

**PROPOSED DIGESTATE LAGOON, HEMSWELL CLIFF,
WEST LINDSEY, LINCOLNSHIRE**

ARCHAEOLOGICAL EVALUATION REPORT

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Prepared for

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by

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Non-Technical Summary

A programme of archaeological evaluation trenching took place on land off Occupation Lane, on the west side of the A15 in the civil parish of Hemswell Cliff in the West Lindsey district of Lincolnshire.

This document describes the archaeological methodology and results from the archaeological evaluation, and will be used in order to provide support for a forthcoming planning application for the excavation and construction of a digestate lagoon.

The proposed development site is situated approximately 400m from the major Roman road of Ermine Street. An archaeological evaluation carried out previously on a large area of land to the north of Occupation Lane identified remains associated with Roman occupation; however, the most significant finds were encountered some 600m from the present site, and trenching in its immediate vicinity proved to be largely negative.

During the current evaluation, four trenches measuring 30m x 2m were opened. The results were such that the only features revealed which could possibly be classed as archaeological were two small holes next to each other which may have been post holes.

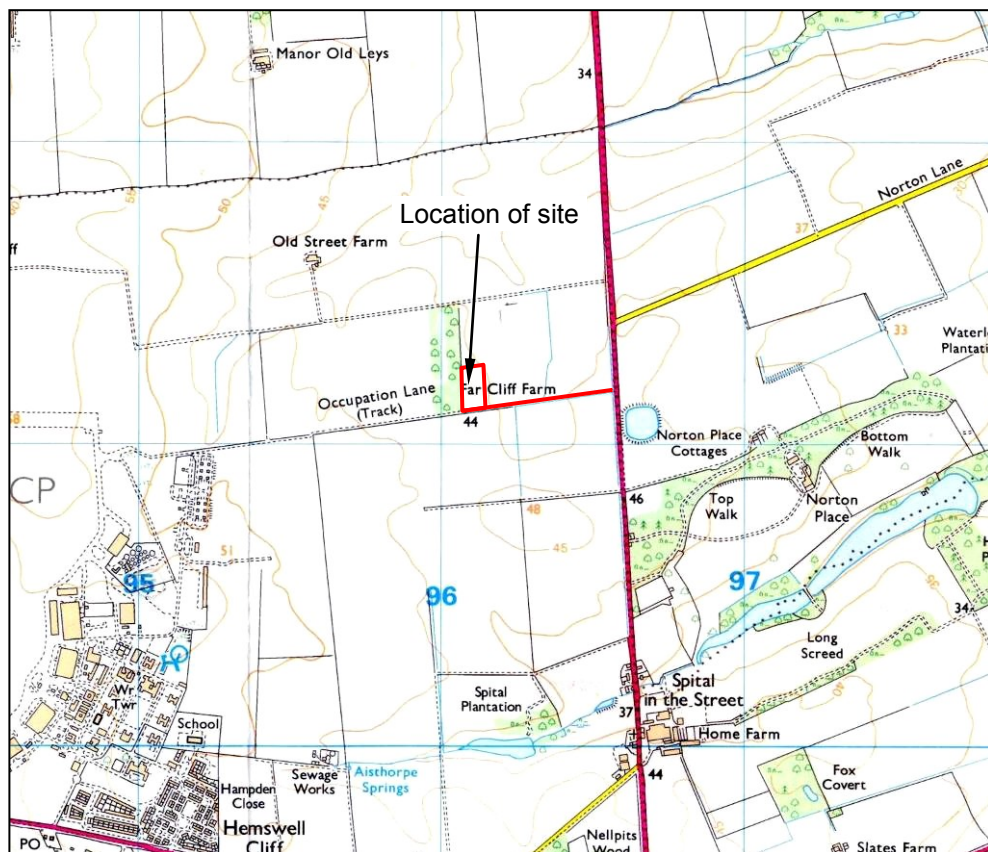


Fig. 1: Location plan of the site (outlined in red) at scale 1:25,000. OS mapping © Crown copyright. All rights reserved. PCAS licence no. 100049278.

