

**PHASE 3, LAND AT WESTBROOKE ROAD, LINCOLN, LN6 7TB**

**ARCHAEOLOGICAL MONITORING  
AND RECORDING REPORT**

NGR: SK 95749 69456 & SK 95752 69392  
Planning Authority: City of Lincoln  
Planning app.: 2018/0244/FUL & 2018/0458/FUL  
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Site code: WRLM 18  
Archive acc. no.: LCNCC: 2019.182

Report prepared for

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by

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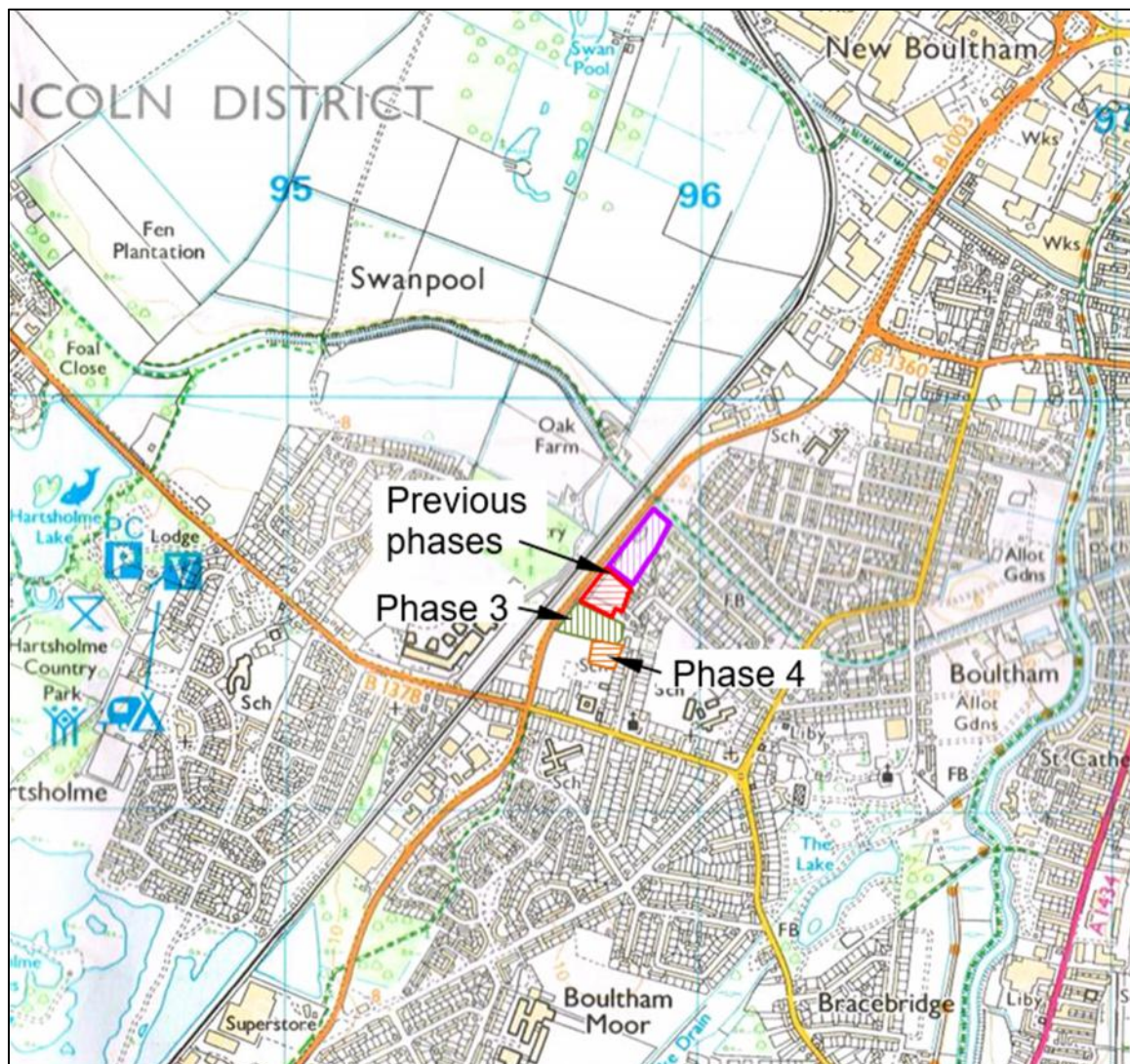
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## Summary

PCAS Archaeology Ltd was commissioned by Chestnut Homes Ltd. to undertake a scheme of archaeological mitigation works during groundworks operations on land off Westbrooke Road, Lincoln. This programme was attached to the third phase of residential construction of the LN6 development, progressing south from the newly completed Phase 2.

The programme of monitoring and recording did not identify any substantial archaeological remains within the monitored zone. Two ditches were exposed, but no finds were recovered from these features, which remain undated.



