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ARCHAEOLOGICAL MONITORING & RECORDING
AT THE LOUTH POTATO COMPANY,
LIVESEY ROAD, LUDBOROUGH,
LINCOLNSHIRE.

National Grid Reference: TF 2956 9517
Site Code: LRLU14
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PREPARED FOR MR. GAVIN FARRAND OF G. F. DESIGN SERVICES ON BEHALF OF HIS
CLIENT - MR. ANDREW WRISDALE OF THE LOUTH POTATO COMPANY

By

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Summary

The archaeological monitoring and recording of the groundworks pertaining to the construction of a new potato store and office extension at the Louth Potato Company, Livesey Road, Ludborough, Lincolnshire, was carried out by Neville Hall MIFA on the 10th and the 11th and on the 23rd and the 24th of September 2014.

The results of this archaeological monitoring were consistent throughout the area of the new build and to the south-east of it. All of the monitored excavations in this area identified a simple deposit sequence which consisted of a topsoil/ploughsoil horizon which overlay a natural subsoil horizon. This deposit sequence was recorded within six Representative Sections. Apart from a low density of undiagnostic brick and tile fragments and very occasional sherds of modern 20th century pottery, which were not retained there were no finds. This same deposit sequence was repeated in the section of service trench which was monitored from the rear boundary fence to the existing site office. This same sequence was recorded within a further Representative Section.

The monitored service trench within the Depot yard revealed a further deposit sequence which consisted of the tarmac yard surface and associated hardcore and a modern made ground deposit which came down directly onto the natural subsoil horizon. This deposit sequence was recorded within a further three Representative Sections. The construction of the Depot and yard had already removed the topsoil/ploughsoil horizon here (which had been recorded elsewhere on this site).

The remaining section of monitored service trench extended from the rear boundary fence to the area of the new build. The identified deposit sequence here comprised a modern made ground deposit overlying the buried topsoil/ploughsoil horizon and the underlying natural subsoil horizon. This deposit sequence was recorded within a further Representative Section.

No archaeological activity was identified on this site and there were no finds. The results of this archaeological monitoring confirmed the conclusions of the prior archaeological desk based assessment study, which had identified low archaeological potential for medieval settlement activity and finds to be made on this site. This conclusion was based on the evidence of the site walkover survey and from local oral evidence from the landowner that the medieval earthworks formerly located in this area had long been ploughed out.

No archaeological activity or finds which could be associated with the medieval settlement of Ludborough were found on this site.

In the light of these findings and following consultations between the author and Ms. Jan Allen of the Lincolnshire County Council Historic Team, it was agreed that the archaeological monitoring of the groundworks pertaining to the proposed new office extension would not be required.

1. Introduction

- 1.1 Neville Hall MIFA was commissioned by Mr. Gavin Farrand of G. F. Design Services on behalf of his client – Mr. Andrew Wrisdale of The Louth Potato Company - to undertake the archaeological monitoring of the groundworks pertaining to the construction of a new potato store and office extension at the Louth Potato Company, Livesey Road, Ludborough, Lincolnshire, centred at National Grid Reference TF 2956 9517. The archaeological monitoring was carried out at the development site on the 10th and the 11th and on the 23rd and the 24th of September 2014.
- 1.2 The work was carried out according to the requirements of various archaeological conditions, which were attached to the granting of planning consent for this development by East Lindsey District Council, the Local Planning Authority (LPA), and acting on the advice of Ms. Jan Allen of the Lincolnshire County Council Historic Environment Team, in her capacity as archaeological advisor on planning issues to the LPA. This is in accordance with the principles established in *NPPF: Planning for the Historic Environment: Historic Environment Planning Practice Guide* (Department of Culture, Media and Sport, 2012) and *Standard and guidance for archaeological watching briefs* (IFA, 2008).
- 1.3 Copies of the final report will be deposited with the clients, Ms. Jan Allen of the Lincolnshire County Council Historic Environment Team, (on behalf of the local planning authority), the Planning Department of East Lindsey District Council, the Lincolnshire Heritage Environment Record (HER) and The Collection, Lincoln, along with an ordered project archive for long term storage and curation.

2. Site Location and Description

- 2.1 The development site is situated on the southern outskirts of the village of Ludborough and off the eastern frontage of the Livesey Road, the modern A18 trunk road. The development site was part of an open field and at the rear of working buildings of the Louth Potato Company. The development site is located on a north-east facing slope, part of the lower dip slopes of the Lincolnshire Wolds, at National Grid Reference TF 2956 9517, and at a height of approximately 37mAOD. The settlement of Ludborough itself is located approximately 8km to the north of the town of Louth, within the modern civil parish of the same name, administrative district of East Lindsey, county of Lincolnshire [Figures 1 and 2].
- 2.2 The assessment site is located on slowly permeable seasonally waterlogged reddish fine loamy and fine clayey soils of the Salop Series. These in turn overlie reddish glacial tills, which in turn overlie a solid geology of chalk of the Upper Cretaceous [BGS, 1999; Soil Survey, 1983].

3. Planning Background

- 3.1 An application for planning permission for the proposed construction of a new potato store and office extension at the Louth Potato Company, Livesey Road, Ludborough, Lincolnshire (Planning Reference: N/107/02432/13) has been submitted to and granted consent by East Lindsey District Council, the Local Planning Authority (LPA) [Figure 2]. However, as the proposed development is situated within a perceived area of high archaeological potential, various archaeological conditions (Nos. 2-4) were attached to this planning consent.

- 3.2 Following the receipt of a Planning Brief from Ms. Jan Allen of the Lincolnshire County Council Historic Environment Team, it was established that the requirement for the archaeological programme of works on this site would comprise the archaeological monitoring and recording of the groundworks during the construction stage of development here.
- 3.3 A specification or a written scheme of works for archaeological monitoring and recording was subsequently submitted to and approved by Ms. Jan Allen of the Lincolnshire County Council Historic Environment Team (on behalf of the LPA) prior to the commencement of the on-site works as required by Condition No. 2 of the planning consent.

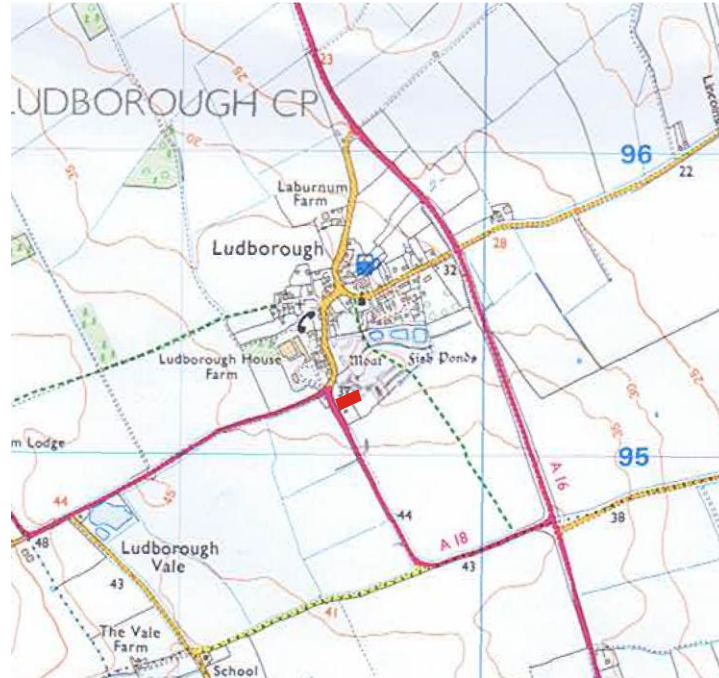


Figure 1: Site location at a scale of 1:25,000 (O.S. copyright licence number 100048723)

- 3.4 Following this agreement, the required notification period of fourteen days of the start of the groundworks programme was given to Ms. Jan Allen of the Lincolnshire County Council Historic Environment Team (on behalf of the LPA) as required by Condition No. 3 of this planning consent.
- 3.5 This report documents the results of this programme of archaeological site monitoring and recording and will be submitted to Ms. Jan Allen of the Lincolnshire County Council Historic Environment Team and to the Local Planning Authority as required by Condition No. 4 of this planning consent.

4. Aims and Objectives of the Archaeological Monitoring

- 4.1 The aims of the project were the **continual** archaeological monitoring and recording of all site groundworks during the construction stage of development, which were to comprise the excavation of the foundations and services for the new potato store and office extension.
- 4.2 The objectives of the project were:

To establish the presence/absence of archaeological remains within the area of the development site.

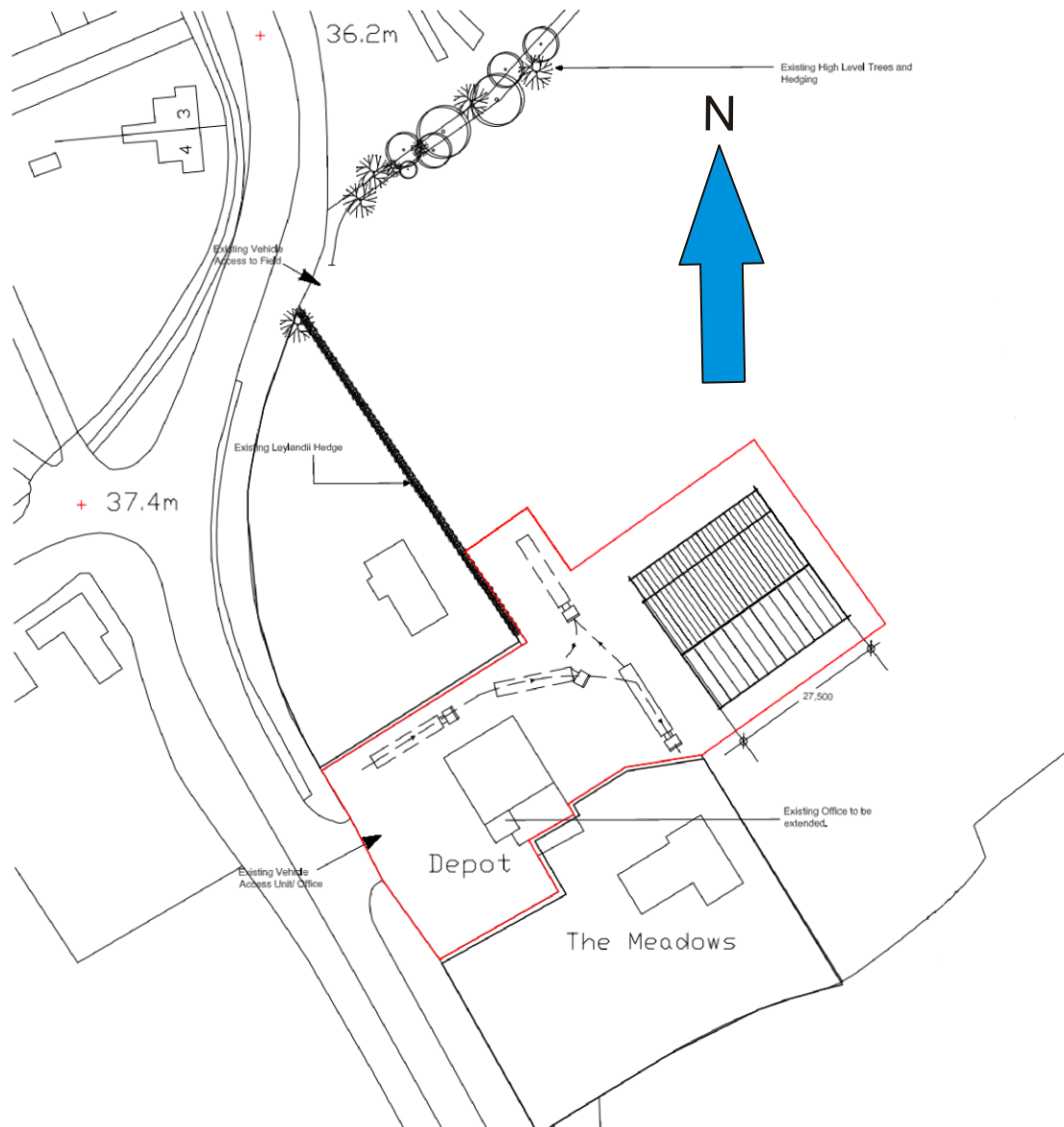


Figure 2: Plan showing the site location and the proposed layout of the development site at an original scale of 1:250 at A2, (extract from Architects plan)

To determine the extent, condition, nature, character, quality and date of any archaeological remains encountered.

