-2.80	D				×-·×-	2.00	Soft mottl	ed yello	w and grey	sandy silty	CLAY			<u> </u> [	E
2.90-3.10	D	N11	11		×× · · · · ·	- 2.90	Medium d	lense ora	inge brown	SAND					E
	1														E
															E
4.00		N15			: · · · ·										目
															目
						(3.80)									:E
5.00		N15												:	E
															目
6.00		NIDO				-									· E
0.00		1920		-	::::										目
				ŀ		6 70									:目
6.70-6.80	D	100			<u>.</u>	0.70	Stiff brown	n sandy I	BOULDER	R CLAY with	n bands of sa	ind and g	gravel		
0.80-7.25	D	N23		þ	<u> </u>	-									E
				Ê											目
					<u></u>	(1.90)									
				F											
Borin	g Progr	ess and	Wa	ter Obs	ervation	ns	(	Chisell	ing	Wate	r Added		GENIEL		H.
Date 7	Time	Depth	De	Casing pth   Di	a. mm	Water Dpt	From	То	Hour	rs From	То	-	REMAI	RKS	
												Water boreh 8.00m on con water	r was at 3.1 ole at a dep on am of mpletion of at a depth	Om whe oth of 28/03/04 f drilling of 13.70	en 4, g )m
All dimensio	ons in me	tres Cli	ient	Joynes	Pike A	ssociates	s Meth	od/				Logge	ed By		
Scale	1:50						Plant	Used					D Eva	ns	

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	BOI	REH	OLE	LOG
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Project	hor Str	act Line	nolm									BOREH	IOLE	EN
Job No	1101 311	Dat	te a	7 02 0		Ground L	evel (m)	Co-C	Ordinates ()			Bł	l2b	
g40	161		2	7-03-04 8-03-04										
Contractor						[						Sheet		
												2	of 2	
SAMPLE	ES & T	ESTS	er		-			STRA	ATA				2	lent/
Depth	Type No	Test Result	Wat	Reduced Level	Legend	Depth (Thick- ness)			DESC	RIPTION			Geolog	Instrum
8.00-8.10 8.10-8.50	D B	N36				*	Stiff brown (continued	n sandy BC )	DULDER C	LAY with	bands of sa	nd and gravel		
8.60-8.80 8.80-9.30	D D	N26			0000	- <u>8.60</u>	Dense SA1	ND and GF	RAVEL					
10.00- 10.50	D	N37				(4.05)								
11.00- 11.50	D	N39		-					2					
12.00- 12.50	D	N42			0.000	12.65								
12.65- 12.85	D	N48					Stiff becom	ning very s	tiff LIAS C	LAY		9		
13.50		N50/ 0.288				(2.50)								
14.50		N51/ 0.24												Thin the second
15.15		N188/ 0	-			15.15								
Borin	lg Prog	ress and	Wa	iter Obs	servatio	ons	(	Chiselling	g	Water	Added	GENEI	RAL	
Date	Time	Depth	De	Casin epth D	g bia. mm	Water Dpt	From 14.8	To 15.15	Hours 1 hour	From	То	REMA Water was at 3. borehole at a de 8.00m on am of on completion o water at a denth	RKS 10m wl pth of 28/03/ f drillin of 13	nen 04, ng 70n
All dimensi	ons in m	etres CI	lient	Joyne	s Pike	Associate	es Meth	od/				Logged By		