## 1.0 Introduction

PCAS Archaeology Ltd was commissioned by Chestnut Homes Ltd. to undertake a scheme of archaeological mitigation works on land off Westbrooke Road, Lincoln; the Phase 3 residential LN6 development.

The methodology adopted during the archaeological investigation followed current best practice and appropriate national guidance including:

- NPPF, National Planning Policy Framework, 2012;
- IFA Code of Conduct (1994 as revised);
- IFA Standards and Guidance for Archaeological Watching Briefs (2008);
- Management of Research Projects in the Historic Environment (MoRPHE)
- Lincolnshire Archaeological Handbook (Lincolnshire County Council, 2016).

The strategy was approved by the City Archaeologist for the City of Lincoln Council.

## 2.0 Site Location and Description (Figs. 1 and 2)

The development site lies in southwest Lincoln; bounded to the west by Tritton Road, and to the east by Westbrooke Road. The north-western boundary is defined by Catchwater Drain and to the south lies the residential cul-de-sac of St. Helen's Avenue. Access to the site is via Westbrooke Road, and through the Phase 1 & 2 development.

Phase 3 encompasses a roughly rectangular area of formerly undeveloped land, c.0.9 hectares in extent. An existing surface water drain running across the southeastern corner of Phase 3 is being retained as part of the development.

The approximate central National Grid Reference of Phase 3 is SK 95749 69456.

## 3.0 Topography and Geology

The development site lies in the Lower City, to the west of the River Witham. It is generally flat, with only minor undulations; ground level is approximately consistent with Tritton Road to the west. There are 2 benchmarks within 150m – on the west side of Tritton Road a level of 9.103mOD is recorded on the side of a building close to the railway, while a second level of 8.310mOD is cut into the north face of a school building on Skellingthorpe Road (<https://www.ordnancesurvey.co.uk/benchmarks/>).

Bedrock geology covering the southwest side of Lincoln is dominated by undifferentiated Scunthorpe and Charmouth Mudstone, sedimentary bedrock formed approximately 183 to 204 million years ago in the Jurassic and Triassic Periods in shallow lime-mud seas where material washed off the land was deposited on shallow platforms.

The drift geology of Balderton and Eagle sand and gravel was identified along the southern edge of this phase of development. The site also lies close to the River Witham, with alluvial and river terrace deposits recorded on the northern side of the development (<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>).

## 4.0 Planning Background and Constraints

The National Planning Policy Framework (NPPF) came into force in March 2012. This placed the responsibility for dealing with heritage assets affected by development proposals with the developer. Developers are required to 'record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible' (NPPF, s141). Developers are obligated to produce a definitive method of archaeological mitigation to fulfil this requirement.

A planning application for the erection of 29 dwellings with vehicular access from Westbrooke Road was submitted to the City of Lincoln Council, application ref: 2018/0244/FUL. A second application, ref: 2018/0458/FUL was also submitted for consideration, proposing the construction of an additional 23 new dwellings and a new road extending behind the properties on St. Helen's Avenue towards Skellingthorpe Road. These applications involve the construction of Phases 3 and 4 respectively of a larger planned development, Phases 1 & 2 of which have already been completed.

The program of works for Phases 3 and 4 included monitoring of all groundworks for the new access road into and within the site, and intermittent monitoring of the remainder of the development; consistent with the monitoring scheme that was undertaken during the first two phases of development.

## 5.0 Archaeological and Historical Background

The site lies on the northern edge of the Skellingthorpe Character Area as defined on the Heritage Connect Lincoln website, a suburban area of mainly housing with some shops, churches and schools. The majority of the current townscape dates from the Inter-War Period although earlier medieval and later, including 19th-century, townscape and landscape elements still have a strong influence on the character; St. Helen's Avenue which marks the eastern boundary of the site dates from the late 1920's – early 1930's (<http://www.heritageconnectlincoln.com/character-area/>).

The development site within the Character Area of Skellingthorpe has the following research agendas as classified by Lincoln Urban Archaeological Assessment (LARA):

- Prehistoric Era (-10000 – 60); There are no Prehistoric research agendas for the Skellingthorpe Character Area
- Roman Military Era (60 – 90); 6.23 Birchwood Area and Boultham Moor, possible utilisation of scrubby woodland areas for industrial or military purposes
- Roman Colonia Era (90-410); 7.3 Industrial belt south west of the city, woodland for fuel and grazing and the Roman pottery industry and other industries, and possible clay extraction pits etc.
- Early Medieval Era (410-850); 8.4 Land around city potentially usable for settlement and agriculture, unknown management and exploitation of the woodland south of the city.
- High Medieval Era (850 - 1350); 9.12.2 Intermediate distance roads connecting Lincoln with the smaller outlying towns and villages, includes Skellingthorpe Road. 9.6 Woodland and pasture to the southwest, as in previous eras. 9.11 Boultham.