To allow the preservation by record of archaeological deposits.

- 4.3 The prior archaeological desk based study had identified a low potential for medieval settlement activity and finds to be made on this site. This was based on the evidence of the site walkover survey and from local oral evidence from the landowner that the medieval earthworks formerly located in this area had long been ploughed out. The potential impact of development on this settlement activity had also been considerably

lowered as the result of the shifting of the location of the new potato store building in particular to the south-east. However, although it was considered that there may be low potential here, the possibility that such archaeological settlement activity and finds may be made on this site was not ruled out by this study. The specific objectives of the archaeological monitoring and recording were therefore to record any archaeological features, structures, deposits or finds are associated with the medieval settlement of Ludborough.

5. Archaeological and Historical Background

- 5.1 This development site has already been the subject of a prior and detailed archaeological desk based assessment compiled by the author in 2013 [Hall, 2013].
- 5.2 This archaeological desk based assessment identified the cropmark of a possible prehistoric or Roman enclosure well to the south-east of the assessment site. So this study considered that the potential for archaeological activity and finds from the prehistoric and Roman periods to be made on this site was **low** [*ibid*].
- 5.3 It is clear that the settlement of Ludborough has late Anglo-Saxon origins from place name evidence, though no direct evidence for this settlement has been found. So the study considered that the potential for such archaeological activity and finds to be found on this site was **low** [*ibid*].
- 5.4 The proposed development site is situated to the south of a scheduled medieval moated manorial site with associated fishponds to the rear. Aerial photographs held at the Lincolnshire Historic Environment Record show the earthworks of a possible medieval house platform to the south of this moated site. The study considered that this was evidence of shrinkage of the medieval settlement. However, during the course of the site walkover survey, no evidence was found for these earthworks on the ground and according to the local landowner, these had been ploughed out long ago. Similarly no contemporary finds were made either from the area of the former earthworks or during the walkover of the remainder of the field in which the development site is situated. Based on this evidence, the study concluded that the potential for such medieval activity and finds to be made on this site was also **low** [*ibid*].
- 5.5 The study did not identify any archaeological remains or finds from the post-medieval period in the area of the development site. Consequently, the potential for similar such activity and finds to be found on this site was also considered to be **low** [*ibid*].
- 5.6 This study also considered that the potential impact of development on this **low** archaeological potential was similarly **low** particularly given the lesser potential degree of impact of for example the foundation design of stanchion bases for the new agricultural building [*ibid*].
- 5.7 The new agricultural building was originally to have been positioned further to the north and in very close proximity to the scheduled moated site complex and probably within the area of the former medieval house platform earthwork, where the degree of potential impact of development would have been much higher on any archaeological potential. This proposal would also have had a negative and adverse impact on the setting of the scheduled moated complex. However, following consultations with English Heritage and the local planning authority archaeologist, the subsequent and resultant shifting of the position of the new agricultural building to the south-east, removed to a large degree any potential impact of development on any potential medieval settlement activity; though while still having a lesser degree of impact on the setting of the scheduled moated complex, this was considered to be much less than it would otherwise have been [*ibid*].

- 5.8 Although the shifting of the new potato store to the south-east would have removed to some extent the potential impact of this development on any medieval settlement activity, the possibility that such settlement activity and finds should be made on this development site was not precluded [*ibid*].

6. Methodology

- 6.1 The archaeological monitoring at the development site was undertaken by Neville Hall MIFA on the 10th and the 11th and on the 23rd and the 24th of September 2014. This comprised the continual archaeological monitoring and recording of an initial phase of mechanical ground reduction of an area, which was slightly larger than the new build footprint of the new potato store. This was followed by the mechanical excavation under archaeological supervision of twenty-seven stanchion bases to accommodate the steel frame construction of the new store building and several service trenches around three sides of the new build area from an existing dyked field boundary to the south-east. These excavations were carried out by a 14-ton 360° mechanical excavator that was fitted with 1.0m and 0.60m wide toothless buckets. The remaining monitored groundworks consisted of the mechanical excavation of service trenches which extended from the Livesey Road frontage to the new build area. These excavations were carried out by a 3-ton 360° mechanical excavator that was fitted with a 0.60m wide toothless bucket.
- 6.2 Where necessary, surfaces were hand cleaned for examination and recording and the deposits observed were recorded on standard *pro-forma* context recording sheets. A plan at a scale of 1:200 was compiled on site of the monitored area of ground reduction and of the excavated stanchion bases within the area of the new build along with the associated service trenches here. This is reproduced in this report at this same scale as **Figure 4**. An architect's plan at a scale of 1:1,000 comprises **Figure 3** of this study and shows the location of the monitored service trenches in the Deport yard to the rear boundary fence and towards the area of the new build.
- 6.3 A total of eleven representative sections [designated as **Representative Sections 1-11**] were also compiled on the site of the various identified deposit sequences. These are similarly reproduced at this same scale on **Figure 5**. **Figures 3 and 4** show their relative locations. A complimentary digital colour photographic record was also maintained, which is reproduced as **Plates 1-77, Appendix 1**. A list of the contexts recorded is reproduced in **Appendix 2**.
- 6.4 All work was carried out according to the approved Specification and to the Institute of Field Archaeologists (IFA) standards and guidance for archaeological watching briefs.

7. Results [Figures 3-5; Appendix 1, Plates 1-77]

7.1 The Initial Ground Reduction

- 7.1.1 The first phase of the monitored groundworks programme consisted of the mechanical excavation of an area that was slightly larger than the new build footprint for the new potato store. These mechanical excavations were undertaken by a 14-ton 360° mechanical excavator that was fitted with a 2.0m wide toothless bucket. The reduced area measured 49.40m in length from north east-south west and 36.70m in width from north west-south east [**Plates 1-15**].
- 7.1.2 The purpose of this ground reduction was to create a level platform for the construction of the new potato store. As there was a rise in ground levels to the south-east, the ground

reduction correspondingly varied in depth from 0.10m-0.15m below ground levels to the north-west and gradually increased in depth to a maximum extent at the south-eastern area of the new build where it attained depths of 0.60m below ground levels.

- 7.1.3 This mechanical ground reduction removed a topsoil/ploughsoil horizon (**001**). Where the ground reduction reached shallower depths to the north-west and in the central portions of the reduced area, this reduction was confined to within the deposit (**001**). Where this ground reduction achieved deeper levels as within the south-eastern parts of the reduced area, the ground reduction extended into the upper levels of an underlying natural and undisturbed subsoil horizon (**002**). All newly exposed surfaces were walked over and were rapidly scanned for any surface finds. Apart from occasional fragments of undiagnostic brick and tile and sherds of modern pottery, which were observed and noted, there were no finds.

- 7.1.4 No archaeological activity was observed throughout this monitored strip.

7.2 The Excavation of the Stanchion Bases

- 7.2.1 Following the completion of this phase of ground reduction, the whole area of the new build was then covered over by a layer of hardcore, which in turn rested on a bedding of terram. The next phase of the groundworks programme consisted of the mechanical excavation under archaeological supervision of twenty-seven stanchion bases of various dimensions and depths to facilitate the erection of a steel framework for the new potato store [**Plates 16-19, 22, 43 and 48**].

- 7.2.2 The stanchion bases are designated from **SB1-SB27**. The excavation of the stanchion bases were recorded according to the order in which they were excavated and not necessarily in numerical order.

- 7.2.3 The first stanchion bases to be excavated comprised **SB6-SB11** along the south-eastern edge of the new build area. **SB6** was excavated at the eastern corner of the area of the new build to a length of 1.30m, to a width of 1.20m and to depths of 1.0m below the level of the redeposited hardcore [**Plate 20**]. The deposit sequence in this excavation consisted of a thin band of topsoil/ploughsoil (**001**) underlying the hardcore and overlying the natural horizon (**002**), which extended to the base of this excavation.

- 7.2.4 **SB7** was excavated to the south-west of **SB6** and along the south-eastern edge of the new build area. **SB7** was excavated to a length and a width of 1.20m and to depths of 1.0m below the level of the redeposited hardcore [**Plate 21**]. Below the hardcore and terram, was a thin band of the deposit (**001**) overlying the natural horizon (**002**), which extended to the base of this excavation. **SB8** was excavated to the south-west of **SB7** and along the south-eastern edge of the new build area. **SB8** was excavated to a length of 1.30m, to a width of 1.20m and to depths of 0.95m below the level of the redeposited hardcore. Below the hardcore, the same deposit sequence noted earlier was also recorded here within **Representative Section 1** [**Plate 23**].

- 7.2.5 **SB9** was excavated to the south-west of **SB8** and along the south-eastern edge of the new build area. **SB9** was excavated to a length of 1.30m, to a width of 1.20m and to depths of 0.95m below the level of the redeposited hardcore [**Plate 24**]. Below the hardcore, the same deposit sequence noted earlier was also recorded here. **SB10** was excavated to the south-west of **SB9** and along the south-eastern edge of the new build area. **SB10** was excavated to a length of 1.40m, to a width of 1.30m and to depths of 0.85m below the level of the redeposited hardcore [**Plate 25**]. The hardcore layer was found to come down directly onto the underlying natural horizon (**002**), which extended to the base of this excavation.

