

# Addenbrooke's N Ward Plant Room and Associated Services

An Archaeological Evaluation and Watching Brief



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### *Summary*

*An archaeological watching brief and small scale evaluation was undertaken during site works carried out in advance of the construction of the new N Ward block at Addenbrooke's Hospital. The watching brief took place during the insertion of trenches for both pipes and foundations, whilst the evaluation was carried out within a 10m by 10m area during the digging of a lift shaft and basement. The only archaeological feature found in this was a short section of narrow ditch which could not be dated. Since there was no obvious truncation of the archaeological levels, it seems very unlikely that any significant archaeology is to be found within the footprint of this site.*

## **Introduction**

A series of archaeological watching briefs and an evaluation were undertaken by the CAU between May and July 2008 on the south side of Addenbrooke's Hospital during groundworks being undertaken in advance of the construction of a new ward block (N Ward) at GR TL 465 549. The site of the new ward was located just to the east of the Rosie Maternity Hospital and to the south of James Ward where this abuts the southern branch of Robinson Way. These works included the digging of a pipe trench for a foul water main, some 13 shafts as part of surface drainage works, plus the excavation of a 10m x 10m square area to a depth of up to 4m below ground level for the purposes of installing a basement and the substantial foundations for a lift shaft.

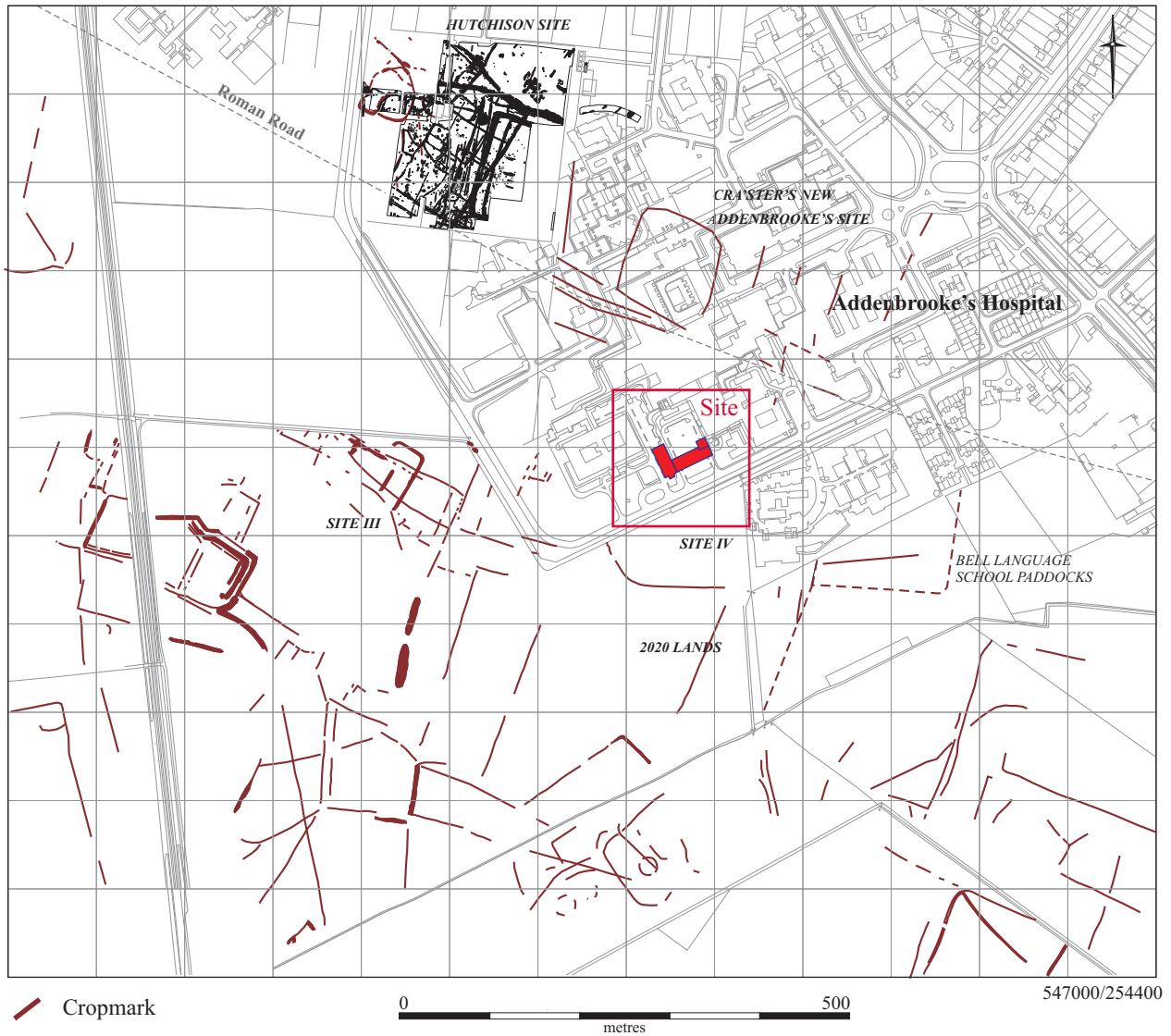
The land surface within this area rose from road level (at approx 15 m OD), some one to two metres, the slope rising most noticeably over the patch of tarmac car park in front of James Ward, in a direction which is most noticeable to the north and east of the existing bus shelter in front of the Rosie Hospital. The car park appears to have been built upon 'made-up ground' composed of the rubble associated with the original 1960s New Addenbrooke's development. Some of the spoil mounds derived from earthmoving linked to these original excavations appear to have been left on the periphery of the hospital site. This can be clearly seen in the present area following examination of the 1967 and 1968 air photographs (see Figure 4 and Standring 2008: Project Specification).