- Early Modern Era (1350 – 1750); 10.12.2 Intermediate roads. 10.6 Woodlands and wood pasture to the southwest. 10.11 Boultham
- Industrial Era (1750 – 1945); 11.11 Railway transport network. 11.12 Woodlands and wood pasture to the southwest. 11.31 Middle class house building between the Wars. 11.61 Elementary schools. 11.7.1 Intermediate road routes. 11.92.9 Holy Cross, Skellingthorpe Road. 11.96 Wesleyan and Methodist Chapels. 11.98 Roman Catholic churches.

(<http://www.heritageconnectlincoln.com/character-area/skellingthorpe/25/related>)

Prehistoric finds recorded around the development site are minimal; two Neolithic flint tools have been recovered within 1km of the site (Lincolnshire Historic Environment Record (LHER) ref: 70109/701070). Settlement in Lincoln began in the Iron Age, concentrated around the confluence between the Rivers Witham and Till. This early occupation developed into what is now known as the Lower City. Access to the lower city and the fortress from the south was via Ermine Street, the approximate line of which is now followed by the High Street and Newark Road, with a branch following the A15 Cross O'Cliff Hill. This road was on the west side of the River Witham, and while geographically is close to the development site, topographically the Roman road and the site are separated.

The area of the development site is likely to have been woodland in the Roman period, utilised as grazing or as a source of fuel and other natural materials. A concentration of Roman kilns have been found during excavations Oak Farm northwest of the development site (LHER ref: 71131), with the closest recorded kilns to the site less than 400m away (Lincoln Heritage Database (LHD) ref: 1588 – 1591). A possible Roman clay extraction pit later reused as a medieval fish pond has been identified to the northwest of the kilns, and further clay extraction pits may be located in the surrounding area (LHD ref: 8439). The extent of the Swanpool Roman potteries is as yet undetermined, and there is the potential for Roman activity associated with the potteries within the proposed development site, however the potential for Roman activity with the site is considered Low if it can be shown that the potteries did not extend into this area.

Occupation in Lincoln appears to have withdrawn back inside the old Roman town walls in the Saxon period (Jones, 2003). There are no Saxon artefacts or features recorded within 1km of the development site, and it is likely that this area remained woodland.

With the Norman Conquest and the construction of Lincoln Castle and Cathedral in the 11th century Lincoln began to thrive once again. The city was built utilising the old Roman road network, and medieval settlement began to spread along the roads from the city towards outlying towns and villages. St. Helen's Church in Boultham around 800m to the southeast of the site dates from the 13th century, and was the focus of one of these outlying settlements (LHER ref: 70537). A second religious site was developed on the small island of higher ground in the Brayford wetlands at Hartsholme (LHD ref: 6401). The hospital of St. Mary Magdalene was also constructed in the 13th century, although there is evidence to suggest it replaced an earlier Saxon church (LHER ref: 71130).

Medieval Lincoln grew on the profits of the Wool Trade, which was largely controlled by the Church. Much of the land on the outskirts of Lincoln was owned by the Church and used to graze the flocks of sheep that were so valuable at this time. It is likely that the development site was grazing land throughout the medieval period.

There are nearly 350 monument records on the Lincoln Heritage Database within a 1km search area of the development site; the majority of these are for modern buildings and developments. The expansion and development of the Lower City away from the waterside areas initiated in the early 20th century, rapidly increasing in the inter and post war period. The development of

Boultham Hall from a small medieval village and post-medieval private estate on the outskirts of Lincoln into a suburb of the city began in the interwar period, with further construction following WWII. St. Helen's Avenue dates from the early 1930's, the construction having been proposed by a Mrs E Blank, builder, in April 1929. Western Avenue dates from the 1960's while Westbrooke Road is a late 20th century development.

## 6.0 Methodology

Archaeological monitoring undertaken during the groundworks for Phase 2 of the development, to the north of Phase 3, identified two almost parallel undated ditches. These features do not correspond with any features on available historic mapping, but it was thought that they would continue into the north-western part of Phase 3 of the development (see results below).

The archaeological monitoring for the third and fourth phases of construction continued the methodology employed in Phase 1 & 2. This involved monitoring all groundworks for the new access roads and sustainable urban drainage scheme around the development (including those for the new wet well and pumping station within phase 4), with intermittent monitoring of the remaining groundworks equating to one third of the new dwellings.

The purpose of the monitoring scheme was to gather sufficient information to establish the presence or absence, extent, depth, condition, character, quality and date of any archaeological deposits and to create a permanent record. Environmental evidence was to be taken into account as appropriate.

All machine excavation was undertaken using a mechanical excavator fitted with a flat toothless blade, in spits no more than 200mm thick, to ensure a clean, even surface.

All features and deposits seen were recorded on standard PCAS context recording sheets, and the progress of the groundworks noted on standard PCAS site diary sheets. Sample sections were drawn at intervals at a scale of 1:20, and plotted on scale 1:500 location plans. A digital photographic record was maintained throughout the project: selected photographs are reproduced in this report.