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### **BOREHOLE LOG**

Anc	hor Stre	eet, Lin	coln									BURE	HOLE	- IN
Job No		Da	ite 2	6-03-04		Ground L	evel (m)	Co-0	Ordinates (	)		E	3H3	
g40	161	e	2	6-03-04	- ar									
Contractor												Sheet		
			_									1	of 2	
SAMPLE	ES & T.	ESTS	er		<b></b>			STR	ATA				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	ent/
Depth	Type No	Test Result	Wat	Reduced Level	Legend	Depth (Thick- ness)			DESC	CRIPTION			Geolog	Instrum
						* 0.20 *	MADE GRO	UND (a)	concrete)	ck and ash)				
0.50-0.60	D					(0.80)				an a				
1.00-1.10	D					1.00	MADE GRC	UND (	lay and cru	shed brick			-	
1.20-1.65	D	N2/ 0.304				(0.65)				Shed offer				1
1.70-1.80	D					1.80	MADE GRO	UND (b	rown sand	)				
1.80-1.90 1.90-2.35	D B	N9				 (0.90)	Loose orange	SAND						
					· · · · · ·	2 70								
2.70-2.80	D		11		× · · · ·	2.70	Soft mottled	sandy si	lty CLAY				+	
2.80		N14	==			-	Medium dens	se orange	e SAND					
2 20		NIG											-	
		NIC				(3.60)								
.80		N15		•								×		
.90		N19				_								
.50-6.70 .70	D	N15			0.00	6.50	Medium dens	e orange	brown SA	ND and GF	RAVEL			
.50		N23			00000									
Boring	g Progr	ess and	Wa	ter Obse	ervatio	ns	Ch	iselling	g	Water	Added	GENE	RAL	<u>_</u>
Date T	ime	Depth	De	Casing pth   Di	a. mm	Water Dpt	From	To	Hours	From	To	REMA	RKS	
		L CI	iort	T	D''									_
THE DRIVENSION	us in met	TPC IU	ICHI	1/11/nec	PIVA (	1 UCONTOTO	<ul> <li>IN/lethod/</li> </ul>							

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BOREHOLE	LOG

Project												BORE	IOLE	E No
And	chor Str	eet, Lind	coln								4	_ в	H3	
Job No		Da	te 2	6-03-04		Ground L	evel (m)	Co-C	ordinates ()					
g40	)161		2	6-03-04								Sheet		
Contractor												2	of 2	
CAMPI		TOTO	T	1				CTD A	T 4			2		1
SAMPL		ESIS	ater			Depth		SIKA	1A				ogy	Imen
Depth	No	Result	M	Level	Legend	(Thick- ness)			DESC	RIPTION			Geol	Instru
					°0.00		Medium de	nse orange	e brown SA	ND and GI	RAVEL (cont	tinued)		Ē
					0000	(3.80)								E
8.50		N26			0.0.0	{								
					0000	÷								E
					000									
9.50		N26			0000									E
					000									
-					00.00	10.30								
10.30-	D	N24				10.50	Medium der	nse brown	SAND					
10.40														
-														
11 30		N28				(1.70) 								
11.50		1120				- -								
						12.00								
12.00-	D	N43			0.00	F	Dense SAN	D and GR	AVEL					
12.10-	D				0000									.∶∎
12.00					0000	(1.65)								
13.00-	D	N50			0000	F								
13.50					0.0.0									
13 65-	D				000	13.65	Stiff becom	ing very st	tiff with de	nth grev LL	ASCLAY			:: <b>∃</b>
13.75		NAL					Sur Secon			pui 6.07 21	000000			
13.70		0.228												
						(1.45)								
14.70		N52/			===									
15.10		0.222 N50/				- 15.10								÷Ħ
15.10		0.07												
						-	11			1				
Bori	ng Prog	ress and	Wa	ater Obs	servatio	ONS Water		hiselling	g I II	Water	Added	GENE	RAL	
Date	Time	Depth	D	epth []	Dia. mm	Dpt	From 14.8	10	Hours	From	10	REMA		
								15.1	1 noui					
A 11 .1'			liert		- D"	<u> </u>						Logged De		
Sca	le 1:50	etres C	nent	Joyne	s Pike	Associate	Plant	Used				D Ev	ans	