The underlying geology of the site is shown as being the Grey Chalk (Lower Chalk) of the Zig-Zag Chalk Formation with the underlying chalk rock of the Totternhoe Stone immediately (some 50 to 100m) to the north of this (BGS 2002). However, a thin cover of terrace gravels (3<sup>rd</sup> Cam Terrace) would appear to lie above this, as is suggested by the outcrop shown on the geological map (Sheet 205) within the area of the Forvie Site (on the opposite side of Robinson Way); something which is also clearly evident in the sections revealed during excavations undertaken in the development area.

### Archaeological background.

Archaeological trenching carried out between November 2004 and January 2005 within a 24 ha area of fields around the western and southern perimeter of Addenbrooke's Hospital between Robinson Way and the railway line (Addenbrooke's *2020 Lands* : see Evans & Mackay 2005) provided evidence of 1st -3rd century Roman settlement, enclosures, and an extensive field system, some of these with earlier Iron Age elements. Within the field immediately to the south of the road and opposite (just within 20-50m) the area of current development was found a cluster of Early Roman settlement features (Site IV), most of these located within Trenches 29 – 31. These features consisted of pits and a group of NW-SE and NE-SW ditches, several of which contained 1st-2nd century AD pottery alongside a few Late Iron Age sherds. The presence of the latter suggested a still earlier phase of occupation. Approximately 100m to the west of this further trenching uncovered a much larger

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Figure 1. Site location

settlement (Site III), plus a regular field system, whilst just beyond this there was evidence of Roman cultivation (horticultural) beds or trenches. None of the Site IV features registered on aerial photographs of the site, yet 100m to the north-east and also some 200m to the west of this there were traces of SW-NE trending linear crop-marks.

The other closest and most relevant archaeological investigation to this was a trench evaluation undertaken on land which lay adjacent (just to the south of) the Bell Language School (Brudenell 2004). This revealed features relating to a Late Bronze Age/ Early Iron Age open settlement as well as to a NNE-SSW orientated 'fence line', the latter apparently having set the axis for much of the later activity, including the presence of Iron Age boundaries and a series of co-axial Romano-British field ditches (2nd – 4th centuries AD). Within the western half of this area behind the Forvie Site laboratories (Area 1: Field Block B) were found the traces of an extensive series of shallow SW-NE aligned Roman ditches (Trench 5). Similar parallel cultivation trenches were found during the 2020 Lands (Site III) investigations, as well as to the south of Addenbrooke's on the opposite side of the Vicar's Brook valley at Clay Farm (Timberlake 2007). It was thought these might represent a system of 'lazy bed' horticulture.

In terms of the more general archaeological picture for the Addenbrooke's – Gog Magog landscape, some 750m to the south-west of here at the Babraham Park and Ride site, excavations in 1999 revealed Late Neolithic pits alongside Early-Middle Bronze Age ditches and inhumations (Hinman 2001). Meanwhile, 500m to the north-west at the Addenbrooke's Hutchison site was found a later and somewhat more extensive settlement consisting of post-hole structures, pits and quarry pits dating from the Middle Bronze Age through to the Early Iron Age. Overlying this were a series of enclosures and settlement features dating from the 1st century BC to the mid 2nd century AD, and with this a group of pottery kilns and a Roman cemetery (Evans et al. 2004). Two Roman roads are known to cross the area now occupied by the Addenbrooke's site, one of these is the extrapolated extension to Wort's Causeway, whilst another on a NW-SE alignment was picked up in Cra'ster's (1969) Addenbrooke's investigations as well as in the Hutchison excavations, thus may pass within a hundred metres or more of the present development.

Evidence for Saxon occupation within the Addenbrooke's area is limited to the small Middle Saxon settlement found at the Hutchison site plus some traces of occupation of the same date present within Field U at the northernmost end of the area of the 2020 Lands investigation (Evans & Mackay 2005). Just to the north of this, a small cluster of Early Saxon pits was encountered during a trench evaluation undertaken along the route of the new hospital water main (Timberlake 2007). Traces of medieval or post-medieval ridge and furrow survive as cropmarks across much of the area surrounding the hospital, though this has produced little in the way of material culture. Fieldwalking carried out across the 2020 Lands fields prior to trenching revealed the presence of general scatters of post-medieval pottery, with more significant concentrations found within Field L, just to the south-east of the Rosie Hospital.

## Method

Watching briefs were carried out during the digging of the foul water main pipe trench as well as the shafts and trenches associated with beam and post-pad foundations. None of the excavations could be entered, thus the deposits could not be examined in detail. Measured sketch sections were drawn using a range pole and a hand-tape and photographs were taken as an additional record. Apart from limited bucket-sampling and the occasional metal detecting of any preserved soils removed within the spoil from these holes, the presence or absence of archaeological material (finds) could not always be determined.

During the digging of the Lift Shaft Basement, the shored and laddered Test Pit 1 dug to determine the nature of the rubble make-up and the underlying geology could be examined and logged in detail, yet for health and safety reasons the larger 10m x 10m excavation could only be examined once the excavation had been dug to the level of the natural, the sides battered, and an access ramp created. The deep sections through modern rubble and the underlying post-medieval – modern buried soils were logged and recorded as measured sketch sections, with soil samples and any finds recovered. Additionally, all the layers beneath the most modern rubble were bucket-sampled for finds.

The surface of the completely excavated area was cleaned to reveal any archaeological or modern features present, the area was base planned at 1:50, and finally, 1m long slots dug through any features, and the sections of these recorded at 1:10. The level of truncation of the natural and any archaeological deposits preserved were then recorded across the site. The levels (OD) within each of the four corners of the excavation were recorded by the surveyors for the contractor.