Intermittent monitoring of Phase 3 began on 11<sup>th</sup> November 2018 and was completed 1<sup>st</sup> July 2019. The personnel involved were S. Palmer-Brown, R. Dennis, G. Perkins and R. Neale.

## 7.0 Results (Fig. 2 to 6)

Monitoring involved a watching brief on the excavation of the road running through the centre of Phase 3, the footings for the new houses, and the excavation of service trenches. Initial excavations focussed on the road strip. This extended southwards from Phase 2, turning eastwards toward the boundary of the site (Fig. 2). A southern leg was also excavated, extending from the corner where the road turns east. The strip involved the removal of topsoil, approximately 0.3m thick and the underlying subsoil, up to 0.08m thick. This exposed the natural sand substrate. Two archaeological features were observed during the road strip; ditches [008] and [009]. The earliest of these, ditch [009] ran east to west through the southern leg of the road strip and through plot 34. This was 2.6m wide, 0.52m deep and contained a total of two fills, from which no finds were recovered. Truncating this ditch to the east was ditch [008], which ran northeast to southwest. This was 0.9m wide, 0.2m deep and contained a single sand silt deposit. This was very mixed, with topsoil and redeposited natural throughout. No finds were recovered.

Footings trenches for a total of twenty-two housing plots were monitored (see fig. 2). Excluding ditch [009] as referenced above, no archaeological features were identified in any of these foundation cuts. Generally, these excavations exposed a basic stratigraphy of topsoil overlying subsoil and the natural substrate. The natural substrate varied between light sands and more compact firm blue clays.

No finds were recovered during the monitoring works.



Plate 1 (left): Ditch [008] (looking NE)

Plate 2 (above): Ditch [009] (looking W).





Plate 3: Plots 34 – 37 (looking W).



Plate 4: Plots 40-41 (looking NE).



Plate 5: Plot 52 representative section (looking N).



Plate 6: Plots 54 - 56 (looking WSW).

## 8.0 Conclusion

The programme of monitoring and recording identified just two ditches within Phase 3 of the LN6 development. Neither of these features appear related to the post-enclosure landscape, as they are not parallel or perpendicular to field boundaries that are depicted on late 19<sup>th</sup> century mapping (Fig. 7).

The exposed ditches were not contemporary, with ditch [009] being stratigraphically earlier than [008]. The course and orientation of ditch [008] seems to correspond to the ditches observed during Phase 2 monitoring (Savage 2018; Fig. 6), although only one could be seen in this phase.

No other features were observed during monitoring programme.

## 9.0 Effectiveness of Methodology

The methodology employed achieved its primary objective, ensuring that any surviving archaeological remains were not destroyed without record; at the same time causing the minimum of disruption to the construction process.

## 10.0 Acknowledgements

PCAS Archaeology Ltd would like to thank Chestnut Homes Ltd for this commission.

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<http://www.heritageconnectlincoln.com/>

<http://mapapps2.bgs.ac.uk/geoindex/home.html>

Search of Lincoln Heritage Database requested 26/4/18

- Site boundary
- Not monitored
- Limit of Excavation
- Archaeological feature
- Sondage