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### **BOREHOLE LOG**

Project					and the second second							BOF	REHO	LE ]	No
An	chor St	reet, L	incoln									201			10
Job No		1	Date 0	1-04-04	1	Ground	Level (m)	Co-	Ordinates (	)			BH4	1	
g4	0161		Ő	1-04-04	1										
Contractor	1											Sheet			-
													1 of 2	2	
SAMPL	ES & 7	TESTS	5 1					STR	ATA						JU I
Depth	Туре	Tes	Vate	Reduced	ILegend	Depth	1		DEG					UEN	ume:
Depin	No	Resu	lt –	Level	Legent	ness)			DES	CRIPTION			100		ack
-						(0.40)	MADE GR	OUND (	concrete0						h
0.45.0.55	D					0.40	MADE GR	OUND (	ash and cru	shed brick				_	
0.60-0.70	D					- 0.00	MADE GR	OUND (	black silty	ash with br	, ick and ston	e)			
0.70-1.10	В								-			,			
1 20-1 70	B	N3/				(0.90)									
		0.304	1			1.50	MADE OF	01.D							
						(0.60)	MADE GR	OUND (I	brown ash a	and clinker	)			•	
_						- 2.10									
2.10-2.20	DB	N2/					MADE GR	OUND (a	coal crushed	d brick and	sandy silt)			-	
2.20 2.00		0.50				(0.70)									
2 80-2 00	D				<u> XXXX</u>	2.80	0	041)70							
2.90-3.00	D					3.10	Orange silty Orange brov	vn mottle	d grey CLA	AY			1		
3.00-3.10	D	N6			· · · · · ·		Wet loose b	ecoming	medium de	nse orange	brown SAN	D			∃∷
					· · · · · ·										
					· · · · · ·	-									
4.00		N8				-									
				·	••••••										
						(3.60)									<u>-</u> :-
5.00		N12		·											
															].
															<u>]:</u> [
														E	
6.00		N15													
6 70-6 80	D			•		6.70	Madium dan		1 01					ĿE	
7.00 7.50				t	0.00	-	Medium den	se orange	brown SA	ND and GI	RAVEL			E	
7.00-7.50	D	NIS										E			
				ò	0.00									E	
				2	00.04									E	
					000	(2.35)								E	
Borin	g Prog	ress an	d Wat	ter Obse	ervatio	ns	Cł	niselling	3	Water	Added	GEN	ERAL		٦
Date	Time	Depth	De	pth   Di	a. mm	Dpt	From	То	Hours	From	То	REM	ARKS	1	
															1
All dim .				<u> </u>											
Scale	e 1:50	tres	Inent	Joynes	Pike A	ssociate	s Method Plant U	i/ Ised				Logged By	Vane		
													+ 4113		

AGS3 UK BH G40161.GPJ AGS3 ALL.GDT 6/4/04



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BOF	REHO	LE	LO	G
				-

Project	chor St	reet Lin	coln										BORE	HOL	E
Job No		Da	ate 0	1_04_04		Ground L	level (m)	Co-	Ordinates (	)			E	BH4	
g40	0161		0	1-04-04											
Contractor													Sheet		_
													2	of 2	
SAMPL	ES & 1	ESTS	er					STR	ATA						T
Depth	Type No	Test Result	Wat	Reduced Level	Legend	(Thick- ness)			DES	CRIPTIO	N		×	Geolog	
8.10-8.60	D	N15			0000		Medium der	ise orang	ge brown S.	AND and	GRAVEL	(continu	ued)		1
					000										
					000	L L									
0.00-9.50	D	N20			00.00	- <u>9.05</u>	Dense brown	SAND	and GRAV	/EL					-
					00.00	E									
					0.00										
0.00		100			000										
0.00- 0.50	D	N25			000										
					0000										
					00.00	(3.55)									
1.10-	D	N41			000										
1.60					0000										
					0.00										
2.00-	D	N42			000	-									
2.10	-				000										
2.60-	D				0.0.0	12.60	Stiff grey LL	SCIA	V						
2.70		N41					5 m 6 6 7 2 m								
				E											
				E											
				E		(2.60)									
				E		_(2.00)									: ·
4.50		N50/ 0.202													
				-		-									
5.20		N50/	F			15.20		-							•. <u></u>
		0.065			ŀ										
										10					
Boring Date T	g Prog	Donth	Wa	ter Obse Casing	ervatio	ns Water	Ch	isellin	g	Wate	r Added	_	GENE	RAL	
	Inte	Depth	De	pth   Di	a. mm	Dpt	14.8	10	1 hours	From	10	_	KEMA.	KKS	_
									inour						
Il dimensio	ns in me	tres Cl	ient	Joynes	Pike A	ssociate	s Method	/				Logo	red Rv		
Scale	1:50						Plant Us	sed					D Eva	ns	