The uppermost rubble layers within the excavation were removed by a 12-ton 360 digger using a toothed bucket, but from the level of the buried soils the layers were then scraped back more carefully using a 2m-wide ditching bucket.

## Results

### *Foul water main pipe trench watching brief (May 2008)*

A watching brief on the digging of this 10m long and 2.8m deep trench northwards from the pumping station was conducted between the 20th-22nd May. The first 2.7m of this route was cut against the side of the existing deep concrete pumping shaft through layers of modern re-deposited chalk and gravel. Below 1.5m this section had to be immediately shuttered in order to make this safe for the insertion of the pipe and pump, thus could not be examined. The last 3m of the trench could be examined in detail: this consisted of topsoil (0 – 0.35m), a shallow lens-like subsoil which contained modern brick (0.35-0.4m), this truncating a layer of marly gravel with clay, an orange gravely silt with patches of marly gravel (0.4 – 0.9m), and beneath that a series of orange gravels, sands and silts, and lenses of light grey-white marly gravels (0.9 – 1.4 to 1.8m); the latter seemingly the infill of a small channel cutting through undisturbed marly gravels made up of fairly angular and less water-worn flint. No

anthropogenic material was recovered from this section, leading to the conclusion that this was probably a natural channel cut through an outlier belonging to the uppermost 3rd Terrace Gravel (BGS 2002).

Further to the east (approx. 100m) along the route of this foulwater drain a watching brief was undertaken by the CAU on the 14th May (see course of pipeline which is shown to the north of Trench A in the Figure 2 Site plan). This work was undertaken during the digging of the first section of trench, but this time to the east of the foundations for the Level 1 Plant Room, and adjacent (but just to the south of the wall of) James Ward. At this point the trench encountered a much greater depth of made-up ground (to 1.5m below ground level). Beneath the made-up ground was a grey-brown silty clay with some inclusions, and beneath that (at 1.8m below ground level), a silty grey clay. Here the bottom of the trench had been cut to a depth of 2.0 -2.1m. Unfortunately, the trench surfaces and sides could not be examined in detail.

A watching brief undertaken on the 16th May to the east of this point, and adjacent to an old concrete manhole which had been removed along a section of the pipe between GPS grid reference points TL 46459 54998 and 46474 55006 revealed the following sequence (shoring and laddering had been put in place allowing this stretch of trench to be examined in detail). This showed:

0-1.55m	made-up ground consisting of several distinct layers of brick and concrete rubble and gravel
1.55-1.6m	a very dark grey silt, possibly a buried soil or else a pond deposit
1.6-1.9m	the remnants of an old soil or sub-soil consisting of a greyish brown silty clay and occasional charcoal flecks
1.9-2.1m	a yellowish-brown silty sand (natural)
2.1m -	a silty sand but with chalky particles becoming more frequent (natural)

The latter section provided a useful link between the above sub-surface stratigraphy within the area just to the west (some 30m) of the Lift Shaft excavation, and that of the Lift Shaft itself. The above dark grey silt is clearly the same layer as Horizon B [002] recorded during the watching brief and evaluation, whilst the underlying grey-brown silt must be the same as the buried soil Horizon C [003-005] (see below).

### *Lift Shaft Watching Brief and Evaluation Excavation (July 2008)*

#### *Test Pit 1*

This was dug on the east side of the vehicular access adjacent to James Ward. No archaeological horizons were encountered, yet this provided a useful record of the overburden and underlying natural.

0-0.32m	brown loamy topsoil
0.32-0.44m	lens of concrete, brick, chalk rubble and soil
0.32-0.48m	laid concrete
0.48-0.80m	light yellow sandy soil with blocks of grey chalk, flint, small white chalk gravel clasts and inclusions of lumps of old concrete (Horizon D)
0.80-1.20m	a similar horizon to above but with less clay lumps towards top and more sandy, becoming more silty and clay-like towards base where there is a further layer consisting of large clay lumps. No concrete.



- 1.20 – 1.64m a mottled gravely sand with both yellow-orange and some paler patches, the latter including some small chalk pebbles plus some hard lumps of marly clay (<2cm diameter). Probably undisturbed natural (channel fill). The sloping base of this channel (dips to W at angle of about 25° - hence south side) is covered with small gravel-like pebbles consisting of white water-rolled chalk and flint
- 1.64m - a hard light cream-grey coloured marly clay with inclusions of small gravel-sized clasts of white chalk (<1cm diameter) and sharp angular flint chips (Horizon E). This becomes increasingly more clayey towards base of test pit, with fewer chalk inclusions
- Base of test pit at 2.1m