1 Introduction

Pre-Construct Archaeological Services Ltd (PCAS) was commissioned by Mr. G. J. Perry to undertake an archaeological evaluation on land off Occupation Lane, Hemswell Cliff, Lincolnshire.

There was a possibility that archaeological remains associated with Roman settlement would be present on the site; therefore a programme of evaluation was recommended by the LPA advisor to inform a planning application for a digestate lagoon.

This document follows current best practice and appropriate national guidance including:

- NPPF, National Planning Policy Framework, 2012;
- CIFA Code of Conduct (2008 as revised);
- CIFA Standards and Guidance for Archaeological Evaluations (2008);
- Management of Research Projects in the Historic Environment (MoRPHE v1.1, English Heritage 2009)
- Lincolnshire Archaeological Handbook (Lincolnshire County Council, 2010).

2 Site Location and Description (Figs. 1 - 3)

The parish of Hemswell Cliff is situated on the west side of the A15 (the route of Roman Ermine Street) at the point where the A15 is crossed by the A631, the main road between Gainsborough and Market Rasen. The parish is bounded by the A15 to the east and the B1398 (Middle Street) to the west; it is divided east-to-west by the A631. Hemswell Cliff village, created from the permanent quarters of the former RAF Hemswell, is situated on the north side of the A631.

The proposed development site lies within the north-eastern corner of Hemswell Cliff civil parish, on the north side of Occupation Lane, a track running westwards off the A15 and giving access to the north end of the former military airfield. The site currently forms part of a field; with the exception of a small plantation on its west side, it is surrounded by open agricultural land. The proposed lagoon measures 100m by 50m, with an additional 4m wide track to be made around the lagoon itself. Its central National Grid Reference is SK 961 912.

3 Topography and Geology

The roughly north-to-south running limestone ridge of the Lincoln Edge separates the valleys of the River Trent to the west and the River Ancholme to the east. The land in the vicinity of the site generally slopes gently from the Lincoln Edge limestone cliff above the Trent valley, before descending more steeply into the Ancholme valley. The site is at an approximate Ordnance Datum height of 40-45m above sea level, on land sloping gently eastwards from the crest of the Lincoln Edge.

No drift geology is recorded in the vicinity of the proposed development site. The local solid geology is the exposed Lincolnshire Limestone of the Lincoln Edge (BGS, 1999).

4 Planning Background

An application for planning permission for the construction of a digestate lagoon is in preparation: the results of the evaluation will be presented in support of the application, and will be used to inform an archaeological mitigation strategy if required.

5 Archaeological and Historical Background

The Lincolnshire Historic Environment Record records the cropmark of an undated enclosure, possibly a Neolithic long barrow, in the field to the north of the proposed lagoon site and approximately 500m to the north-east of it (HER ref. 56331). Archaeological monitoring carried out during road improvements at the junction of the A15 with Norton Lane, approximately 400m to the east of the site, recorded a linear feature some 5m wide and 0.5m deep underlying the modern road, but retrieved no indication of its date or function (HER ref. 55382).

The major Roman road of Ermine Street, connecting London to York via Lincoln and the ferry crossing of the River Humber at Winteringham, runs some 400m to the east of the site, below the course of the modern A15.

An archaeological evaluation was carried out in 2013 on a large area of land to the north of the former airfield and the west of Ermine Street, in advance of the proposed construction of a wind farm: the current site lay within the south-east corner of the evaluation area. Trenches 16 and 17 of the evaluation were excavated directly to the north-east of the proposed lagoon site. Trench 16 had been sited to investigate an area shown by an earlier geophysical survey to be slightly disturbed and interpreted as possible plough scarring: the only feature encountered was a narrow, probably post-medieval trench, oriented east-to-west and containing an irregular wall or structure of dry-laid limestone fragments. Trench 17 had been positioned as a control, to investigate a negative zone on the geophysical survey, and proved to be archaeologically sterile (Francis, 2013).