Figure 2: Plan of monitored works  
1:500

Figure 3a - Plot 28 & 29

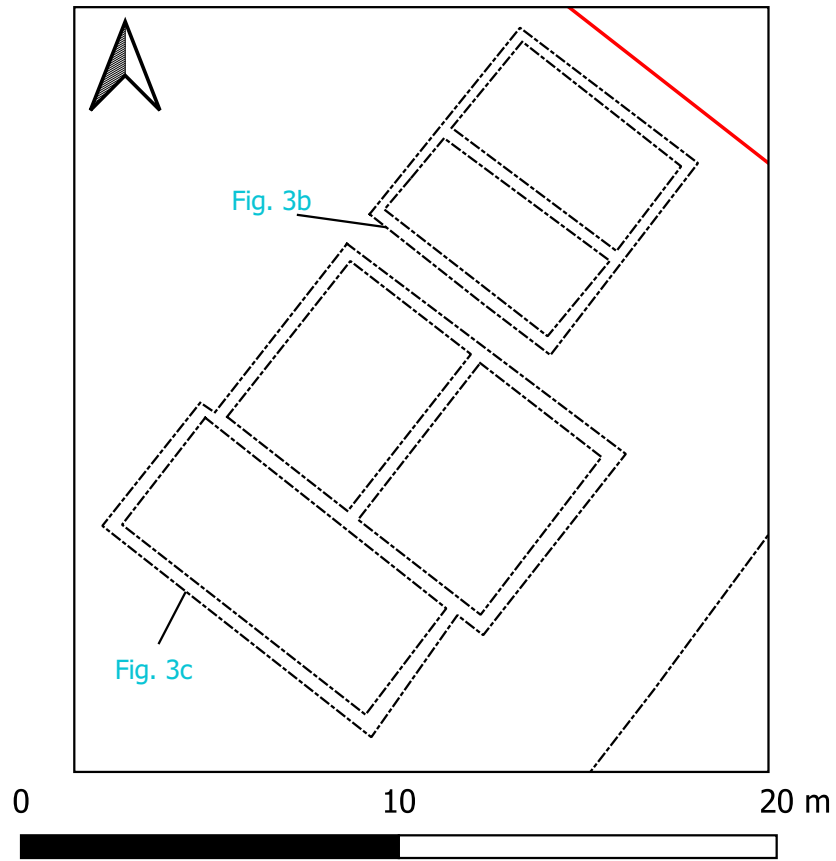


Figure 3b

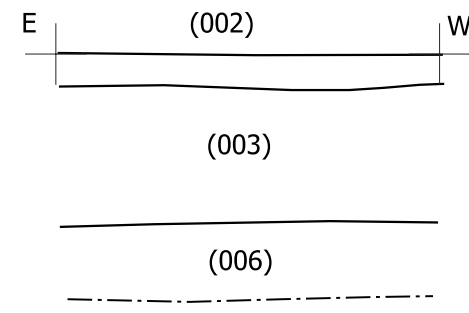


Figure 3c

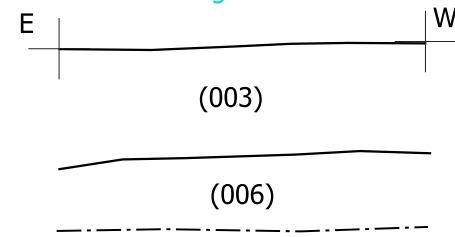


Figure 3e

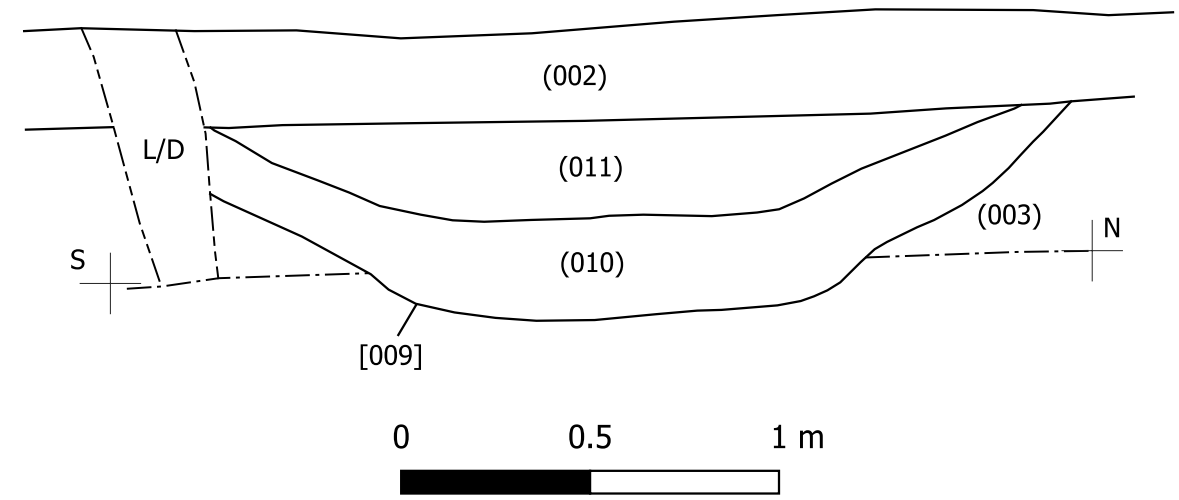


Figure 3d - Plot 32 to 37 and southern road strip

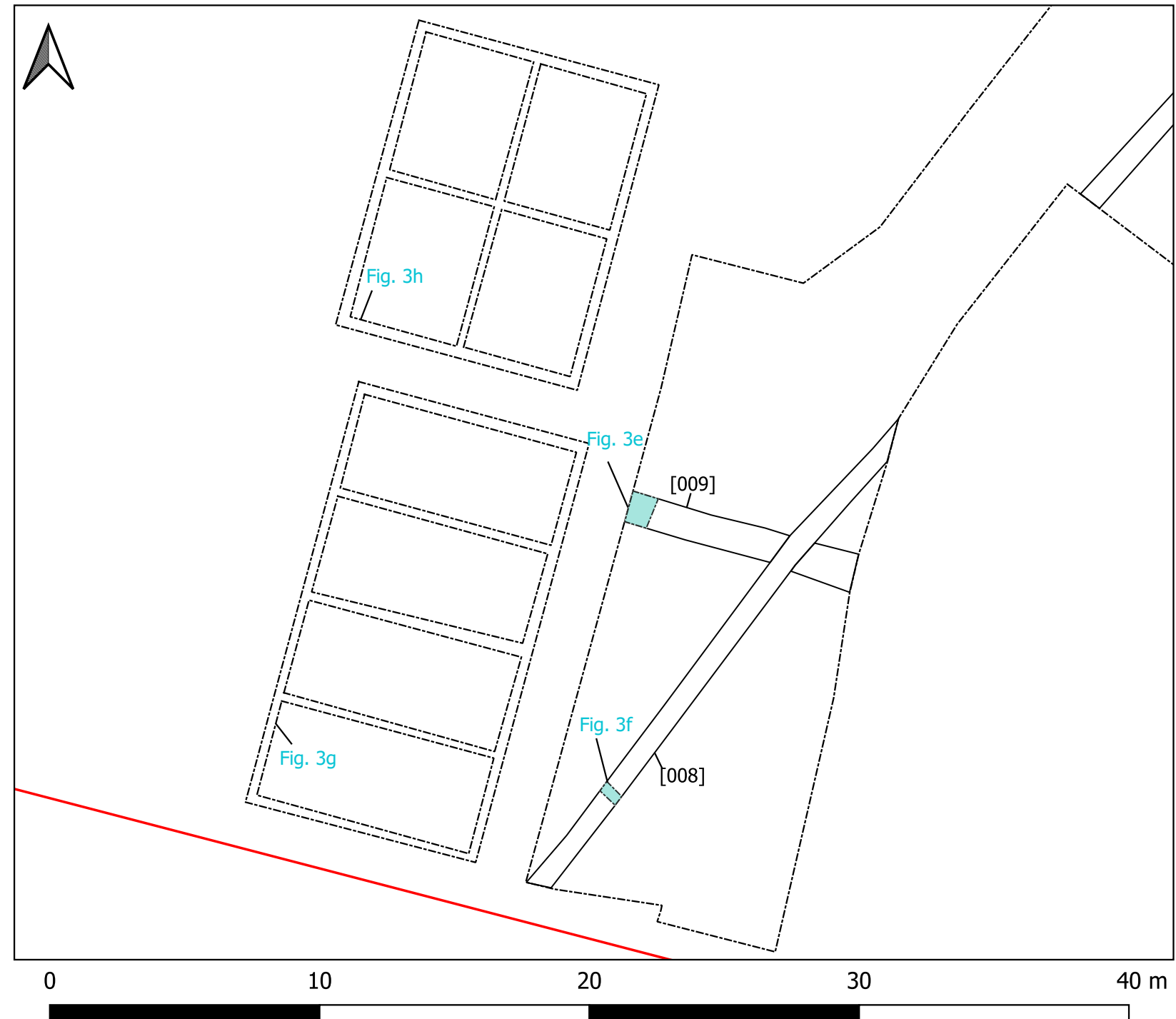


Figure 3f

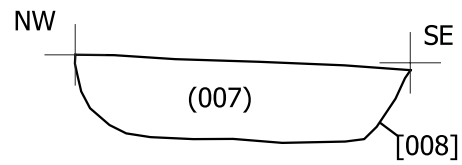


Figure 3g

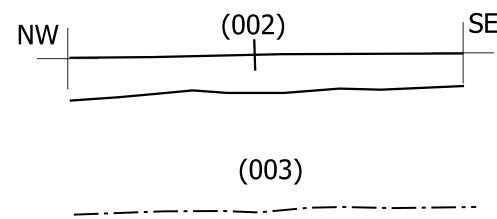


Figure 3h

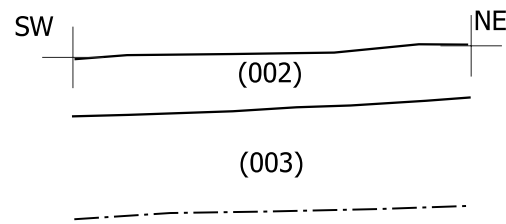


Figure 4a - Plots 40 & 41

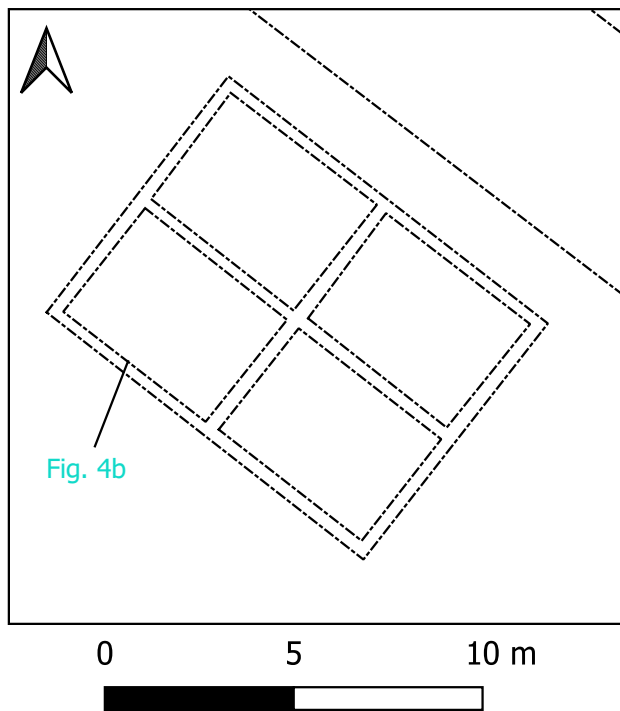


Figure 4b

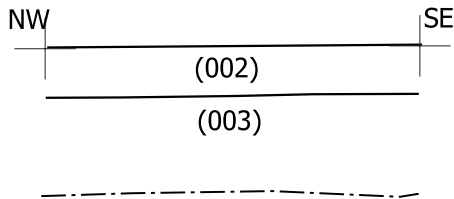


Figure 4d

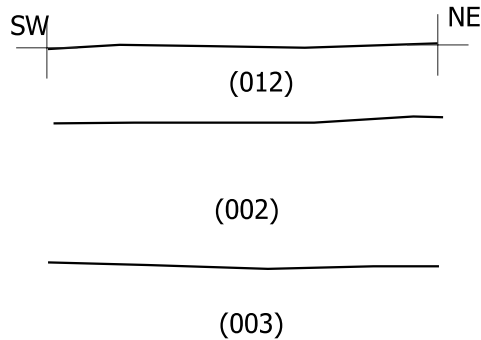