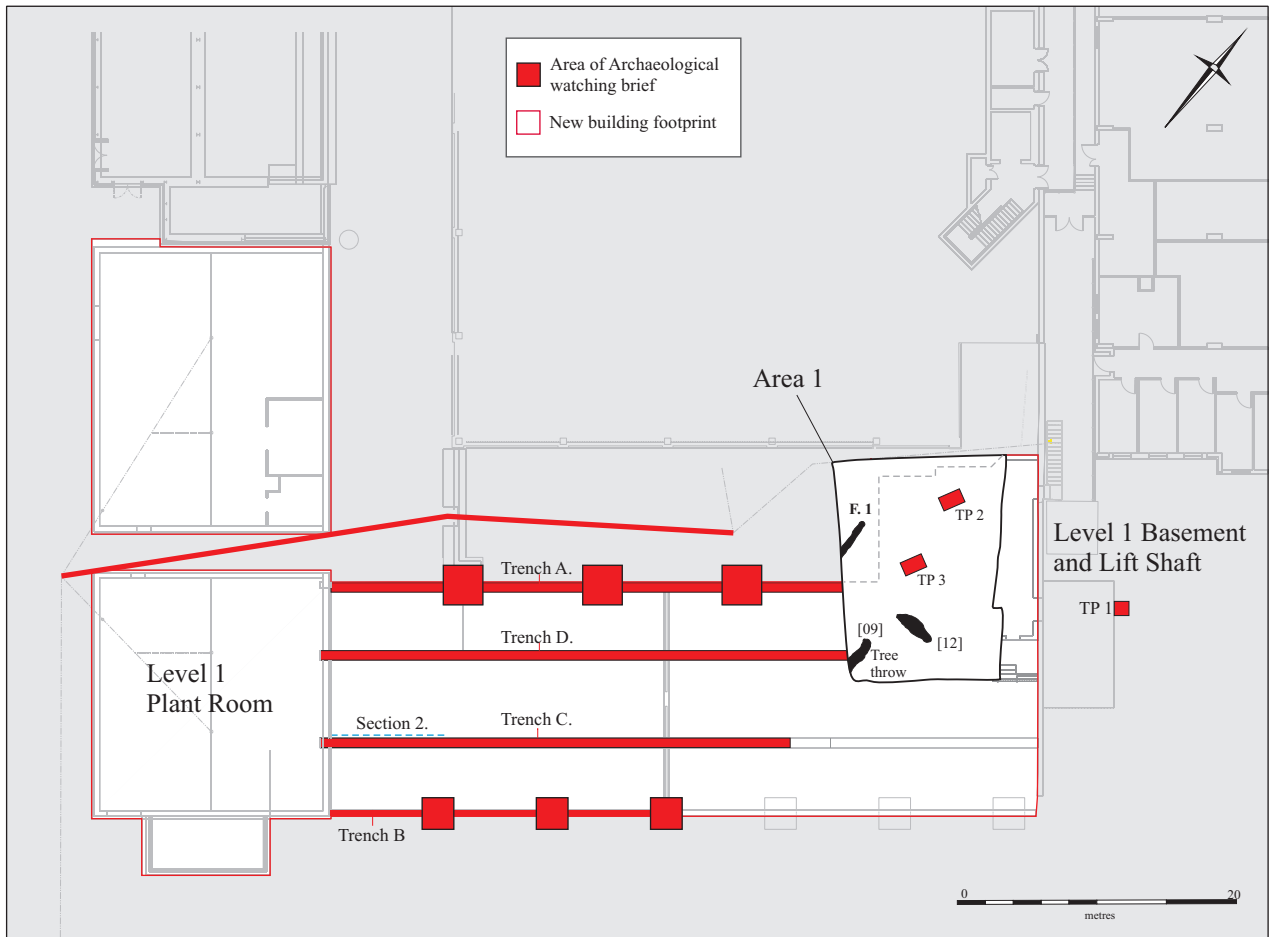
The overall similarity between the above section and that of the foul water main pipe trench (N end) suggests that here (approx 100m distant) we may be looking at the other end of an east-west palaeochannel cutting the top of the thin layer of terrace gravel. Truncation of the natural (during building works) is suggested.

### *Excavation of Lift Shaft Basement – watching brief*

Down to a depth of about 2m the stratigraphy of the layers cut by the 100m<sup>2</sup> excavation were recorded in the east-facing section. Below 2m the depth to the existing natural was recorded in bucket-scrape test pits (Test Pits 2 & 3). These two sets of data have been amalgamated in the following schematic section for the area of the Lift Shaft to the north and west of TP 1. The stratigraphy of the overburden (modern backfill) and post-medieval – modern soils beneath this level appeared to be fairly uniform across the site. However, the thickness of the buried soil units (003-005) overlying the natural varied. From a combined thickness of 15cm these became deeper (35cm thick) towards the centre of the excavated area

- 0-0.1m tarmac (former car park level)
- 0.1-0.7m sandy gravel containing minor brick and concrete (redeposited make-up or backfill)
- 0.7-0.75m laid concrete
- 0.75-1.10m upper buried soil (modern) containing brick, flint and chalk
- 1.10-1.60m sandy gravel containing clay lumps and some concrete (backfill)
- 1.60-1.75m chalky layer with some concrete (Horizon D)
- 1.75-1.90m modern (30yr old?) brick rubble within a chalky brown soil which is pressed down into underlying layer (Horizon A) [001]
- 1.90-2.05m a dark grey-black and clean organic silt with inclusions of large flint gravel (rounded and angular). Possibly a pond deposit. Fairly sterile – though contains a single fragment of clay pipe stem, some rare oyster shell (food debris), and small crumbs of brick. Also includes traces of leaves and twigs (Horizon B) [002]
- 2.05 – 2.10 (or 2.15m) a dark grey-green to brown sandy silt with rootlet holes, inclusions of flint pebbles and a slightly reddened oxidised (and cracked) iron-panned surface. This was a buried soil (Horizon C) containing very small fragments of charcoal, coal, cinder and small fragments of degraded brick. Includes a moderately well preserved sherd of 16th-17th century pottery alongside a crumb of very abraded Late Prehistoric pottery (residual). Interpreted as being a post-medieval buried soil [003]
- 2.10 -2.15 (or 2.20m) a lower buried soil consisting of a mid-brown silt with rare inclusions of coal and brick detritus [004]
- 2.15-2.20 (or 2.35m) a buried sub-soil consisting of a soft yellowish-brown silt (sterile) [005]
- 2.20 (or 2.35m) a light yellow silty sand with pale coloured marly lenses and patches of gravel (natural)
- Base of excavation at about 2.35m

The organic silt layer [002] formed an important marker horizon across the



Section 1 (F.1)