The 2013 evaluation produced good evidence for Roman occupation across parts of the site, in the form of enclosure ditches, pits and structures: the settlement may have originated in the late Iron Age, and continued in occupation until the late 3rd to 4th century AD. The most significant finds – a late Roman stone structure in association with an assemblage of sherds from fine ceramic table wares, with the remains of a metalled surface or trackway in the vicinity – occurred to the south of Old Street Farm, approximately 600m to the north-west of the proposed lagoon site (*ibid.*).

The first airfield at Hemswell Cliff was opened in 1916; it was initially used by the RFC as a night landing ground before becoming a training airfield. The site was returned to farmland shortly after the end of the First World War. A new airfield, one of a number of permanent bases being built to accommodate the then rapidly expanding RAF, was opened on the same site in 1936; the village now known as Hemswell Cliff began as the permanent quarters of RAF Station Hemswell. RAF Hemswell served as a bomber base during the Second World War, and continued in military service through the early part of the Cold War, but went out of use in 1967. The site then stood empty until it was adopted for use as a market and trading area. The associated station settlement survives as Hemswell Cliff village, which became a civil parish in its own right in 1998 (*ibid.*).

6 Methodology

The evaluation consisted of four 30m x 2m trenches spaced across the area in which the lagoon is to be dug (Fig. 3), positioned in order to give a wide spread of sampling across the site. The trenches were located on the site by triangulation, and were opened by a machine fitted with a toothless bucket, under archaeological supervision.

The evaluation trenches were hand cleaned where necessary, and were drawn in plan at a scale of 1:100. Excavated features were drawn in section at scales of 1:20, and representative sections of the trench baulks were also drawn at 1:20. These were located on the trench plans. A written record of each significant stratigraphic horizon and archaeological feature was made on standard PCAS trench recording forms. A digital photographic record,

supplemented by colour slide photography, was made and a narrative account was also kept, in the form of a site diary.

The fieldwork was carried out by Julian Sleaf on the 16th and 17th June 2015. Weather conditions were variable, but generally favourable.

7 Results

7.1 Trench 1 (Fig. 4)

Trench 1 was positioned along the southern edge of the site and oriented east to west. The trench was excavated 0.42m down to the natural, which consisted of a powdery pinkish white silt drift material above limestone brash. The occasional vein of orange coloured sandy silt drift was noted. Nothing of archaeological interest was encountered.

7.2 Trench 2 (Fig. 5)

Trench 2 was positioned along the eastern edge of the site and oriented north to south. The trench was excavated 0.40m down to the natural, which consisted of a powdery pinkish white silt drift material above limestone brash. The occasional patch of orange coloured sandy silt drift was noted. Nothing of archaeological interest was encountered.



Plate 1: Trench 1, looking west



Plate 2: Trench 2, looking north. The orange natural sandy drift is visible in several places

7.3 Trench 3 (Fig. 6)

Trench 3 was positioned along the eastern edge of the site and oriented north to south. The trench was excavated 0.36m down to the natural, which consisted of a powdery pinkish white silt drift material above limestone brash. The occasional vein of orange coloured sandy silt drift was noted. There were two small round features in the southern end of the trench.

Two almost identical features were encountered, which appeared to be oval shaped possible post holes [302] and [304] 0.30m apart, with steep sides and rounded bases. They measured 0.40m by 0.34m and exhibited very clear regular cuts. Both were 0.20m deep and filled with a natural looking reddish brown silty clay deposit.



Plate 3: Trench 3, looking north. What appear to be post holes are visible in the foreground



Plate 4: Section through post holes [302] and [304], looking north. The features are almost identical and filled with the same silty clay material

7.4 Trench 4 (Fig. 7)

Trench 4 was positioned along the northern edge of the site and oriented east to west. The trench was excavated 0.42m down to the natural, which consisted of a powdery pinkish white silt drift material with frequent limestone brash. An area of slightly raised, dense limestone brash was noted in the central portion of the trench. Nothing of archaeological interest was encountered.