- 7.2.6 **SB11** was positioned at the southern corner of the new build area. **SB11** was excavated to the south-west of **SB10** to a length of 1.40m, to a width of 1.30m and to depths of 0.95m below the level of the redeposited hardcore [**Plate 26**]. The hardcore layer was found here to come down directly onto the underlying natural horizon (**002**), which extended to the base of this excavation.
- 7.2.7 **SB22** was excavated to the north-west of **SB11** and along the south-western edge of the new build area. **SB22** was excavated to a length of 1.40m, to a width of 0.90m and to depths of 0.95m below the level of the redeposited hardcore [**Plate 27**]. The hardcore layer was found to come down directly onto the underlying natural horizon (**002**), which extended to the base of this excavation. **SB25** and **SB26** were positioned to the north-west of **SB22** and along the south-western edge of the new build area. Both stanchion bases were excavated as a single and combined base to a length of 2.20m, to a width of 0.90m and to depths of 1.0m below the level of the redeposited hardcore [**Plate 28**]. The hardcore layer was found to come down directly onto the underlying natural horizon (**002**), which extended to the base of this excavation.
- 7.2.8 **SB27** was located to the north-west of **SB25/26** and along the south-western edge of the new build area. **SB27** was excavated to a length of 1.40m, to a width of 0.90m and to depths of 1.0m below the level of the redeposited hardcore [**Plate 29**]. The hardcore layer was found to come down directly onto the underlying natural horizon (**002**), which extended to the base of this excavation. **SB24** was situated to the north-west of **SB27** and along the south-western edge of the new build area. **SB24** was excavated to a length and to a width of 1.0m and to depths of 0.95m below the level of the redeposited hardcore. The deposit sequence in this excavation consisted of a thin band of topsoil/ploughsoil (**001**) underlying the hardcore and overlying the natural horizon (**002**), which extended to the base of this excavation. This deposit sequence was recorded within **Representative Section 4** [**Plate 30**].
- 7.2.9 **SB23** was positioned to the north-west of **SB24** and along the south-western edge of the new build area. **SB23** was excavated to a length of 1.10m, to a width of 1.0m and to depths of 0.95m below the level of the redeposited hardcore [**Plate 31**]. The deposit sequence in this excavation consisted of a thin band of topsoil/ploughsoil (**001**) underlying the hardcore and overlying the natural horizon (**002**), which extended to the base of this excavation. **SB17** was situated at the western corner of the new build area and to the north-west of **SB23**. **SB17** was excavated to a length of 1.80m, to a width of 1.40m and to depths of 0.95m below the level of the redeposited hardcore [**Plate 32**]. The deposit sequence in this excavation consisted of a thin band of topsoil/ploughsoil (**001**) underlying the hardcore and overlying the natural horizon (**002**), which extended to the base of this excavation.
- 7.2.10 **SB16** was situated to the north-east of **SB17** and along the north-western edge of the new build area. **SB16** was excavated to a length of 1.40m, to a width of 1.30m and to depths of 1.0m below the level of the redeposited hardcore [**Plate 33**]. The deposit sequence in this excavation consisted of a thin band of topsoil/ploughsoil (**001**) underlying the hardcore and overlying the natural horizon (**002**), which extended to the base of this excavation. **SB15** was located to the north-east of **SB16** and along the north-western edge of the new build area. **SB16** was excavated to a length and a width of 1.30m and to a depth of 0.95m below the level of the redeposited hardcore. The deposit sequence in this excavation consisted of a thin band of topsoil/ploughsoil (**001**) underlying the hardcore and overlying the natural horizon (**002**), which extended to the base of this excavation. This deposit sequence was recorded within **Representative Section 3** [**Plate 34**].
- 7.2.11 **SB14** was located to the north-east of **SB15** and along the north-western edge of the new build area. **SB14** was excavated to a length of 1.40m, to a width of 1.30m and to depths

of 0.95m below the level of the redeposited hardcore [Plate 35]. The deposit sequence in this excavation consisted of the topsoil/ploughsoil (001) underlying the hardcore, which extended to the base of this excavation. **SB13** was located to the north-east of **SB14** and along the north-western edge of the new build area. **SB13** was excavated to a length and to a width of 1.40m, and to depths of 0.85m below the level of the redeposited hardcore [Plate 36]. The deposit sequence in this excavation consisted of a thin band of topsoil/ploughsoil (001) underlying the hardcore and overlying the natural horizon (002), which extended to the base of this excavation.

- 7.2.12 **SB12** was situated at the northern corner of the new build area and to the north-east of **SB13**. **SB12** was excavated to a length of 1.40m, to a width of 1.30m and to depths of 0.90m below the level of the redeposited hardcore [Plate 37]. The deposit sequence in this excavation consisted of a thin band of topsoil/ploughsoil (001) underlying the hardcore and overlying the natural horizon (002), which extended to the base of this excavation.
- 7.2.13 **SB1** was situated to the south-east of **SB12** and along the north-eastern side of the new build area. **SB1** was excavated to a length of 1.0m, to a width of 0.90m and to depths of 0.95m below the level of the redeposited hardcore [Plate 38]. The deposit sequence in this excavation consisted of a band of topsoil/ploughsoil (001) underlying the hardcore and overlying the natural horizon (002), which extended to the base of this excavation. **SB2** was positioned to the south-east of **SB1** and along the north-eastern side of the new build area. **SB2** was excavated to a length of 1.0m, to a width of 0.90m and to depths of 0.90m below the level of the redeposited hardcore. The deposit sequence in this excavation consisted of a band of topsoil/ploughsoil (001) underlying the hardcore and overlying the natural horizon (002), which extended to the base of this excavation. This deposit sequence was recorded within **Representative Section 2** [Plate 39].
- 7.2.14 **SB3** was located to the south-east of **SB2** and along the north-eastern side of the new build area. **SB3** was excavated to a length and to a width of 0.90m and to depths of 0.95m below the level of the redeposited hardcore [Plate 40]. The deposit sequence in this excavation consisted of a thin band of topsoil/ploughsoil (001) underlying the hardcore and overlying the natural horizon (002), which extended to the base of this excavation. **SB4** was situated to the south-east of **SB3** and along the north-eastern side of the new build area. **SB4** was excavated to a length and to a width of 0.90m and to depths of 0.95m below the level of the redeposited hardcore [Plate 41]. The deposit sequence in this excavation consisted of a thin band of topsoil/ploughsoil (001) underlying the hardcore and overlying the natural horizon (002), which extended to the base of this excavation.
- 7.2.15 **SB5** was excavated to the south-east of **SB4** and along the north-eastern side of the new build area. **SB5** was excavated to a length of 1.0m, to a width of 0.90m and to depths of 0.95m below the level of the redeposited hardcore [Plate 42]. The deposit sequence in this excavation consisted of a band of topsoil/ploughsoil (001) underlying the hardcore and overlying the natural horizon (002), which extended to the base of this excavation.
- 7.2.16 This was followed by the mechanical excavation of a series of internal stanchion bases. The first of these comprised **SB18**, which was situated to the south-west of **SB4** and to the north-west of **SB7**. **SB18** was excavated to a length of 1.40m, to a width of 0.90m and to depths of 0.90m below the level of the redeposited hardcore [Plate 44]. The deposit sequence in this excavation consisted of hardcore overlying the natural horizon (002), which extended to the base of this excavation. **SB19** was situated to the south-west of **SB18** and was excavated to a length of 1.60m, to a width of 0.90m and to depths of 1.0m below the level of the redeposited hardcore [Plate 45]. The deposit sequence in this excavation consisted of hardcore overlying the natural horizon (002), which extended to the base of this excavation.

- 7.2.17 **SB20** was located to the south-west of **SB19** and was excavated to a length of 1.40m, to a width of 0.80m and to depths of 0.95m below the level of the redeposited hardcore [**Plate 46**]. The deposit sequence in this excavation consisted of hardcore overlying the natural horizon (**002**), which extended to the base of this excavation. **SB21** was situated to the south-west of **SB20** and to the north-east of **SB25/26**. **SB21** was excavated to a length of 1.40m to a width of 0.80m and to depths of 1.0m below the level of the redeposited hardcore [**Plate 47**]. The deposit sequence in this excavation consisted of hardcore overlying the natural horizon (**002**), which extended to the base of this excavation.
- 7.2.18 No archaeological activity or finds were identified throughout the monitoring of the excavation of these stanchion bases.

7.3 The Service Trenches

7.3.1 The Service Trench in the Depot Yard to the Rear Boundary Fence

- 7.3.1.1 The first section of this electricity cable trench to be excavated extended from the rear boundary fence and into the Depot yard. This first section was excavated to a length of 20.0m, to a width of 0.40m and to depths of between 0.80m-1.0m below ground levels. The depth of this trench increased to the north-east and towards the rear boundary fence [**Plates 49-50**].
- 7.3.1.2 The first and most northerly section of this cable trench which extended from the rear boundary fence and past the existing depot office building went through the topsoil/ploughsoil deposit (**001**), which in turn overlay the undisturbed natural horizon (**002**). The natural horizon (**002**) extended to the base of this excavation. This deposit sequence was recorded within **Representative Section 6** [**Plate 52**].
- 7.3.1.3 To the south, this section of cable trench then extended into the Depot yard and just past the existing site office. Here there was a change to the deposit sequence. The removal of the tarmac yard surface revealed a layer of hardcore which in turn overlay a modern made ground deposit (**003**). This deposit in turn overlay the natural horizon (**002**), which extended to the base of this excavation. This changed deposit sequence was recorded within **Representative Section 7** [**Plate 51**]. The natural horizon (**002**) in this section of the cable trench had been stained darker by leaching from the overlying tarmac yard surface.
- 7.3.1.4 The second and final section of this cable trench extended from just past the existing site office through to the southern site boundary by the Livesey Road frontage whence it connected with existing services. This second and final section of cable trench was excavated to a length of 15.0m, to a width of 0.40m and to depths of 0.70m-0.80m below ground levels. The trench shallowed out towards the southern site boundary [**Plates 53-54, 56-58 and 60**].
- 7.3.1.5 There was a slight change to the deposit sequence in this second and final section of the cable trench. The tarmac yard surface was here found to come down directly onto the modern made ground deposit (**003**). This deposit in turn directly overlay the undisturbed natural horizon (**002**), which extended to the base of this excavation. This changed deposit sequence was recorded within **Representative Sections 8 and 9** [**Plates 55 and 59**]. The natural horizon (**002**) in this section of the cable trench had been stained darker by leaching from the overlying tarmac yard surface.