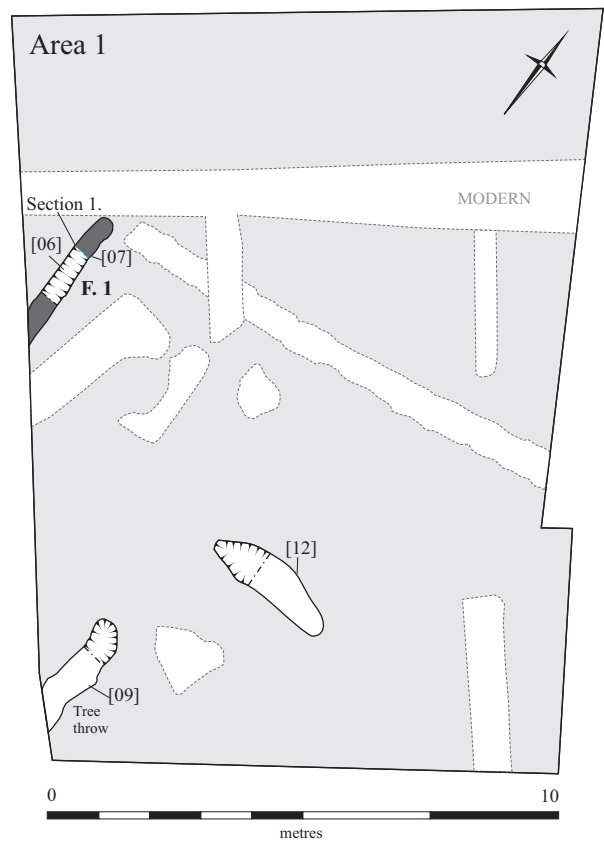
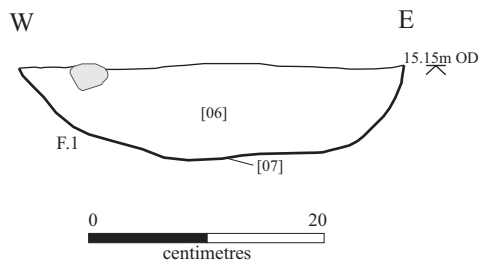


Figure 2. Site plan showing area of archaeological watching brief and Area 1 archaeological evaluation.

excavation, differentiating this area from that to the south. This was interpreted as being an area of shallow pond, perhaps a seasonal wet area with silting that post-dated the use of this as agricultural land, probably during the late 19th or 20th century. The accumulation of buried soils beneath this most likely derives from post-medieval cultivation. The earliest dates for these contexts ([003] and [004]) may be 16th-17th century based on the recovery of a little-abraded diagnostic sherd consisting of the pedestal foot and base of a GRE pipkin-type cooking utensil found within the top of the soil profile [003] during bucket sampling. A tiny scrap of prehistoric pot found within this layer was clearly residual. However, the possibility of relatively short-term residuality of the 16th-17th-century pot within the cultivation soil might mean that the soil itself could be anything up to 19th century in date, though the absence of anything which is clearly more modern implies that this may already have become buried and un-worked by this date. Here the preservation of a probable post-medieval land surface was fortuitous, and was due largely to the dumping of rubble on top of this horizon during the earliest site disturbance associated with demolition and levelling carried out at the time of the first building phase of the hospital. Importantly this shows that the top of the gravel and silts lying just beneath this, thus any archaeological interface with the natural in this area, has not suffered truncation. Any pre-buried soil archaeology in this area will thus lie at about 13m – 13.4m OD.

*Lift Shaft Basement – an archaeological evaluation (Area 1 on site plan: Figure 2)*

Removal of the buried soils and the cleaning of the underlying surface of the natural (marly sands and gravel) revealed mostly modern features cut through this from above. This included the recent pea-grit filled culvert trench (perhaps originally a pipe trench) dug to channel away rainwater pumped from a cistern to the east of the excavated area, but also several modern east-west rubble-filled trenches dating from the hospital construction, or perhaps even a later phase of building, some of which included fills containing rubber and plastic. Parallel to the east side of the excavation was a disused pipe (drain) trench from which a large iron pipe was removed. Other modern features included residual lumps of concrete which had been buried from above, plus the two cuts for the archaeological test pits down to natural (TPs 2 & 3).

On cleaning back, the natural appeared to be fairly uniform, but contained a large patch of marly clay containing water-rolled gravel-sized pebbles of chalk. This appeared to be an underlying layer of the drift geology equivalent to the basal natural encountered within Test Pit 1 (Horizon E). All of these comprise what is probably a thin outlier deposit of the 3rd. Cam Terrace overlying the chalk.

Three or four possible features were identified, all cut or penetrating into the natural. At least two of these irregular and elongate pit-like features appeared to be tree throws, thus were probably not archaeological. Slots were dug through both of the latter, and sections recorded. One of these in the SW corner of the excavation (S.2) was over 2m long and 0.5-0.6m wide and had an irregular outline and an asymmetric ‘V-shaped’ profile approx. 0.1 – 0.15m deep [008]. This contained a single fill consisting of a light grey-brown silty clay [009] devoid of any finds. Another NW-SE aligned ‘banana-shaped’ feature (S.3) was interpreted as being a possible tree throw, approx. 2.5m long and 0.6-0.7m wide with a 0.23m deep and quite similar asymmetric ‘V-shaped’ profile [012] containing two fills; a fine light grey silty clay [010]

deposited against the south edge as a primary silting-up fill, and a secondary or main fill of brown-yellow silty clay with a mottling of dark manganese stained spots [012]. Once again neither of these contained any finds, nor any evidence for burning, thus it can only be assumed that these were natural hollows and the sites of former tree throws.

Cut-off by the western side of the excavation was a cut linear feature (F.1); this consisted of a narrow and shallow ditch with a terminal at its north end. This feature appeared to be archaeological, but was considerably truncated, perhaps as a result of former ploughing.