Plate 5: Trench 4, looking east. The dark patch in the background is a dense area of limestone brash

8 Discussion and Conclusions

The evaluation revealed only two possible features, a pair of what appeared to be post holes or solution features in the southern end of Trench 3. The fills of these features were very natural looking and did not behave like solution features towards the base - for example there was no evidence of undercutting which would have been expected. The cuts were very regular and identical in dimensions, and neither feature yielded any finds. Apart from these possible features, nothing of archaeological interest was encountered during the evaluation, therefore it is highly unlikely that development would have a direct impact on any possible surviving archaeology.

9 Effectiveness of Methodology

Archaeological evaluation was effective in demonstrating the absence of archaeological remains on the site. The body of evidence thus produced will be sufficient to inform the planning and development process.

10 Project Archive

The project archive, consisting of the site recording and the finds, will be deposited with printed copies of this report at The Collection, Lincoln, on or before December 2015; following deposition, the archive will be available for consultation under the LCNCC accession number 2015.119. A copy of the full approved report will also be uploaded to the Archaeology Data Service OASIS (Online Access to the Index of archaeological investigationS) database, where it will be publicly accessible online.

11 Acknowledgements

Pre-Construct Archaeological Services would like to thank G. J. Perry Planning Consultant for this commission.

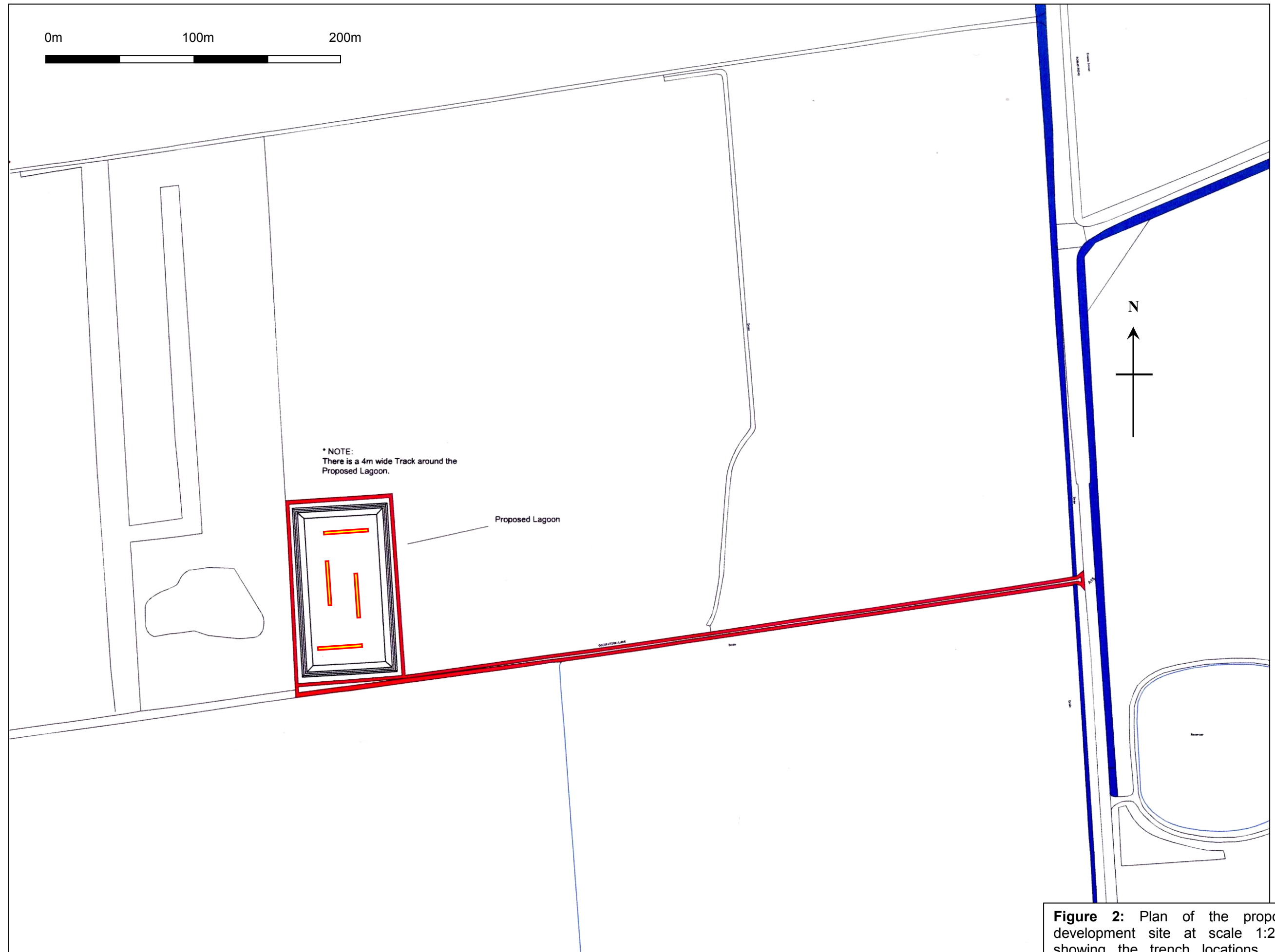
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Ordnance Survey, 2012, *Ancholme Valley, Barton-upon-Humber, Brigg, Scunthorpe & Kirton in Lindsey: 1:25 000 scale Explorer series sheet 281*. The Ordnance Survey, Southampton.