7.3.2 The Service Trench from the South-Eastern Field Boundary Dyke to the New Build Area & Around Three Sides of the New Build Area

- 7.3.2.1 A second service trench was excavated from a dyke at the south-eastern field boundary north-westwards to the eastern corner of the area of the new build. This first section of this service trench was excavated to a length of 37.40m, to a width of 0.60m and to a depth of 0.90m below ground levels, which increased to a depth of 1.20m below ground levels at the eastern corner of the new build area [**Plates 61 and 63-65**].
- 7.3.2.2 The deposit sequence encountered within this trench was the same and consistent with that observed within the area of the new build. This sequence comprised the topsoil/ploughsoil horizon (**001**) overlying the undisturbed natural subsoil horizon (**002**), which extended to the base of this excavation. This deposit sequence was recorded within **Representative Section 5** [**Plate 62**].
- 7.3.2.3 A second section of this trench was excavated from the eastern corner of the new build area north-westwards to the northern corner of same and just to the north-east of the north-eastern edge of this new build area. This second section of this service trench was excavated to a length of 37.50m, to a width of 0.60m and to depths of between 1.20m at the eastern corner of the new build area to depths of 1.40m below ground levels at the northern corner of the new build area [**Plates 66-67**]. The same deposit sequence of the topsoil/ploughsoil horizon (**001**) overlying the undisturbed natural subsoil horizon (**002**) was also encountered throughout the whole monitored length of this section. The deposit (**002**) extended to the base of this excavation.
- 7.2.3.4 A third section of this trench was excavated from the northern corner of the new build area and extended south-westwards to terminate at the western corner of the new build area. This third section of trench was also excavated just beyond the north-western edge of the new building area to a length of 32.0m, to a width of 0.60m and to depths of 1.40m at the northern corner of the new build area and decreasing in depth to 0.90m below ground levels at the western corner of the new build area [**Plates 69-70**]. The same deposit sequence of the topsoil/ploughsoil horizon (**001**) overlying the undisturbed natural subsoil horizon (**002**) was also encountered throughout the whole monitored length of this section. This deposit sequence was recorded within **Representative Section 10** [**Plate 68**]. The deposit (**002**) extended to the base of this excavation.
- 7.2.3.5 A fourth and final section of this trench was excavated from the eastern corner of the new build area south-eastwards to the southern corner of same and just beyond the south-eastern edge of this new build area. This fourth and final section of this trench was excavated to a length of 32.0m, to a width of 0.60m and to depths of 1.20m at the eastern corner of the new build area and decreasing in depth to 0.90m below ground levels at the southern corner of the new build area [**Plate 71**]. The same deposit sequence of the topsoil/ploughsoil horizon (**001**) overlying the undisturbed natural subsoil horizon (**002**) was also encountered throughout the whole monitored length of this section. The deposit (**002**) extended to the base of this excavation.

7.3.3 The Service Trench from the Rear Boundary Fence to the New Build Area

- 7.3.3.1 The final service trench to be excavated was a north-easterly extension of the cable trench which was excavated to the south-west within the Depot yard. This final section of this cable trench extended from the rear boundary fence north-eastwards to the south-western edge of the new build area. This section of the cable trench was excavated to a length of 10.50m, to a width of 0.60m and to depths of 0.60m-0.70m below ground levels [**Plates 72-75 and 77**]. The deposit sequence in this section of the trench comprised a modern made ground deposit (**004**), a buried topsoil/ploughsoil horizon (**005**) and the undisturbed natural subsoil horizon (**002**). This deposit sequence was recorded within

Representative Section 11 [Plate 76]. The natural horizon (002) extended to the base of these excavations.

8. Discussion and Conclusions

- 8.1 The groundworks pertaining to this development comprising an initial phase of ground reduction within the area of the new build footprint followed by the excavation of twenty-seven stanchion bases within this new build area; the excavation of service trenches which extended from the Livesey Road frontage to the area of the new build and the excavation of further service trenches from an existing dyke to the south-east and around three sides of the new build area were undertaken under archaeological supervision and were continually monitored.
- 8.2 The results of this archaeological monitoring were consistent throughout the area of the new build and to the south-east of it. All of the monitored excavations in this area identified a simple deposit sequence which consisted of a topsoil/ploughsoil horizon which overlay a natural subsoil horizon. This deposit sequence was recorded within six Representative Sections. Apart from a low density of undiagnostic brick and tile fragments and very occasional sherds of modern 20th century pottery, which were not retained, there were no finds.
- 8.3 This same deposit sequence was repeated in the section of service trench which was monitored from the rear boundary fence to the existing site office. This same sequence was recorded within a further Representative Section.
- 8.4 The monitored service trench within the Depot yard revealed a further deposit sequence which consisted of the tarmac yard surface and associated hardcore and a modern made ground deposit which came down directly onto the natural subsoil horizon. This deposit sequence was recorded within a further three Representative Sections. The construction of the Depot and yard had already removed the topsoil/ploughsoil horizon here (which had been recorded elsewhere on this site).
- 8.5 The remaining section of monitored service trench extended from the rear boundary fence to the area of the new build. The identified deposit sequence here comprised a modern made ground deposit overlying the buried topsoil/ploughsoil horizon and the underlying natural subsoil horizon. This deposit sequence was recorded within a further Representative Section.
- 8.6 No archaeological activity was identified on this site and there were no finds. The results of this archaeological monitoring confirmed the conclusion of the prior archaeological desk based assessment study, which had identified low archaeological potential for medieval settlement activity and finds to be made on this site. This conclusion was based on the evidence of the site walkover survey and from local oral evidence from the landowner that the medieval earthworks formerly located in this area had long been ploughed out.
- 8.7 No archaeological activity or finds which could be associated with the medieval settlement of Ludborough were found on this site.
- 8.8 In the light of these findings and following consultations between the author and Ms. Jan Allen of the Lincolnshire County Council Historic Team, it was agreed that the archaeological monitoring of the groundworks pertaining to the proposed new office extension would not be required.

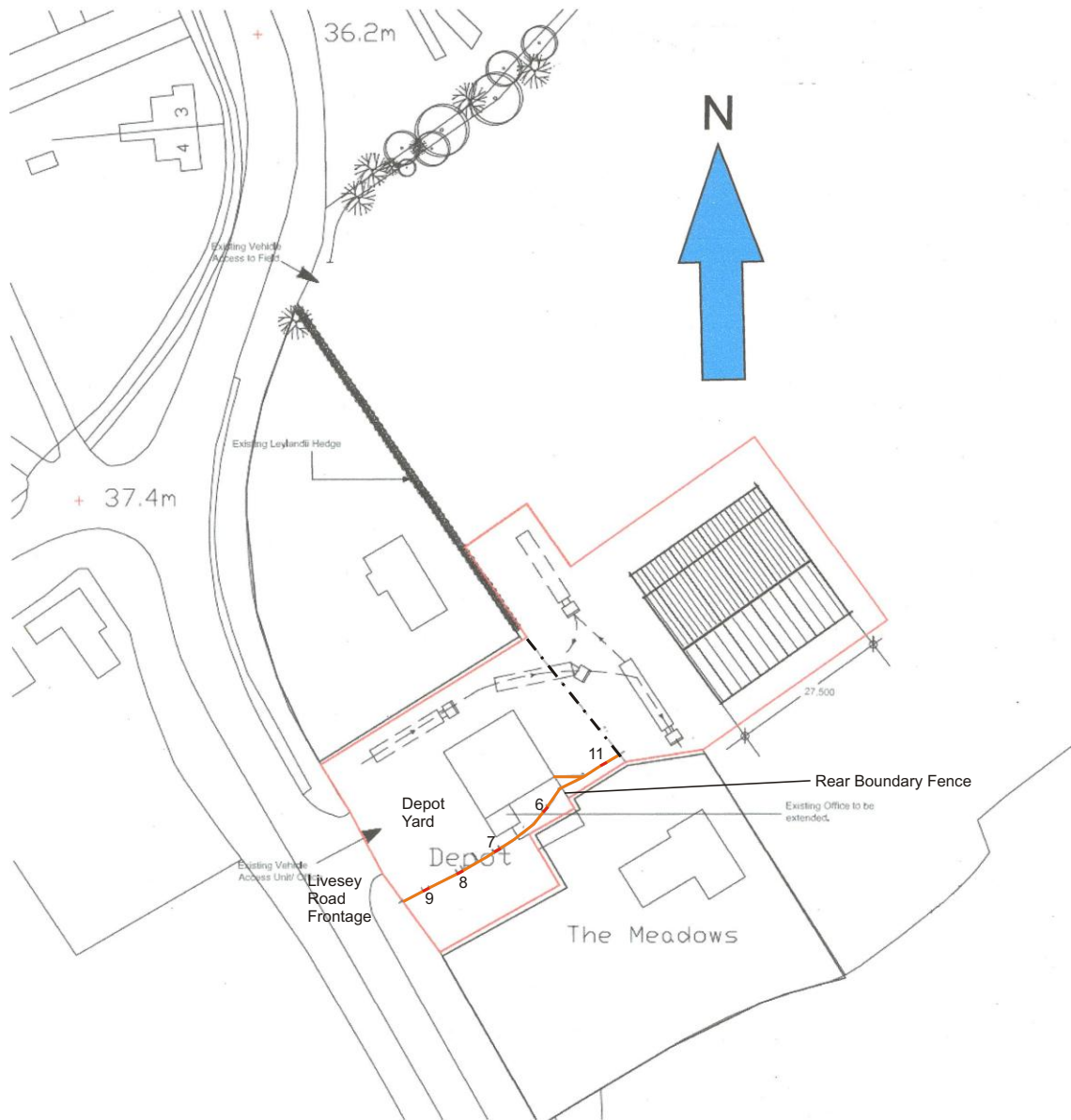


Figure 3: Plan of the Monitored Service Trenches in the Depot Yard and Towards the Area of New Build Showing the Locations of **Representative Sections 6-9 and 11** at a scale of 1:1,000 (extract from Architects plan).

9. Effectiveness of Methodology and Confidence Rating

- 9.1 The methodology chosen clearly demonstrated the nature of the identified deposit sequences and the absence of archaeological activity and finds on this site, while providing sufficient time to record the deposit sequences observed. A more detailed level of archaeological assessment and investigation clearly would not have been necessary. It is considered that the implemented methodology was sufficient to confirm and record

both the absence of archaeological activity and finds and the nature of the identified deposit sequences present within the area of the development site with a high degree of confidence.