**F.1** A small linear SW-NE trending ditch, >2.5m long, 0.4m wide and 0.05-0.1m deep (truncated). Sampled by means a 1m long slot (S.1), the x-sectional profile of this was a flattened 'U-shape' with symmetrical gently concave sides and a gentle and almost imperceptible break of slope, the west side being very slightly steeper than the east [007]. The terminal of the ditch was rather more highly truncated. Nevertheless, it could still be seen that this was gently rounded, symmetrical and also gently sloping. The single fill consisted of a brown silty clay with very occasional flecks of charcoal and stones (flint) [006]. No finds were recovered.

Within the north-eastern corner of the excavated area, just to the south of the flood culvert trench, a small irregular-shaped pit or tree throw was revealed during the cleaning back of the natural. Not long afterwards, however, this became concealed by a layer of redeposited silt following a sudden release of pumped floodwater. The potential feature was thus not excavated. From initial examinations the fill of this appeared to be almost identical to that for F.1, thus there remains the high chance that this may have been of archaeological origin.

#### *Trenching and pitting in between the Level 1 Plant Room and the Lift Shaft Basement (August 2008)*

A watching brief was undertaken of this work on the 2nd August 2008. An area of approx. 10m x 5m (Trench A) was opened up just to the south of the new foul water main pipe trench and immediately to the east of the foundations for the Level 1 Plant Room. Within this area the first foundation pad was dug to a depth of 2.5m, but here revealed no evidence for archaeology. Above the buried surface of the natural (which lay at 0.89m depth) lay a moderately thickly developed (between 0.16 - 0.32m thick) post-medieval buried soil consisting of a mid-dark brown sandy silty clay soil (Horizon C?). The latter implied that there was no significant truncation of the underlying land surface at this spot. Above was an ubiquitous modern layer of made-up ground which contained brick, concrete and gravel. Here the buried soil rested upon natural which consisted of chalky clay at a depth of 14.64m OD.

Some 8m to the south of this a smaller 4m<sup>2</sup> hole (Trench B: Foundation Pad 1) was dug to a depth of 1.6m. Within this the natural was encountered at the shallower depth of 0.6m (14.2m OD). However, here the post-medieval soil appeared to be fairly well truncated or missing. Eastwards the depth of redeposited overburden increased, suggesting a deepening of deposits, perhaps partly accounted for by the amount of modern dumping of spoil associated with the building of the hospital.

The parallel foundation trench some 3.5m to the north of this (Trench C) revealed a section some 16+m long which clearly showed the gradual rise in the top of the natural eastwards (Figure 3; section 2). The natural consisted here a yellow-orange sandy silty clay with some gravel on top of a variegated yellow-grey marly horizon. On top of this the 'modern' dark soil or ponded silt horizon (Horizon B). This was well preserved, but thinned eastwards (from 0.1m to 0.05m thick). However, the remains of the loamy buried soil (Horizon C) beneath this was barely preserved

The western end of the third foundation trench (Trench D) was recorded over the same distance from the eastern edge of the cut for Level 1 of the Plant Room 1 (002). Here the made-up ground surface rose from 16m OD to 16.5m OD (at 8.9m from the Plant Room), whilst the slope in the preserved natural was slightly less pronounced and more undulating (15.65m to 15.81m OD at 8.9m). The overlying buried soils Horizons B & C were only partly truncated at the western end of this, but better developed (0.12m and 0.08m thick respectively at 8.9m). At a distance of 7.5m from the west end, a possible shallow (0.25m deep) and 0.8m wide tree throw was encountered.

Another infilled (and approx 1m wide) irregular shaped tree throw hole was encountered in the north section of the 0.6m wide Trench B, just 1 m to the east of Foundation Pad 2. The base of this was at approx 15m OD. In the recorded section, the following horizons were noted:

0 – 0.15m	tarmac
0.15 – 0.25 (to 0.75 m at west end)	laid gravel mixed with redeposited rubble
0.25 – 0.40m (east end)	redeposited soil and CBM
0.30 – 0.42 (to 0.5m)	mix dark soil and rubble with flint (Horizon A)
0.42 – 0.54 (to 0.66m)	dark grey organic silt with flint (Horizon B)
0.53 – 0.70 (to 0.80m)	grey-brown silty soil with occ charc (Horizon C)
0.75 – 0.84m	pebbly lens in yellow silty gravel (tree throw)
0.75 – 1.03m	main fill of irregular tree throw hole: light brown silty sand with patches of gravel and black peat (root holes)
below 0.8 (to 1 m)	NATURAL

Within the side of Foundation Pad 3 (north section), some 4m to the east of this point, the top of the natural was encountered at 0.95 to 1.1m depth (approx 15.1m OD). The top of the 2.8m deep hole for this was at 16.1m OD, whilst the base of it lay at 13.3m OD. The depth to the base of the post-medieval buried soil (Horizon C), as was found also found within the other E-W sections, was highly variable, suggestive of plough soil interspersed by grubbed-out trees or hedges. The presence of possible 'modern' (20th century?) plough furrows could also be seen just beneath the base of Horizon B in the section revealed in Trench A between 6m and 22m east of the Plant Room (watching brief between 12th-23rd August). The untruncated continuation of this Horizon B was evident in the area in between Trenches C and D where the surface of this had been stripped (to a max. of 0.5m depth) during the laying of foundations. This shallow stripping was monitored for some 16m to the east of the Plant Room.