Figure 4c - Plots 42 to 44

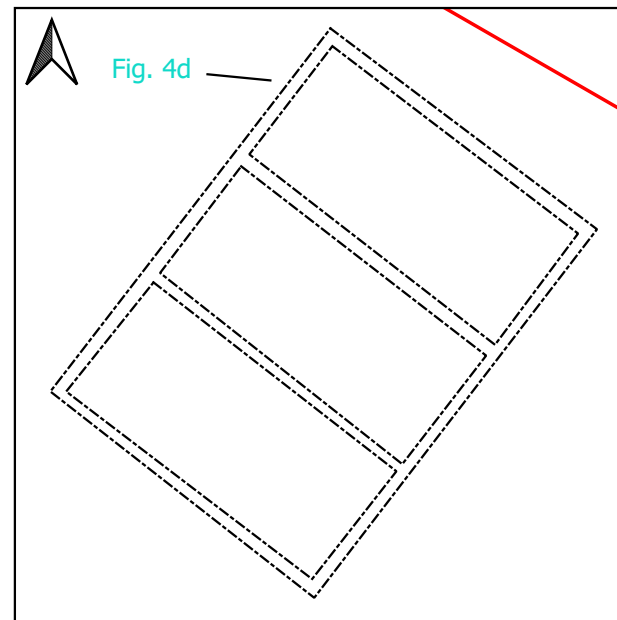


Figure 5a - Plots 49 to 56

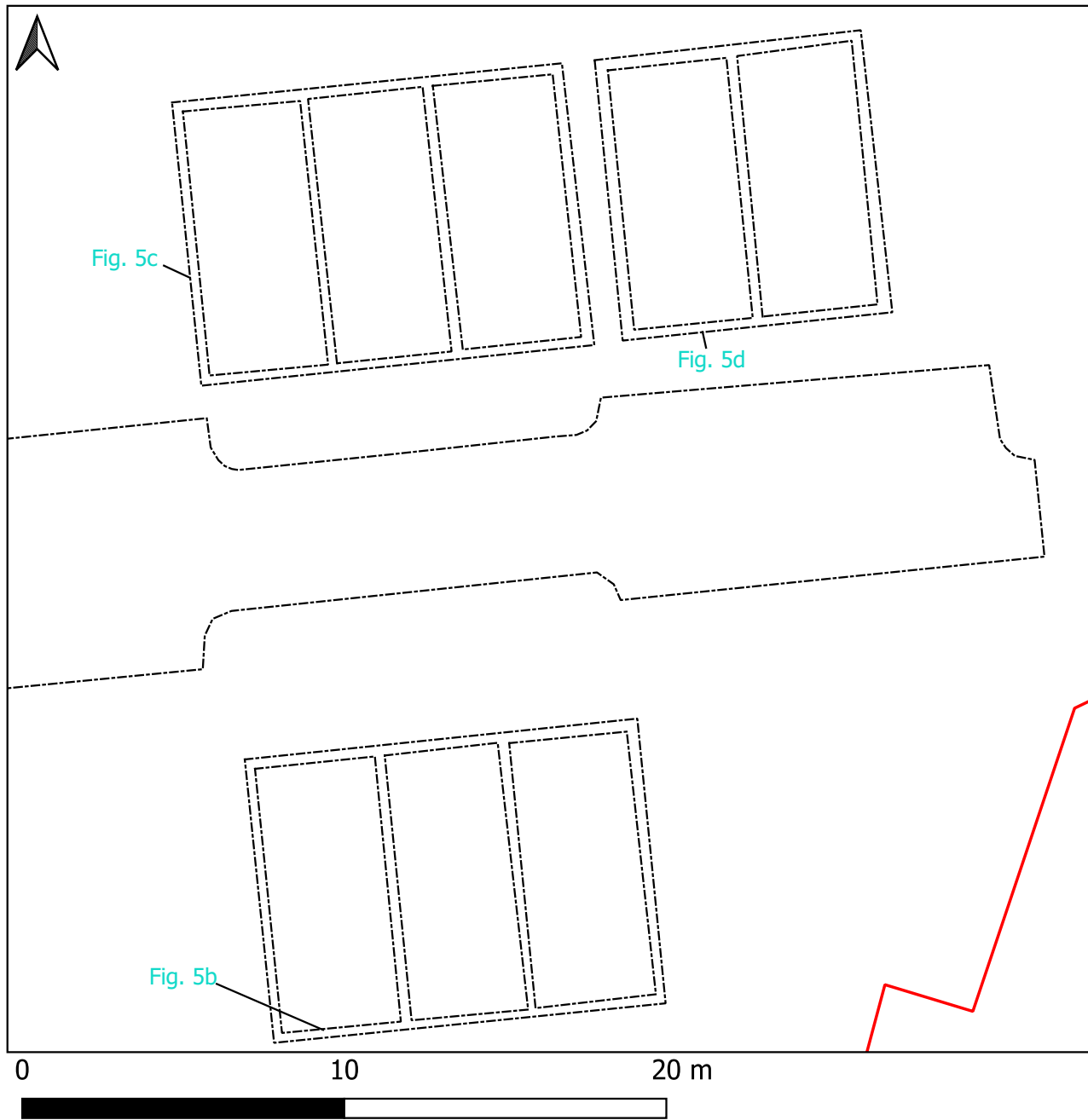


Figure 5b

(001)

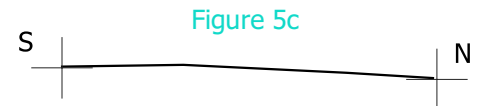
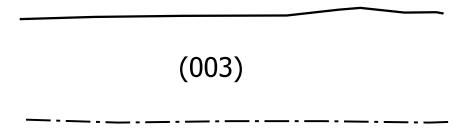


Figure 5c

(001)

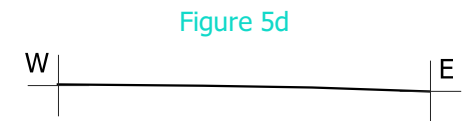
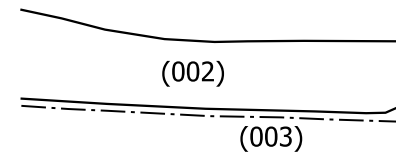
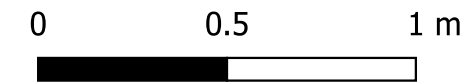
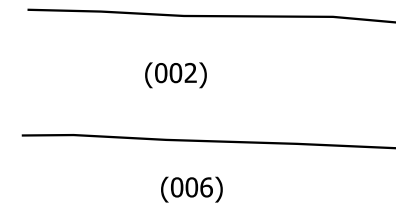


Figure 5d

(001)





- Site boundary
- Phase 2
- Limit of Excavation
- Ditches seen in Phase 2
- Archaeological feature
- Sondage

Figure 6:  
Plan showing ditches seen in Phase 3 and Phase 2  
1:500





Phase 3

Phase 2

0 50 100 m