10. Acknowledgements

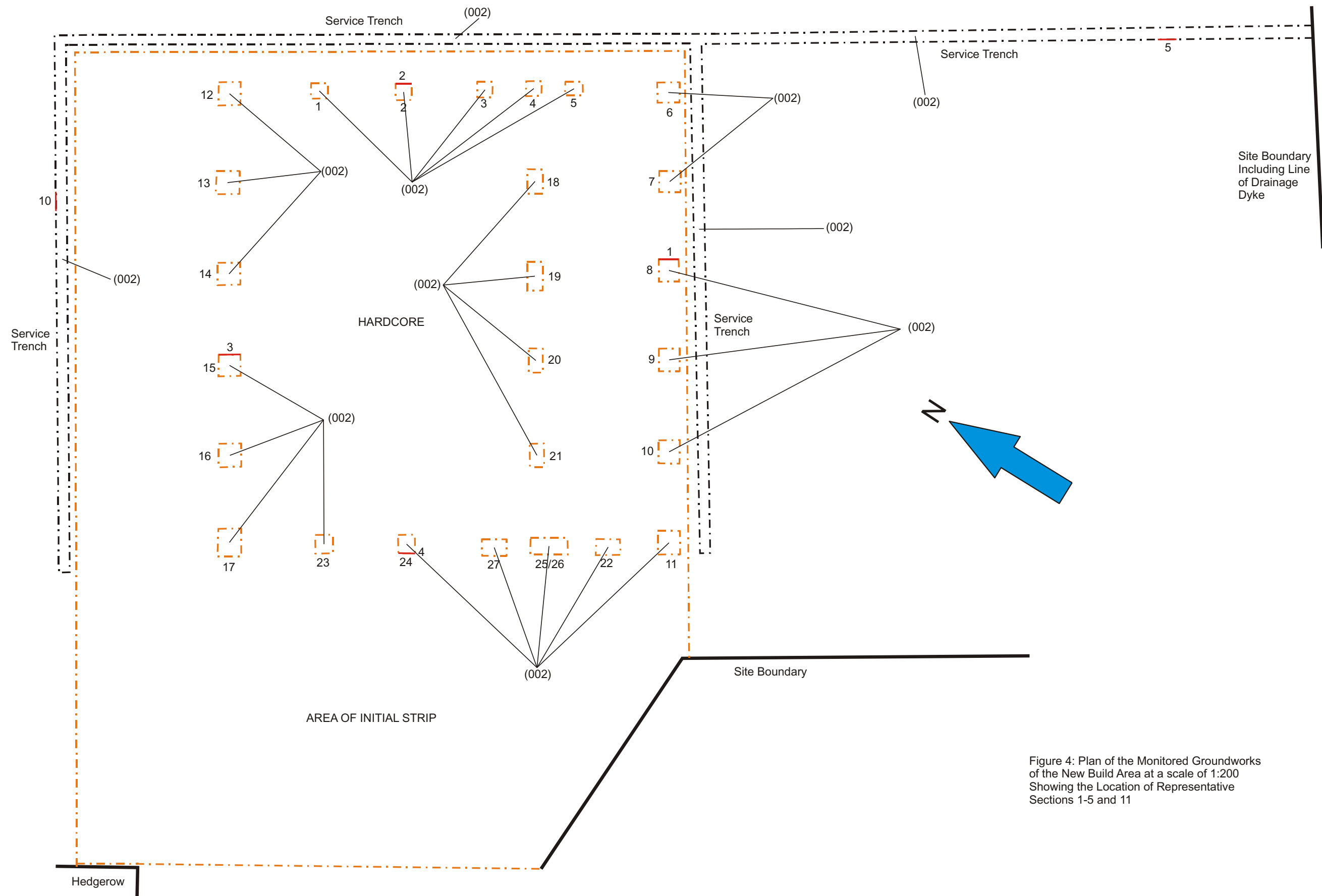
- 10.1 Thanks are gratefully extended to Mr. Gavin Farrand of G. F. Designs and his client - Mr. Andrew Wrisdale of the Louth Potato Company - for commissioning this work. Thanks are also extended to Ms Jan Allen of the Lincolnshire County Council Historic Environment Team, and to the staff of the Lincolnshire Heritage Environment Record, the Lincolnshire Archives and the Lincoln Central Library for their kind assistance.

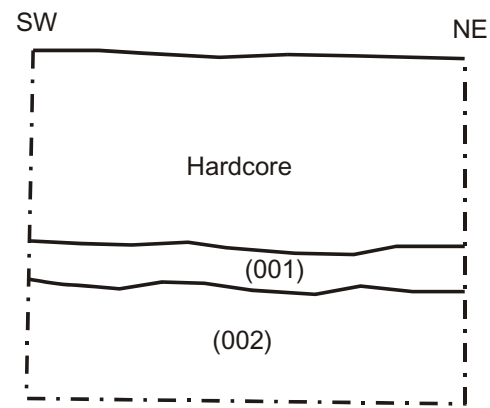
11. Bibliography

British Geological Survey, (1999), Sheet 103, *Louth, Solid & Drift Edition*, Scale 1:50,000.

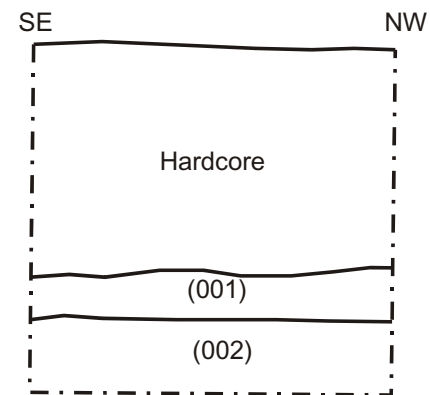
Hall, N., (2013), *A Desk Based Heritage Assessment of Land off Livesey Road, Ludborough, Lincolnshire*.

Soil Survey of England & Wales, (1983), *Soils of Eastern England*, Sheet 4.

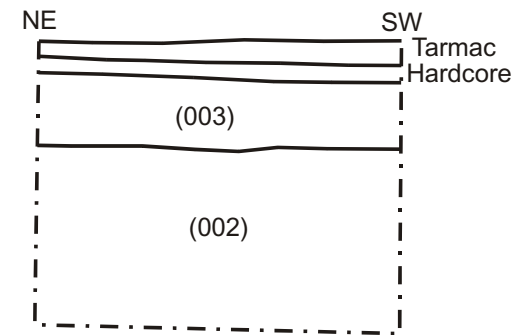




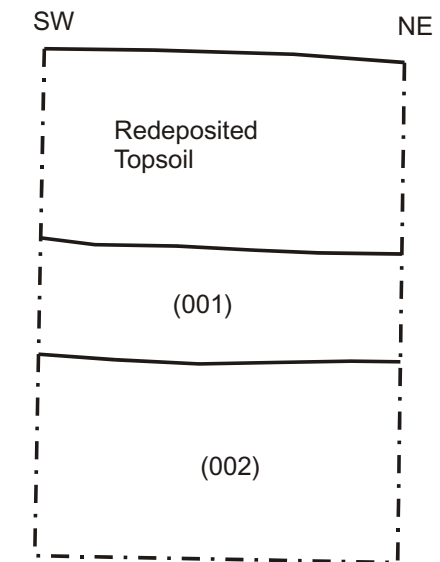
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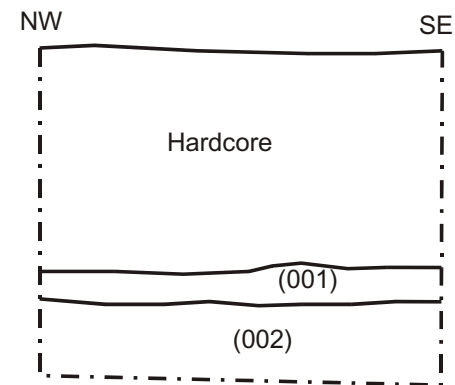
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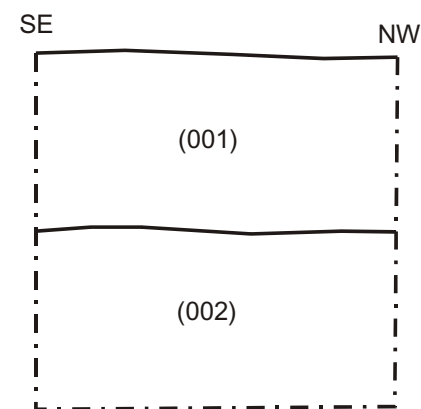
Representative Section 7, Service Trench, North West Facing Section, Scale 1:20



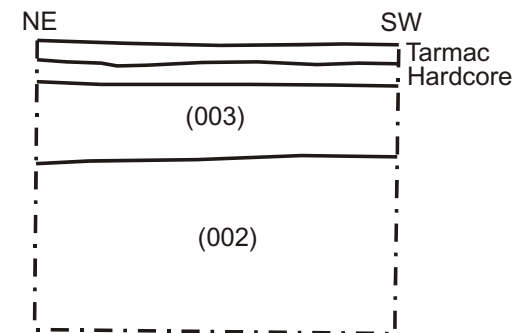
Representative Section 10, South East Facing Section, Scale 1:20



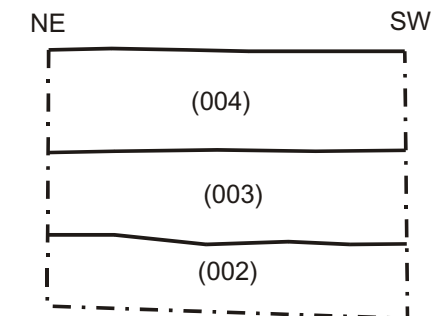
Representative Section 2, Stanchion Base 2, South West Facing Section, Scale 1:20



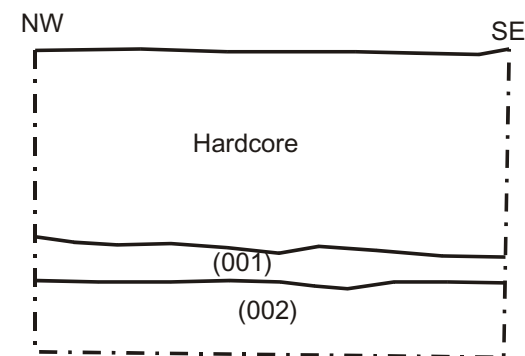
Representative Section 5, Service Trench from the Eastern Dyke, North East Facing Section, Scale 1:20



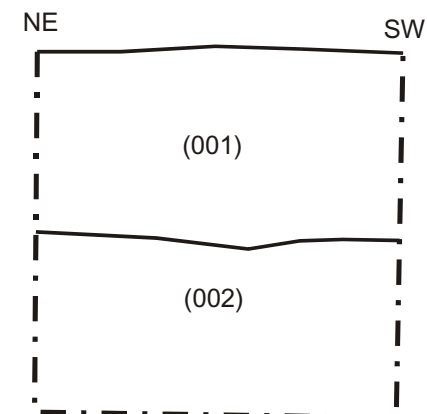
Representative Section 8, Service Trench, North West Facing Section, Scale 1:20



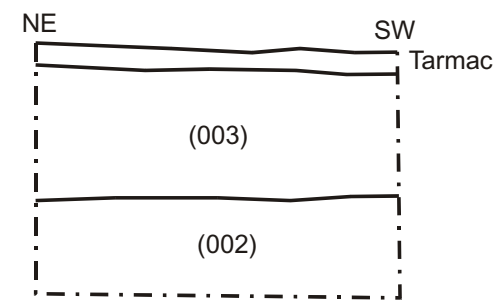
Representative Section 11, North West Facing Section, Scale 1:20



Representative Section 3, Stanchion Base 15, South West Facing Section, Scale 1:20