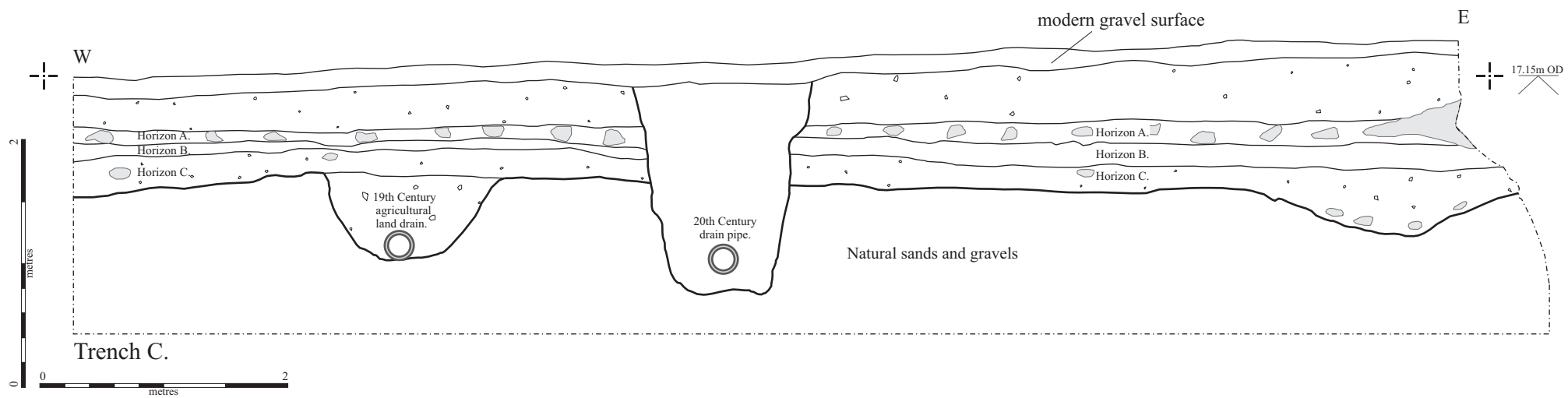


Figure 3. Section 2

## Discussion

The remains of the large areas of spoil shown in the air photographs taken during constructional works in 1967 and 1968 ( Figure 4) are most likely represented by an increasing thickness of building rubble and redeposited gravel, such as that identified in the sections beneath the surface of the former car park as this nears the site of the present Lift Shaft.

In correlating the different sections examined during this watching brief and evaluation the most easily identifiable base of this dumped pile (consisting of a layer of modern brick rubble sitting within a chalky brown soil) was referred to as Horizon A. Immediately underneath this there lay a thin layer (0.15 – 0.25m thick) of ponded grey-black organic silt (Horizon B) which could be seen in almost all sections across the site. Given the numbers of bricks pressed into the top of it, this horizon was clearly modern in origin. The shunting around and dumping of spoil from which must have taken place at the time of the first building of the hospital perhaps led to the poorly drained environment, and as a consequence the deposition of the shallowly ponded silt. In some places, such as within the area now occupied by the Lift Shaft, up to 1.75m of rubble was deposited on top of this.

No dateable archaeology, and only one possible archaeological feature was identified during the course of the evaluation undertaken higher up in the sequence of digging the Lift Shaft. Based on the profile of its cross-section and termination, its dimensions and its NE-SW alignment, there remains the possibility that this single feature could be Roman and may represent the end of a partly truncated cultivation trench. Given that this example is probably not an isolated feature, there are other parallels to this nearby; for example in the form of a group of similarly aligned trenches found within Area 1 (Block B) on the Bell Language School excavation (Brudenell 2004). Still others, much closer to the current site were found on Site III of the 2020 Lands (Evans & Mackay 2005), whilst on the opposite side of the Addenbrooke's (Vicar's or Hobson's Brook) Valley at Clay Farm were found a series of these in 2006; the latter were interpreted as possible horticultural trenches, perhaps for the cultivation of asparagus (Timberlake 2007). However, in the absence of dating, or more importantly the survival of other parallel trenches, the issue of the function and dating of this ditch found within the Lift Shaft remains a matter of speculation, and as such, little more significance can be paid to it.

More problematically, no archaeological finds were recovered from the evaluation trench, even within a disturbed context. Nevertheless, two elongate tree throws were sampled here, whilst to the west of the Lift Shaft a number of others were also encountered within the foundation (beam) trench sections, most of the tree holes cut into the top of the natural beneath the level of the agricultural soil (Horizon C).

The results of the watching brief would appear to show that apart from the small-scale truncation of the potential archaeological horizon (lying somewhere in between the cultivation soil (Horizon C) and the underlying natural) caused by the modern pipework and other investigation trenches, the pre-hospital landscape in the area to the east of the Plant Room shaft(s) does not appear to have been truncated by the still earlier Addenbrooke's development. Sometimes it is quite difficult to differentiate between what is modern/ pre-modern and archaeological above the surface of the

natural. Nevertheless, it seems probable that at least some trace of these features, if present, would have been detected within the narrow foundation trenches, test pits and evaluation trench which together comprise a sample amounting to some 20% of the evaluation area. The recognition of tree throws within these narrow trenches is a case in point. We can only conclude therefore that the absence of features recorded within the trenches and test pits dug in between the Plant Room and the Lift Shaft implies that the density of archaeology within this area must be low.