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BOREHOLE LOG
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An	chor St	reet Lin	coln									BORE	EHOLE	EI
Job No		Da	ate 2	25-03-04	1	Ground I	Level (m)	Co-	Ordinates (	)		E	3H5	
g4(	0161		2	25-03-04										
Contractor												Sheet		
												1	of 2	
SAMPL	ES & 1	TESTS	er					STR	ATA				_ <u>&gt;</u>	T
Depth	Type No	Test Result	Wat	Reduced Level	Legend	Depth (Thick- ness)			DES	CRIPTION			Geolog	Litt
						0.20	MADE GRO	UND (	reinforced o	concrete)	)		_	
0.50-0.60	D					(0.50)			layered birt	ck with asin	)			
0.60-1.00	В					0.70	MADE GRC	UND (	concrete)					
						(0.50)	MADE GRC	UND (	crushed brid	ck, ash and	clayey silt)			
1.20		N8				<u> </u>	MADE GRO	UND (	clayey silt,b	orick and sa	ndstone)			
						(0.80)					,			1
						2 10								
2.10-2.20	D	N10			× × × × × × × × × × × × × × × × × × ×	(0.40)	Dark brown s	andy SI	LT with th	in bands of	sand			
					.xx	2.30	Loose orange	brown	fine graine	d SAND				
3.00-3.50	В	N8			· · · · · ·	(1.20)								
					· · · · · ·									
8.70-3.80	D		ł		× × ·	3.70	Soft mottled I	ight bro	wn and gre	y sandy silt	ty CLAY		<u>       </u> [:	
1.00		N16	Į¥́		×	(0.40) - 4.10		0		,, on	.,			
							Medium dens	e orange	e brown SA	ND				
5.00		N13			::::F		2							
				-	::: <b>:</b> [	(3.50)								
10					· · · •	(3.30)								
.10		N18			::::[									
					::::[									
				·	::::[									
.00		N16		[.	::::F									·EE
				ŀ	:::: <b>!</b>	7 60								
.60-7.80	D			0	0.00	7.00	Medium dense	becom	ing dense o	range brow	n SAND and	GRAVEL		
Borin	g Prog	NI6	Wat	ter Obse	orvation	ns	Chi	cellin		Watar	Added			·E
Date 7	fime	Depth	De	Casing		Water	From	To	Hours	From	To	GENE REMA	KAL RKS	
			De			Dpt				. 10111				
All dimensio	ons in me	tres Cli	ent	Jovnes	Pike A	ssociates	Method/					ogged Ry		_
Scale	1:50				1		Plant Us	ed			1	D Eva	ans	