Representative Section 6, Service Trench, North West Facing Section, Scale 1:20



Representative Section 9, Service Trench, North West Facing Section, Scale 1:20

Figure 5: Representative Sections 1-11 at a scale of 1:20

Appendix 1: Plates

Pre-Groundworks



Plate 1: Pre-groundworks, from the south-east



Plate 2: Pre-groundworks, from the south-west



Plate 3: Pre-groundworks, from the west



Plate 4: Pre-groundworks, from the north-west

Initial Ground Reduction



Plate 5: Initial ground reduction, from the south-west



Plate 6: Initial ground reduction, from the south-west



Plate 7: Initial ground reduction, from the south-west



Plate 10: Initial ground reduction, from the south-west



Plate 8: Initial ground reduction, from the south-west



Plate 11: Initial ground reduction, from the west



Plate 9: Initial ground reduction, from the south-west



Plate 12: Initial ground reduction, from the south-west



Plate 13: Initial ground reduction, from the south-west



Plate 14: Initial ground reduction, from the south-west



Plate 15: Initial ground reduction, from the north-east

The Excavation of the Stanchion Bases



Plate 16: Excavation of the stanchion bases, from the north-west



Plate 17: Excavation of the stanchion bases, from the south-east



Plate 18: Excavation of the stanchion bases, from the south



Plate 21: Stanchion Base 7, from the south-east



Plate 19: Excavation of the stanchion bases, from the south



Plate 22: Excavation of the stanchion bases, from the south



Plate 20: Stanchion Base 6, from the south-east



Plate 23: Representative Section 1, Stanchion Base 8, from the south-east



Plate 24: Stanchion Base 9, from the south-east



Plate 26: Stanchion Base 11, from the south-east



Plate 25: Stanchion Base 10, from the south-east



Plate 27: Stanchion Base 22, from the south-west



Plate 28: Stanchion Bases 25 and 26, from the south-west



Plate 29: Stanchion Base 27, from the south-west



Plate 32: Stanchion Base 17, from the north-east



Plate 30: Representative Section 4, Stanchion Base 24, from the north-east



Plate 33: Stanchion Base 16, from the north-east



Plate 31: Stanchion Base 23, from the north-east



Plate 34: Representative Section 3, Stanchion Base 15, from the south-west



Plate 35: Stanchion Base 14, from the north-east



Plate 36: Stanchion Base 13, from the north-west



Plate 37: Stanchion Base 12, from the south-west



Plate 38: Stanchion Base 1, from the south-east



Plate 39: Representative Section 2, Stanchion Base 2, from the south-west



Plate 40: Stanchion Base 3, from the north-east



Plate 41: Stanchion Base 4, from the south-west



Plate 42: Stanchion Base 5, from the north-east



Plate 43: Excavation of the stanchion bases, from the south



Plate 44: Stanchion Base 18, from the north-east



Plate 45: Stanchion Base 19, from the north-west



Plate 46: Stanchion Base 20, from the north-west



Plate 47: Stanchion Base 21, from the north-west



Plate 48: Completed excavation of the stanchion bases, from the south

The Service Trenches

The Service Trench in the Depot Yard to the Rear Boundary Fence



Plate 49: The Service Trench, from the south-west



Plate 50: The Service Trench, from the north-east



Plate 51: Representative Section 7, from the north-west



Plate 52: Representative Section 6, from the north-west



Plate 53: The Service Trench, from the south-west



Plate 54: The Service Trench, from the north-east



Plate 55: Representative Section 8, from the north-west



Plate 56: The Service Trench, from the north-east



Plate 57: The Service Trench, from the north-east



Plate 58: The Service Trench, from the south



Plate 59: Representative Section 9, from the north-west



Plate 60: The Service Trench, from the south

The Service Trench from the South-Eastern Field Boundary Dyke to the New Build Area & Around Three Sides of the New Build Area



Plate 61: Excavation of the Service Trench from the South-Eastern Dyke, from the south-west



Plate 62: Representative Section 5, from the north-east



Plate 63: Excavation of the Service Trench from the South-Eastern Dyke, from the north-west



Plate 66: Excavation of the Service Trench from the South- Eastern Dyke & along the north-eastern side of the new build area, from the north-west



Plate 64: Excavation of the Service Trench from the South-Eastern Dyke, from the north-west



Plate 67: Excavation of the Service Trench along the north-eastern side of the new build area, from the north



Plate 65: Excavation of the Service Trench from the South-Eastern Dyke, from the south-east



Plate 68: Representative Section 10, from the south-east



Plate 69: Excavation of the Service Trench along the north-western side of the new build area, from the south



Plate 70: Excavation of the Service Trench along the north-western side of the new build area, from the south



Plate 71: Excavation of the Service Trench along the south-eastern side of the new build area, from the south

The Service Trench from the Rear Boundary Fence to the New Build Area



Plate 72: Excavation of the Service Trench, from the north

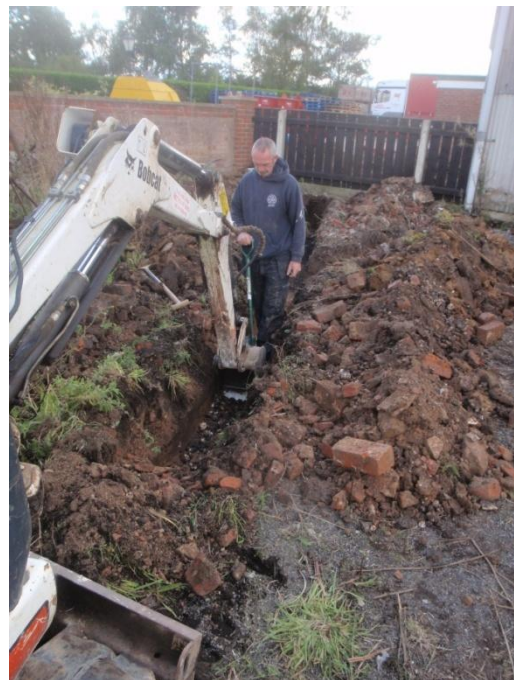


Plate 73: Excavation of the Service Trench, from the north



Plate 74: Excavation of the Service Trench, from the north



Plate 75: Excavation of the Service Trench, from the north



Plate 77: Excavation of the Service Trench, from the north



Plate 76: Representative Section 11, from the north-west

Appendix 2: List of Contexts

- 001** Topsoil/ploughsoil horizon. Soft, mid orange brown clayey silt with occasional small-medium angular stones & occasional small-medium undiagnostic brick and tile fragments. Above **(002)**. Recorded within **Representative Sections 1-6 and 10**. Depth - 0.50m.
- 002** Natural subsoil horizon. Soft, mid orange brown silty clay with frequent small chalk fragments & flecking. Below **(001)**. Recorded within **Representative Sections 1-11**. Depth - >0.56m.
- 003** Modern made ground deposit encountered when a cable trench was excavated across the Depot yard. Friable, light grey brown sandy silt with frequent small-medium fragments of brick, concrete and chalk and small fragments of charcoal and flecking and small mortar fragments and flecking. Same as **(004)**. Above **(002)** and below the tarmac yard surface and associated hardcore. Recorded within **Representative Sections 7-9**. Depth - 0.35m.
- 004** Modern made ground deposit encountered when a cable trench was excavated from the rear boundary fence to the new build area. Friable, light grey brown sandy silt with frequent small-medium fragments of brick, concrete and chalk and small fragments of charcoal and flecking and small mortar fragments and flecking. Above **(005)**. Same as **(003)**. Recorded within **Representative Section 11**. Depth - 0.27m
- 005** Buried topsoil/ploughsoil horizon encountered when a cable trench was excavated from the rear boundary fence to the new build area. Soft, mid orange brown clayey silt with occasional small-medium angular stones & occasional small-medium undiagnostic brick and tile fragments. Below **(004)**. Same as **(001)**. Recorded within **Representative Section 11**. Depth - 0.23m.

Appendix 3: The Archive

The archive consists of:

Five context records

One site plan at a scale of 1:200 of the monitored groundworks in the new build area on one sheet of drawing film.

Eleven section drawings at a scale of 1:20 on one sheet of drawing film

One context register

One photographic register

All records are currently held at:

38 Finningley Road

Lincoln

LN5 9BE

And will be deposited by August 2015:

The Collection

Danes Terrace

Lincoln

LN2 1LP

Under the accession number **LCNCC: 2014.158** and the site code **LRLU14**

Appendix 4: Photographic Register

PHOTOGRAPHIC RECORD SHEET

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3	" "	W		" "	"
4	" "	NW		" "	"
	Initial Ground Reduction				
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6	Initial ground reduction	SW		10/9/14	LRLU14
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8	Initial ground reduction	SW		11/9/14	LRLU14
9	Initial ground reduction	SW		11/9/14	LRLU14
10	Initial ground reduction	SW		11/9/14	LRLU14
11	Initial ground reduction	W		11/9/14	LRLU14
12	Initial ground reduction	SW		11/9/14	LRLU14
13	Initial ground reduction	SW		11/9/14	LRLU14
14	Initial ground reduction	SW		11/9/14	LRLU14
15	Initial ground reduction	NE		11/9/14	LRLU14
	The Excavation of the Stanchion Bases				
16	Excavation of the Stanchion	NW		23/9/14	LRLU14

PHOTOGRAPHIC RECORD SHEET

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18	Excavation of The Stanchion Bases	S		At 23/4/14	LRLU14
19	Excavation of The Stanchion Bases	S		At 23/4/14	LRLU14
20	Stanchion Base 6	SE		At 23/4/14	LRLU14
21	Stanchion Base 7	SE		At 23/4/14	LRLU14
22	Excavation of The Stanchion Bases	S		At 23/4/14	LRLU14
23	Representative Section 1, Stanchion Base 8	SE		At 23/4/14	LRLU14
24	Stanchion Base 9	SE		At 23/4/14	LRLU14
25	Stanchion Base 10	SE		At 23/4/14	LRLU14
26	Stanchion Base 11	SE		At 23/4/14	LRLU14
27	Stanchion Base 22	SW		At 23/4/14	LRLU14
28	Stanchion Bases 25 and 26	SW		At 23/4/14	LRLU14
29	Stanchion Base 27	SW		At 23/4/14	LRLU14
30	Representative	NE		At 23/4/14	LRLU14

PHOTOGRAPHIC RECORD SHEET

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	23				
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	17				
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	16				
34	Representative	SW		23/4/14	LRLU14
	Section 3, Stanchion Base				
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	3				
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	4				
42	Stanchion Base	NE		23/4/14	LRLU14
	5				
43	Excavation of The Stanchion Bases	S		23/4/14	LRLU14

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	19				
46	Stanchion Base	NW		At 23/9/14	LRLU14
	20				
47	Stanchion Base	NW		At 23/9/14	LRLU14
	21				
48	Completed excavation of the Stanchion Bases	S		At 23/9/14	LRLU14
	The Service Trenches				
	The Service Trench in the Depot Yard to the Rear Boundary Fence				
49	The Service Trench	SW		At 23/9/14	LRLU14
50	The Service Trench	NE		At 23/9/14	LRLU14
51	Representative Section 7	NW		At 23/9/14	LRLU14
52	Representative Section 6	NW		At 23/9/14	LRLU14
53	The Service Trench	SW		At 23/9/14	LRLU14
54	The Service Trench	NE		At 23/9/14	LRLU14
55	Representative Section 8	NW		At 23/9/14	LRLU14
56	The Service	NE		At 23/9/14	LRLU14

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	Trench				
59	Representative	NW		At 23/9/14	LRLU14
	Section 9				
60	The Service	S		At 23/9/14	LRLU14
	Trench				
	The Service				
	Trench From				
	The South				
	Eastern Field				
	Boundary Dyke				
	to The New				
	Build Area and				
	Around Three				
	Sides of The				
	New Build Area				
61	Excavation of	SW		At 24/9/14	LRLU14
	The Service				
	Trench From The				
	South Eastern				
	Dyke				
62	Representative	NE		At 24/9/14	LRLU14
	Section 5				
63	Excavation of	NW		At 24/9/14	LRLU14
	The Service				
	Trench From The				
	South Eastern				
	Dyke				
64	Excavation of	NW		At 24/9/14	LRLU14
	The Service				
	Trench From The				