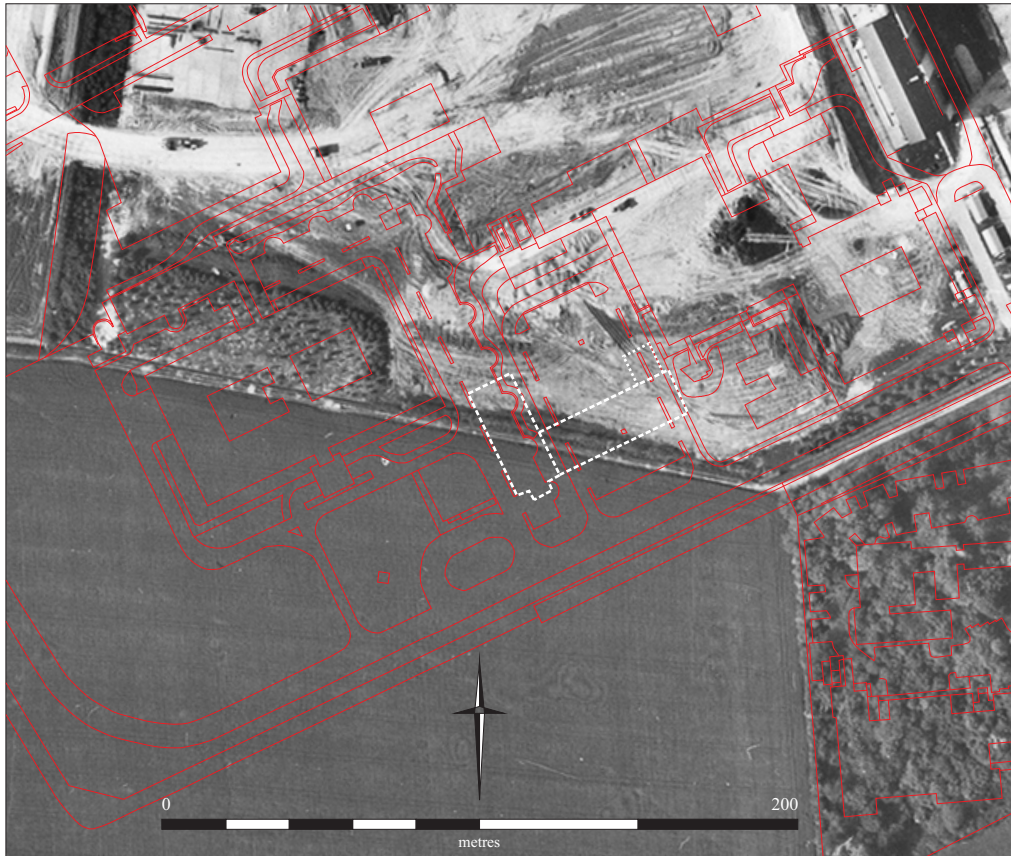
During the watching brief carried out on the foundation trenches, the depth to the top of the dark grey-black (modern) organic deposit (Horizon B) was recorded, as well as the depth to natural. In between these was a variable depth of what appeared to be an agricultural soil (Horizon C), of post-medieval to earlier date, within which a number of small tree throws were noted. The heights of these buried two ground surfaces shows the land rising to the east, from a height of about 16m OD at the Plant Room to over 17m OD at the Lift Shaft (to the bottom of Horizon B). Actually the latter appears closest to the surface at the western end, rising in height (together with the underlying natural) up to a high point some 7 to 10m east of the edge of the Level 1 Plant Room, becoming deeper on the edge of the Lift Shaft. The top of the natural also dips away at a more gentle angle towards the south. The only place where these horizons had been noticeably truncated by previous constructional work was in the section recorded in Foundation Pad Hole 1 (Trench B).

The single find of post-medieval pottery (16th – 17th century) from the excavation came from Horizon C. The latter was recovered during bucket sampling of the spoil removed during the excavation of the Lift Shaft. This same layer contained tiny traces of degraded brick, charcoal and coal, and was bioturbated as a result of rooting and possibly also plough cultivation. One suggestion is that we are looking at a very similar level of disturbance to that responsible for the finds of post-medieval pottery recorded on the field surfaces to the west of here during fieldwalking associated with the 2020 Lands investigations; the origin of which could have been some minor local post-medieval rural settlement. Although ploughing within this area will have undoubtedly partially truncated earlier archaeological features, the survival of this shallow-dug ditch (F.1) suggests that any such traces of pits or ditches would probably have been detected on stripping off, or else seriously trenching the overlying layers.

## **Conclusion**

Given the amount of investigation that has taken place the likelihood of finding any significant archaeology within the area immediately to the east and north-east of the Plant Room, and to the south of James Ward, does not seem great. To the west of the current site, such as within the grassed area in front of the Rosie Maternity Hospital, the likelihood of finding archaeology remains less. However, the examination of the land beyond this constructional fringe, such as on the opposite (south-east) side of Robinson Way, may prove to be quite different.





1967



1968

Figure 4. Air photographs showing extent of dumping of modern rubble and gravel over NE (car park) end of site

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## References

- British Geological Survey 2002 *Saffron Walden Solid & Drift 1:50000 Geological Map Sheet 205* Keyworth, Notts.
- Brudenell, M. 2004 *Land Adjacent to the Bell Language School, Cambridge: An Archaeological Evaluation*, Cambridge Archaeological Unit, Report no.646, October 2004
- Cra'ster, M. 1969 New Addenbrooke's Iron Age site, Long Road, Cambridge, *Proceedings of the Cambridge Antiquarian Society* 62, 21-28.
- Evans, C., Mackay, D. & Webley, L. 2004 *Excavations at Addenbrooke's Hospital: the Hutchison Site*, Cambridge Archaeological Unit, Report no. 609, April 2004
- Evans, C. & Mackay, D. 2005 *Addenbrooke's 2020, Cambridge Archaeological Evaluation Fieldwork*, Cambridge Archaeological Unit, Report no. 671, March 2005
- Hinman, M. 2001 Ritual activity at the foot of the Gog Magog Hills, Cambridge, in J.Bruck (ed.), *Bronze Age Landscapes: Tradition and Transformation*, 33-40, Oxford, Oxbow
- Timberlake, S. 2007 *The Addenbrooke's Link Road, Clay Farm, Trumpington, Cambridge: The 2007 Investigations, Site 3*, Cambridge Archaeological Unit Report no.803, December 2007