## 2046 Phase 3 and 4, Westbrooke Rd., Lincoln

### Appendix 1 - Context Summary

Context	Type	Description	Finds
001	Layer	Topsoil. Light brown silt sand with occasional pebbles. Fine and loose. 0.3m thick.	
002	Layer	Subsoil. Similar to (001). Light brown with orange hue to it. Silty sand. Gravels and small pebbles throughout. 0.05m thick.	
003	Layer	Natural substrate. Light orange sands with patches of gravel. Some light blue grey clay patches.	
004	Layer	Modern rubble. Limestone.	
005	Layer	Made ground. Light grey brown silt sand deposit.	
006	Layer	Thick blue clay. Very compact and firm. Plastic. Contained small pebbles and gravels, although these were rare.	
007	Fill	of ditch [008]. Friable to loose, very mixed and patching in colour, ranging from light brown through to mid brown to dark greyish brown. Abundant small to medium sized pebbles.	
008	Cut	NE to SW orientated linear feature. Shallow, with steep, disturbed sides into a flat base. Probable former boundary/drainage ditch. 0.9m wide and 0.2m deep.	
009	Cut	Ditch. Shallow sides into a flat base. Orientated approximately E to W. 2.6m wide and 0.52m deep.	
010	Fill	of ditch [009]. Dark brown black silt sand. Organic. Modern pottery recovered, although not retained.	
011	Fill	of ditch [009]. Light yellow sands. Redeposited natural. Loose and friable with no inclusions.	
012	Layer	Mixed deposit of disturbance. Mid brown silty sands with occasional pebbles. 1m wide and 0.2m deep.	