PHOTOGRAPHIC RECORD SHEET

Camera No.	Date Loaded / /	Time Loaded :	Comments		B&W Col. Digi. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Frame	Comments	View	Scale	Init & Date	Site
	Identification Shot	N/A	N/A		
	South Eastern Dyke				
65	Excavation of the Service Trench from the South Eastern Dyke	SE		24/9/14	LRLU14
66	Excavation of the Service Trench from the South Eastern Dyke & along the north-eastern side of the new build area	NW		24/9/14	LRLU14
67	Excavation of the Service Trench along the north eastern side of the New Build Area	N		24/9/14	LRLU14
68	Representative Section 10	SE		24/9/14	LRLU14
69	Excavation of the Service Trench along the north western side of the new build area	S		24/9/14	LRLU14
70	Excavation of the Service Trench along the north western side of the new build	S		24/9/14	LRLU14

PHOTOGRAPHIC RECORD SHEET

[illegible]

Appendix 5: OASIS Summary Sheet

OASIS DATA COLLECTION FORM: England

[List of Projects](#) | [Manage Projects](#) | [Search Projects](#) | [New project](#) | [Change your details](#) | [HER coverage](#) | [Change country](#) | [Log out](#)

The Louth Potato Company, Livesey Road, Ludborough, Lincolnshire - Neville Hall MIFA

OASIS ID - nevilleh1-195342

Versions

View	Version	Completed by	Email	Date
View 1	1	Neville Hall	nevillehallmifa@gmail.com	15 November 2014

Completed sections in current version

Details	Location	Creators	Archive	Publications
Yes	Yes	Yes	Yes	1/1

Validated sections in current version

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

File submission and form progress

Grey literature report submitted?	Yes	Grey literature report filename/s	Sent by other means
Boundary file submitted?	No	Boundary filename	
HER signed off?		NMR signed off?	

Email Lincolnshire HER about this OASIS record

OASIS:

Please e-mail English Heritage for OASIS help and advice

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Cite only: <http://www.oasis.ac.uk/form/formctl.cfm?OID=nevilleh1-195342> for this page

Appendix 6: Specification for Archaeological Monitoring

**Archaeological Monitoring
at the Louth Potato Company
Livesey Road, Ludborough,
Lincolnshire.**

**Prepared for Mr. Gavin Farrand of G. F. Design Services on behalf
of his clients - the Louth Potato Company**

National Grid Reference: TF 2956 9517

Site Code: LRLU14

Accession No: LCNCC: 2014.158

Planning Reference: N/107/02432/13

**Prepared by Neville Hall MIFA, Freelance Field
Archaeologist & Consultant**

July 2014

Non-technical summary

- S1 *A scheme of works comprising archaeological monitoring and recording is required during the erection of a new building to be used as a potato store and an extension to an existing office building at the Louth Potato Company, Livesey Road, Ludborough, Lincolnshire.*
- S2 *A prior archaeological desk based study identified a low potential for medieval settlement activity and finds to be made on this site. This was based on the evidence of the site walkover survey and from local oral evidence from the landowner that medieval earthworks formerly located in this area had long been ploughed out. The potential impact of development on this settlement activity had also been considerably lowered as the result of the shifting of the new potato store building in particular to the south. However, although there may be low potential, the possibility that such archaeological settlement activity and finds should be made on this site should not be ruled out. The specific objectives of the archaeological monitoring and recording will therefore to record any archaeological features, structures, deposits or finds are associated with the medieval settlement of Ludborough.*
- S3 *The archaeological monitoring will be undertaken during the groundworks stage of development, which will comprise the excavation of foundations and services for the new potato store and office extension. Any archaeological features, structures and/or deposits will be recorded in writing, graphically and photographically.*
- S4 *On the completion of the archaeological monitoring, a report will be produced detailing the results of the archaeological investigation. The report will consist of a narrative supported by illustrations and photographs.*

1. Site location and description [Figures 1 and 2]

- 1.1 The assessment site is situated on the southern outskirts of the village of Ludborough and off the eastern frontage of the Livesey Road, the modern A18 trunk road. The assessment site is currently part of an open field and at the rear of working buildings of the Louth Potato Company. The assessment site is located on a north-east facing slope, part of the lower dip slopes of the Lincolnshire Wolds, at National Grid Reference TF 2956 9517, and at a height of approximately 37mAOD. The settlement of Ludborough itself is located approximately 8km to the north of the town of Louth, within the modern civil parish of the same name, administrative district of East Lindsey, county of Lincolnshire.
- 1.2 The assessment site is located on slowly permeable seasonally waterlogged reddish fine loamy and fine clayey soils of the Salop Series. These in turn overlie reddish glacial tills, which in turn overlie a solid geology of chalk of the Upper Cretaceous.

2. Planning background [Figure 2]

- 2.1 This document comprises a Specification or a written scheme of works for archaeological monitoring and recording which is to be maintained during the erection of a new potato store and office extension at the Louth Potato Company, Livesey Road, Ludborough, Lincolnshire (Planning reference: N/107/02432/13).

3. Historical and Archaeological Background

- 3.1 This development site has already been the subject of a prior and detailed archaeological desk based assessment compiled by the author in 2013.

- 3.2 This archaeological desk based assessment identified the cropmark of a possible prehistoric or Roman enclosure well to the south-east of the assessment site. So this study considered that the potential for archaeological from the prehistoric and Roman periods to be **low**.

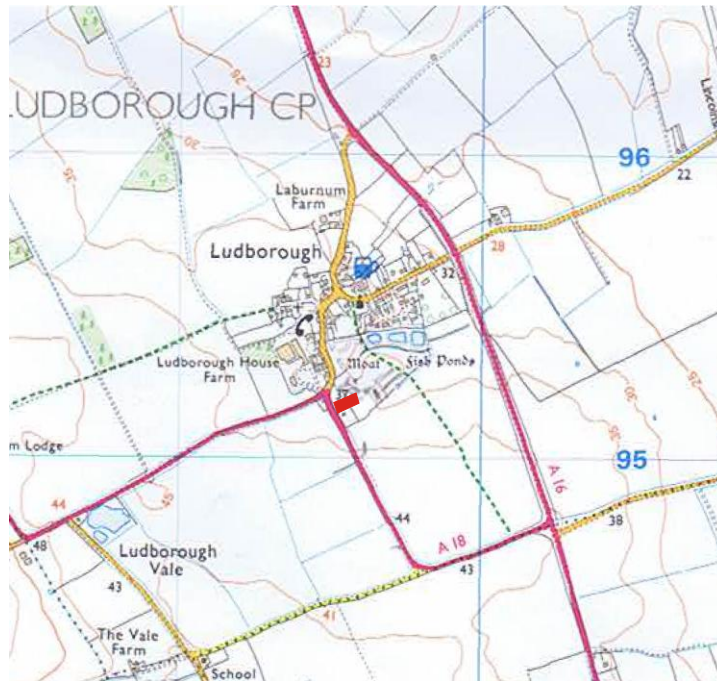


Figure 1: Site location at scale 1:25,000. The site is shown in red. (O.S. copyright licence number 100048723)

- 3.3 It is clear that the settlement of Ludborough has late Anglo-Saxon origins from place name evidence, though no direct evidence for this settlement has been found. So the study considered that the potential for such archaeological activity to be found on this site was **low**.
- 3.4 The proposed development site is situated to the south of a scheduled medieval moated manorial site with associated fishponds to the rear. Aerial photographs held at the Lincolnshire Historic Environment Record show the earthworks of a possible medieval house platform to the south of this moated site. The study considered that this was evidence of shrinkage of the medieval settlement. However, during the course of the site walkover survey, no evidence was found for these earthworks on the ground and according to the local landowner, these had been ploughed long ago. Similarly no contemporary finds were made either from the area of the former earthworks or during the walkover of the remainder of the field in which the development site is situated. Based on this evidence, the study concluded that the potential for such medieval activity and finds to be made on this site was also **low**.
- 3.5 The study did not identify any archaeological remains or finds from the post-medieval period in the area of the development site. Consequently, the potential for similar such activity to be found on this site was also considered to be **low**.
- 3.6 This study also considered that the potential impact of development on this **low** archaeological potential was similarly **low** particularly given the lesser potential degree of

impact of for example the foundation design of stanchion bases for the new agricultural building.

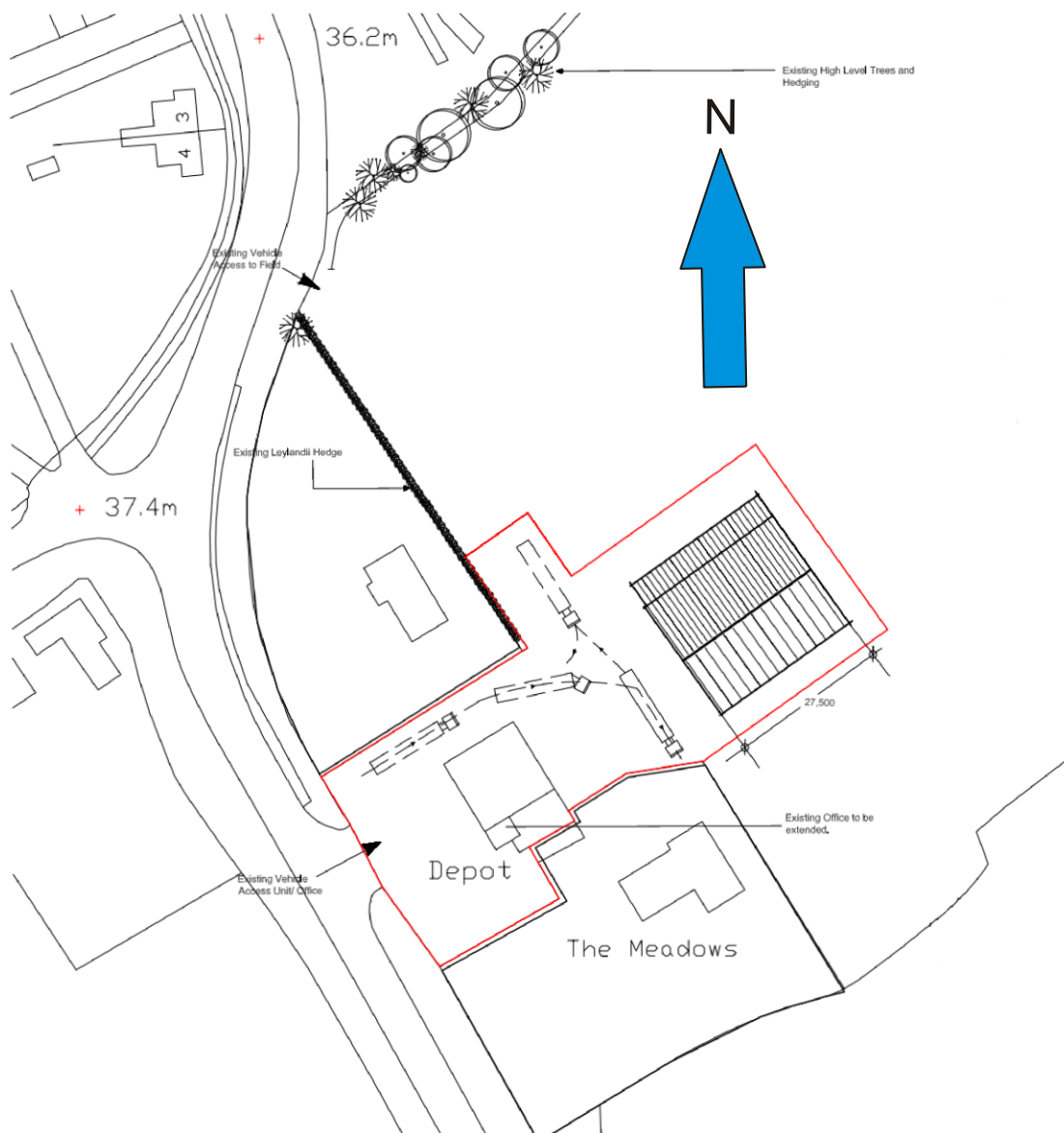


Figure 2: Plan showing the site location and the proposed layout of the assessment site at an original scale of 1:500 at A2, (extract from Architects plan)