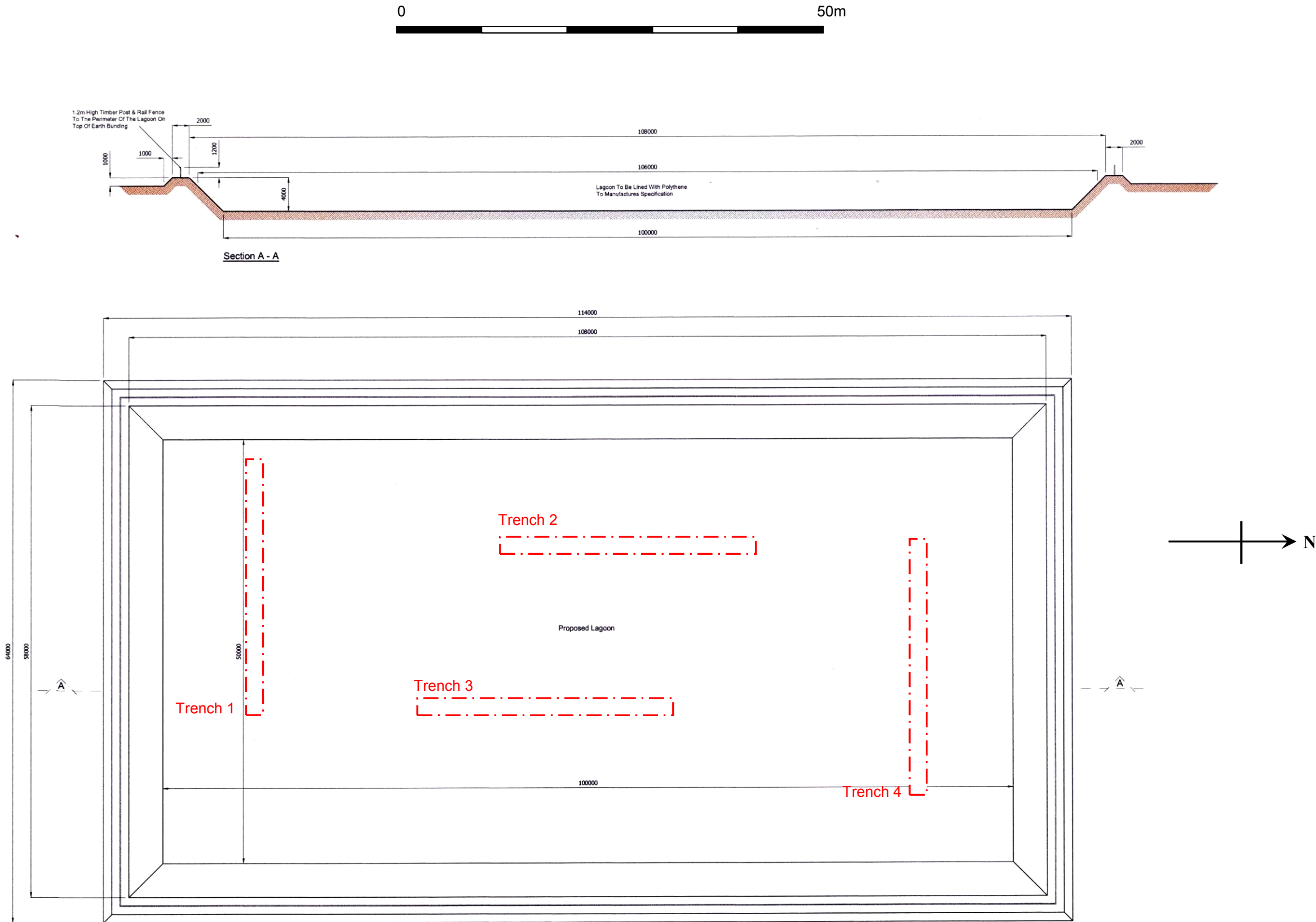


Figure 3: Plan and section drawings of the proposed lagoon at scale 1:500, with the trench locations. Drawings supplied by client.