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BOREHOLE	LOG

Project													BORE	HOL	ENo
And	chor St	treet, I	Lincol	1							v.				
Job No	161		Date	25-03	-04	Ground I	Level (m)		Co-Ordinates	0				5115	
Contractor	101			25-05	-04								Sheet		
													3neer 2	of 2	
SAMPL	ES &	TEST	S .					S	TRATA						Iť.
Depth	Туре	Te	Wate	Redu	Iced	Depth			DE		Ţ			logy	umer
	NO	Res	ult	Le		ness)	Madium	damas h			N			Geo	Instr
					000	4	(continu	ed)	ecoming dens	e orange br	own SAND	) and GR	AVEL		
8.60-8.80	D	N2	5		0.00										
					000										
					000										
9.50-10.00	D	N30	5		0000										
					0000										
					00.00	E									
					0000	(5.60)									
10.65		N36	5		0.00										
10.70- 11.20	D				0000										
					000										
11.70					0.000										
11.70		N35			000										
12.15-	D				0000										
12.30					0.0.00										
12.70-13.20	D	N42			0000										
13.20-	D	NISO	,		0.00	13.20	04:001								
13.40	D	0.222	2		===		Suii beco	ming ver	y stiff with de	epth LIAS (	CLAY				
14.20		N50/ 0.278			===	(2.10)									
						-									目
15.30		N50/				15.30									
		0.126													
Boring	g Prog	ress ai	nd Wa	ter O	bservation	ns		Chisell	ing	Water	Added	]	GENER	AL	
Date Ti	ime	Depth	De	epth [	Dia. mm	Dpt	From	То	Hours	From	То		REMAR	KS	
							14.9	15.3	l hour						
All dimonsi			Client				[								
Scale	1:50 n me	res	chent	Joyi	ies Pike A	ssociates	Meth Plant	nod/ t Used				Logged	l By D Evar	19	

AGS3 UK BH 640161.GPJ AGS3\_ALL.GDT 6/4/04



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	BO	REH	OLE	LOG
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Project												BO	REH	OLE	No
A	nchor St	reet, l	Lincolı	1							š.			10	
Job No			Date	29-03-04	4	Ground	Level (m)	Co-	-Ordinates (	0			Br	16	
g2	40161			29-03-04	4										
Contracto	r											Sheet			
SAMD	IEC &	TEST	C	T				CTD	A TT A				1 0	f 2	15
SAIVIT			ater	D 1	,	Depth	1	SIK	AIA					gy	nent
Depth	No	Res	$  _{ult} \ge$	Level	Legend	(Thick-			DES	CRIPTION	ſ			eolo	Istrui
						0.20	MADE GRO	OUND (	reinforced	concrete)				0	
						0.40	MADE GRO	OUND (	road stone)	omonoto en i					
0.50-1.00	В					(0.80)	MADE OK	עאוטע (	asii, DI ICK, Ci	oncrete and	gravel)				
						(0.80)									
1.20-1.30	D	NI	0			- 1.20	MADE GRO	DUND (	Clayey san	d with ston	e and occasi	ional small			
1.30-1.70	В					(0.05)	pieces of wo	od)							
						(0.93)									
2 15-2 30						2.15	Looga mottle	d C A NT	D with anot						
2.30-2.40	DB	N7				2.50	Damp loose	becomin	ng medium	dense oran	ge brown SA	AND with this	1		
2.10 2.00						(0.80)	ballus of clay	/						ŀ	:目:
						3.10								:	目
3.10-3.20 3.20	D	N7					Medium dens	se orang	e brown SA	ND				·	:目:
														į.	·目·
1.05		110												ŀ	
4.25		N9				(2.05)									目
						(3.05)									
						.									·目:
5.20		N13													
						(15									
6.15-6.30	D				0.00	0.15	Medium dens	e becom	ning very de	ense SAND	and GRAV	/EL		-	
5.50-0.80	D	NI2			0.02										目:
					0.0.04										目
					00.04										目
7.30-7.75	D	N13			0000										目
				c.	0000										E I
<b>D</b> :					0.04										目
Date	ng Prog	Dent	nd Wa	ter Obse Casing	ervation	1S Water	Ch	iselling	g L	Water	Added	GEN	JERA	L	
		Depu	De	epth Di	a. mm	Dpt	From	10	Hours	From	To	KEN	IARK	15	
All dim		T	Cline												
Scal	le 1:50	tres	Client	Joynes	Pike A	ssociates	S Method/ Plant Us	ed				Logged By	Tyans		