- 3.7 The new agricultural building was originally to have been positioned further to the north and in very close proximity to the scheduled moated site complex and probably within the area of the medieval house platform earthwork, where the degree of potential impact of development would have been much higher on any archaeological potential. This proposal would also have had a negative and adverse impact on the setting of the scheduled moated complex. However, following consultations with English Heritage and the local planning authority archaeologist, the subsequent and resultant shifting of the position of the new agricultural building to the south, will have removed to a large degree any potential impact of development on any potential medieval settlement activity; though

while still having a lesser degree of impact on the setting of the scheduled moated complex, this is considered to be much less than it would otherwise have been.

- 3.8 Although the shifting of the new potato store to the south would have removed to some extent the potential impact of this development on any medieval settlement activity, the possibility that such settlement activity and finds should be made on this development site should not be precluded.

4. Aims and objectives of the project

- 4.1 The aims of the project are the **continual** archaeological monitoring and recording of all site groundworks during the construction stage of development, which will comprise the excavation of the foundations and services for the new potato store and office extension.

- 4.2 The objectives of the project are:

To establish the presence/absence of archaeological remains within the area of the development site.

To determine the extent, condition, nature, character, quality and date of any archaeological remains encountered.

To allow the preservation by record of archaeological deposits.

- 4.3 The prior archaeological desk based study identified a low potential for medieval settlement activity and finds to be made on this site. This was based on the evidence of the site walkover survey and from local oral evidence from the landowner that the medieval earthworks formerly located in this area had long been ploughed out. The potential impact of development on this settlement activity had also been considerably lowered as the result of the shifting of the new potato store building in particular to the south. However, although there may be low potential, the possibility that such archaeological settlement activity and finds may be made on this site should not be ruled out. The specific objectives of the archaeological monitoring and recording will therefore to record any archaeological features, structures, deposits or finds are associated with the medieval settlement of Ludborough.

5. Methodology

- 5.1 The archaeological monitoring will be undertaken during the groundworks phase of development, and will include the **continual monitoring** of any topsoil stripping, of ground reduction, of the excavation of foundations, and of any other ground disturbance. All mechanical excavations will be undertaken under archaeological supervision using a toothless bucket.
- 5.2 All work will be carried out according to the Institute of Field Archaeologists (IFA) standards, and will be under the management of a Member of the IFA (MIFA).
- 5.3 All work will be undertaken following all statutory Health and Safety requirements and legislation in operation at the time of the monitoring.
- 5.4 A Risk Assessment will be prepared for the site.
- 5.5 Stripped areas and trench sections will be continually observed to identify any archaeological features and/or deposits which may be exposed.
- 5.6 Section drawings at a scale of 1:10 will be made of any archaeological features identified in the course of the groundworks, including representative sections of trenches at

- appropriate intervals. These will be related to a site plan drawing at a scale of 1:50, which may also record archaeological features and/or deposits identified. Any significant archaeological features in plan will also be recorded at a scale of 1:20.
- 5.7 Written descriptions detailing the nature of archaeological features and/or deposits encountered will be compiled on pro-forma context record sheets.
 - 5.8 Any finds recovered will be bagged and labelled for further analysis. All relevant finds will be ordered into an archive. Most modern material will not be retained, although notes will be made of the appropriate context. An appropriate sample of materials such as ceramic building materials will be made.
 - 5.9 Any and all artefacts found during the monitoring and thought to come under the provisions of the *Treasure Act* (1996), will be removed from the site to a secure location, and will be promptly reported to the appropriate coroner's office.
 - 5.10 Throughout the monitoring a digital photographic record will be compiled, and will comprise an overview of the site prior to work starting, and during as well as after completion of the work, and will include any excavated features, sections and other relevant details that aid interpretation.
 - 5.11 Should human remains be encountered, they will be left *in situ*, and only excavated if absolutely necessary. Proper respect will be accorded to these remains, which will be cleaned to allow positive identification. Should removal be required, the appropriate Department for Constitutional Affairs Licence will be obtained prior to the removal of the remains. In addition, any remains will be reported to the local Environmental Health Department, coroner and the police will be informed, where appropriate.
 - 5.12 The fieldwork will be undertaken by Neville Hall MIFA. Additional personnel may be appointed if required.

6. Post-fieldwork methodology

- 6.1 On the completion of the fieldwork, all of the written, drawn and photographic records produced by the archaeological monitoring will be checked, ordered, labelled (where appropriate) and catalogued to compile a distinctive site archive.
- 6.2 All finds recovered during the fieldwork will be washed, marked and packaged according to the deposit from which they were recovered. They will also be ordered into (and form part of) the site archive.
- 6.3 An assessment of significant finds will be made in light of general site information.
- 6.4 Any finds requiring specialist treatment and/or conservation will be sent to the Conservation Laboratory at The Collection, Lincoln, and in consultation with the relevant curator.
- 6.5 The site archive will be examined to enable the determination of various phases of activity on the site (if appropriate).
- 6.6 Relevant finds will be sent to specialists for identification and dating.

7. Monitoring arrangements

- 7.1 Provision will be made for the Lincolnshire County Council Historic Environment Team on behalf of East Lindsey District Council, the Local Planning Authority to monitor the works during the fieldwork stage and any other aspect of the archaeological project as required including the post fieldwork analysis and report preparation stages of the project.

- 7.2 A minimum notification period of not less than fourteen days of the start date of works on the site will be given to the Lincolnshire County Council Historic Environment Team.
- 7.3 All aspects of the archaeological programme will be undertaken in accordance with this project specification.
- 7.4 Any variation to the project programme in terms of works or recording on or off site will be fully discussed and agreed with the Lincolnshire County Council Historic Environment Team.
- 7.5 Arrangements will be made for the representative of the Lincolnshire County Council Historic Environment Team for access to the site to undertake monitoring visits, and such visits will be accounted for in the final report preparation.
- 7.6 The Lincolnshire County Council Historic Environment Team shall be kept fully informed of any unexpected or unforeseen discoveries made during the course of the archaeological monitoring and recording programme.

8. Archive preparation and deposition

- 8.1 The documentation and records generated by the archaeological monitoring will be sorted and ordered in the format acceptable to The Collection, Lincoln, and to the standards and requirements as laid out in their Guide Book.
- 8.2 A unique accession number will be obtained from The Collection for the site archive.
- 8.3 It is anticipated that the archive will be deposited at The Collection, Lincoln by August 2015.

9. Reporting procedures

- 9.1 A report detailing the findings of the archaeological monitoring will be completed within two months after the finalisation of the fieldwork. Any delays will be related to the relevant authorities.

- 9.2 The report will consist of:

A title page, with project name and location, national grid reference, planning reference, site code, accession number, client name, author and date;

A contents page listing report sections, illustrations and appendices;

A non-technical summary of the results of the monitoring;

An introduction, site description and location;

Planning background to the project;

A section on the archaeological and historical background to the project;

A description of the methodology used in the project;

A section describing the results of the monitoring;

A section on the discussion and results of the project including a consideration of the findings of the project in a local and regional context;

A consideration of the effectiveness of the project methodology and a confidence rating of the results;

Illustrations including plans showing monitored areas, all archaeological features and sections thereof (including trench sections); and

Appendices comprising appropriate photographs of the site and of specific and significant archaeological features and representative sections and a list of contexts, and any specialist reports on finds from the site.

- 9.3 An electronic copy of the report will be deposited with the OASIS project (On-line Access to the Index of Archaeological Investigations) <http://ads.ahds.ac.uk/project/oasis/index.cfm>.

10. Publication and dissemination

- 10.1 Copies of the final report will be deposited with the clients, the local curator (on behalf of the local planning authority), East Lindsey District Council and with the Lincolnshire Heritage Environment Record (including a digital copy in a .pdf format).
- 10.2 A note will be placed in 'Lincolnshire History and Archaeology' describing the results.
- 10.3 The deposition of the site archive will be in accordance with guidelines outlined in the Lincolnshire Archaeological Handbook (LCC, 2012).
- 10.4 Should the results of the archaeological investigation merit it, a note will also be placed in appropriate national journals e.g. *Medieval Archaeology*.

11. Other factors (including contingency)

- 11.1 In the event of the discovery of any unexpected remains of archaeological importance, or of any changed circumstances, it is the responsibility of the archaeological contractor to inform the Lincolnshire County Council Historic Environment Team.
- 11.2 Where important archaeological remains are discovered and deemed to merit further investigation, additional financial resources may be required to provide an appropriate level of investigation, recording and analysis.
- 11.3 Any additional financial contingency requirement for additional fieldwork or post-excavation analysis outside the scope of the proposed scheme of works will only be activated following full consultation with the Lincolnshire County Council Historic Environment Team and the client.

12. Variations to the proposed scheme

- 12.1 Variations to the proposed scheme will only be made following written confirmation with the archaeological curator.

13. Resources

- 13.1 The monitoring will be undertaken by Neville Hall using standard archaeological field techniques.
- 13.2 Post-excavation analysis will be undertaken by Neville Hall and where available specialist analysis from:-

Jane Young
Ian Rowlandson
Val Fryer
Carol Allen
Malin Holst
Jane Cowgill

Medieval and Post-medieval Ceramics
Iron Age and Roman Ceramics
Environmental
Neolithic and Bronze Age
Osteoarchaeology
Metallurgy

- 13.3 Small finds requiring conservation will be conserved by the City and County Museum Laboratory.
- 13.4 Recognised specialists will be sought in the event that other data are retrieved in the course of the monitoring.

14. Insurance statement

- 14.1 Public indemnity of £2,000,000 with Towergate Insurance.

15. Copyright

- 15.1 Copyright will remain that of the author. Licence will be given to the client to present any reports, copyright of the author, to the planning authority in good faith of satisfactory settlement of account.

16. Ownership

- 16.1 It will be asked of the client, at the outset, that the ownership of any portable objects discovered in the course of the monitoring be donated along with the archive.