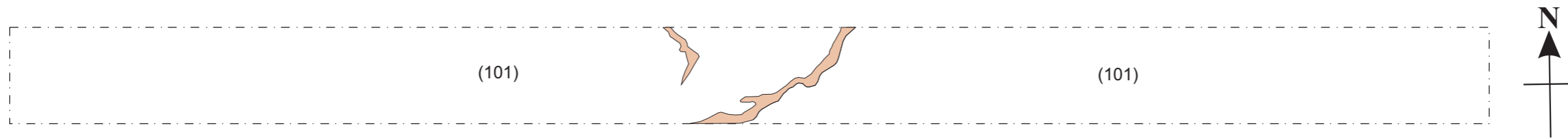


Fig. 4: Plan of Trench 1



Fig. 5: Plan of Trench 2



 Natural orange sandy silt, drift material

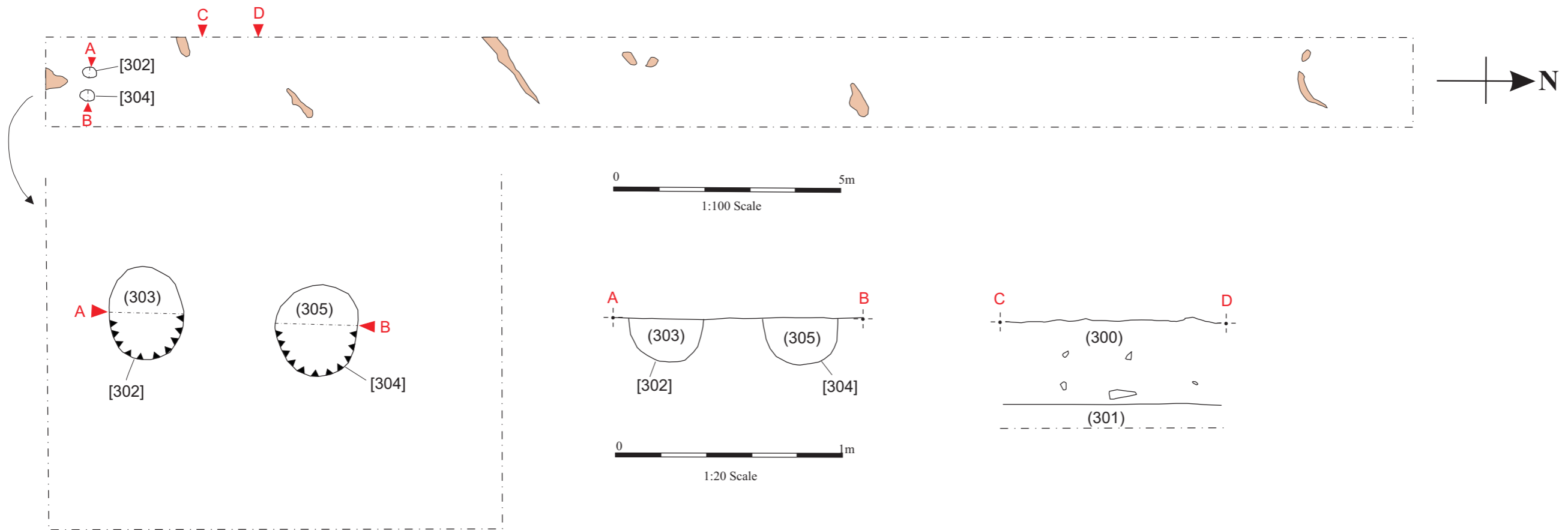


Fig. 6: Trench 3 Plan and Sections



Fig. 7: Plan of Trench 4



Appendix 2: Context Summary

Trench 1

| Context | Type | Description | Finds/dating |
|---------|-------|---|--------------|
| 100 | Layer | Topsoil. Mid reddish brown stiff clayey silt with frequent small limestone inclusions. Thickness 0.42m. | Modern |
| 101 | Layer | Natural. Powdery pinkish white silt, drift material above brash. Contains occasional lens of orange sandy silt drift. Thickness >0.12m. | |

Trench 2

| Context | Type | Description | Finds/Dating |
|---------|-------|---|--------------|
| 200 | Layer | Topsoil. Mid reddish brown stiff clayey silt with frequent small limestone inclusions. Thickness 0.40m. | Modern |
| 201 | Layer | Natural. Powdery pinkish white silt, drift material above brash. Contains veins of orange sandy silt drift. Thickness >0.03m. | |

Trench 3

| Context | Type | Description | Finds/Dating |
|---------|-------|---|--------------|
| 300 | Layer | Topsoil. Mid reddish brown stiff clayey silt with frequent small limestone inclusions. Thickness 0.36m. | Modern |
| 301 | Layer | Natural. Powdery pinkish white silt, drift material above brash. Contains veins of orange sandy silt drift. Thickness >0.10m. | |
| 302 | Cut | Possible post hole or solution feature. Oval with steep sides and rounded base. Length 0.40m, width 0.32m, depth 0.20m. | |
| 303 | Fill | Fill of [302]. Mid reddish brown stiff silty clay. | |