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BOR	EHO	LE	LO	G
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Project And	chor St	reet, Lir	ncoln										BORE	HOL	E No
Job No		D	ate 2	9-03-04	 F	Ground I	Level (m)	C	o-Ordinates	0		<u> </u>	E	BH6	
g40	0161		2	9-03-04	ł										
Contractor													Sheet		
			T	1									2	of 2	
SAMPL	ESÆ	ESIS	iter		1	Denth	1	STI	RATA					y	ient/
Depth	Type No	Test Result	Wa	Reduced Level	Legend	(Thick- ness)			DES	CRIPTION	1			Geolog	Instrum
8.20-8.70	D	N15			0.0.00		Medium	dense bec	oming very	dense SAN	ID and GR	AVEL <i>(c</i>	ontinued)		
9.10-9.60	D	N19			0.000	(5.95)									
10.00- 10.50	D	N21			0.000										
11.10- 11.60	D	N36				_									
12.00- 12.10 12.10	D	N75/ 0.036 N70/ 0.04	_		0 - 0	- 12.10									
					- - - - - - - - - - - - - - - - - - -										
Boring	Progr	ess and	Wate	er Obse	rvation		(	hisellir		Watar	Added	][			
Date Ti	ime	Depth	Den	Casing	mm	Water	From	To	Hours	From	To		GENER	AL	
							12.05	12.1	2 hours						
All dimension Scale	is in met 1:50	res Cli	ent	Joynes	Pike A	ssociates	Metho Plant	od/ Used				Logged	i By		



# LEGEND

Ι

ι	J	Undisturbed driven tube sample, 100mm nominal diameter unless noted
F	þ	Undisturbed pushed piston sample, 100mm nominal diameter unless noted
]]	ſW	Thin wall tube (pushed)
0	CBR	CBR mould sample
E	BLK	Block sample
I	)	Small disturbed sample
E	3	Disturbed bulk sample
J		Jar Sample
V	WS	Water sample
0	CS	Core sample
		Test results
		Test results
S	5	Test results Standard penetration test, split spoon sampler
S	5	Test results Standard penetration test, split spoon sampler Standard penetration test, solid cone
S C K		Test results Standard penetration test, split spoon sampler Standard penetration test, solid cone Field permeability test, kFH indicates falling head, kPI indicates packer injection
S C K V		Test results Standard penetration test, split spoon sampler Standard penetration test, solid cone Field permeability test, kFH indicates falling head, kPI indicates packer injection Field vane test [ natural (n) remoulded (r) ]
S C K V I	S C V a or I <sub>d</sub>	Test results Standard penetration test, split spoon sampler Standard penetration test, solid cone Field permeability test, kFH indicates falling head, kPI indicates packer injection Field vane test [ natural (n) remoulded (r) ] Point load strength quoted for axial (a) and diameter (d)
S C K V I,	S C K J a or I <sub>d</sub> CS	Test results Standard penetration test, split spoon sampler Standard penetration test, solid cone Field permeability test, kFH indicates falling head, kPI indicates packer injection Field vane test [ natural (n) remoulded (r) ] Point load strength quoted for axial (a) and diameter (d) Core sample for laboratory testing
S C K I I C P	S C V a or I <sub>d</sub> CS P	Test results Standard penetration test, split spoon sampler Standard penetration test, solid cone Field permeability test, kFH indicates falling head, kPI indicates packer injection Field vane test [ natural (n) remoulded (r) ] Point load strength quoted for axial (a) and diameter (d) Core sample for laboratory testing Pocket Penetrometer
S C K V I, C P	S C A or I <sub>d</sub> CS PP	Test results Standard penetration test, split spoon sampler Standard penetration test, solid cone Field permeability test, kFH indicates falling head, kPI indicates packer injection Field vane test [ natural (n) remoulded (r) ] Point load strength quoted for axial (a) and diameter (d) Core sample for laboratory testing Pocket Penetrometer