| 304 | Cut | Possible post hole or solution feature. Oval with steep sides and rounded base. Length 0.40m, width 0.34m, depth 0.20m. | |
| 305 | Fill | Fill of [304]. Mid reddish brown stiff silty clay. | |

Trench 4

| Context | Type | Description | Finds/Dating |
|---------|-------|---|--------------|
| 400 | Layer | Topsoil. Mid reddish brown stiff clayey silt with frequent small limestone inclusions. Thickness 0.42m. | Modern |
| 401 | Layer | Natural. Same as (101), (201) and (301) but more frequent brashy outcroppings of limestone present. Thickness >0.06m. | |
| 402 | Layer | Natural. Spread of denser limestone brash set into dirty soil. Limestone becomes dense and solid in places. Perhaps a raised, exposed area of limestone under (401). Width 13m. | |

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Proposed Digestate Lagoon, Hemswell Cliff, Lincs - Pre-Construct Archaeological Services Ltd

OASIS ID - preconst3-216357

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|------------------------|---------|--------------------|--|-------------|
| View 1 | 1 | Richard Mandeville | richard@pre-construct.co.uk | 1 July 2015 |
| View 2 | 2 | Alison Lane | alison@pre-construct.co.uk | 8 July 2015 |

Completed sections in current version

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|---------|----------|----------|---------|--------------|
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| Details | Location | Creators | Archive | Publications |
|---------|----------|----------|---------|--------------|
| No | No | No | No | 0/1 |

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