

487

CLIFTON GARAGE, YORK.

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REPORT ON AN ARCHAEOLOGICAL EVALUATION.
OSA REPORT No: OSA03EV04.

APPLICATIONS
30 MAY 2003
COMPLETED

MAY 2003.

OSA

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PLANNING
30 MAY 2003
DESIGN

Report Summary.

REPORT NO: OSA03EV04

SITE NAME: Clifton Garage, 84 Clifton, York

COUNTY: North Yorkshire

NATIONAL GRID REFERENCE: NGR SE 5948 5291

ON BEHALF OF: Mr. R Pulleyn

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TIMING: Fieldwork
23rd–28th April, 2003
Post excavation & report preparation
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PERIODS REPRESENTED: Romano-British, Medieval, Post-Medieval

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1.0 Abstract.

An archaeological evaluation was carried out by On-Site Archaeology at Clifton Garage, York, North Yorkshire on behalf of Mr. R Pulleyn in advance of the proposed residential development of the site. This work was conducted in order to fulfil an archaeological condition attached to the planning permission. The archaeological evaluation took place over a period of 5 days on site from the 23-29th April.

The evaluation consisted of the excavation of three trenches to determine the nature of archaeological deposits in the area. A number of archaeological features and deposits were uncovered, including ditches, pits and post-holes. Pottery, bone and assorted finds from the Romano-British to Post-Medieval periods were recovered.

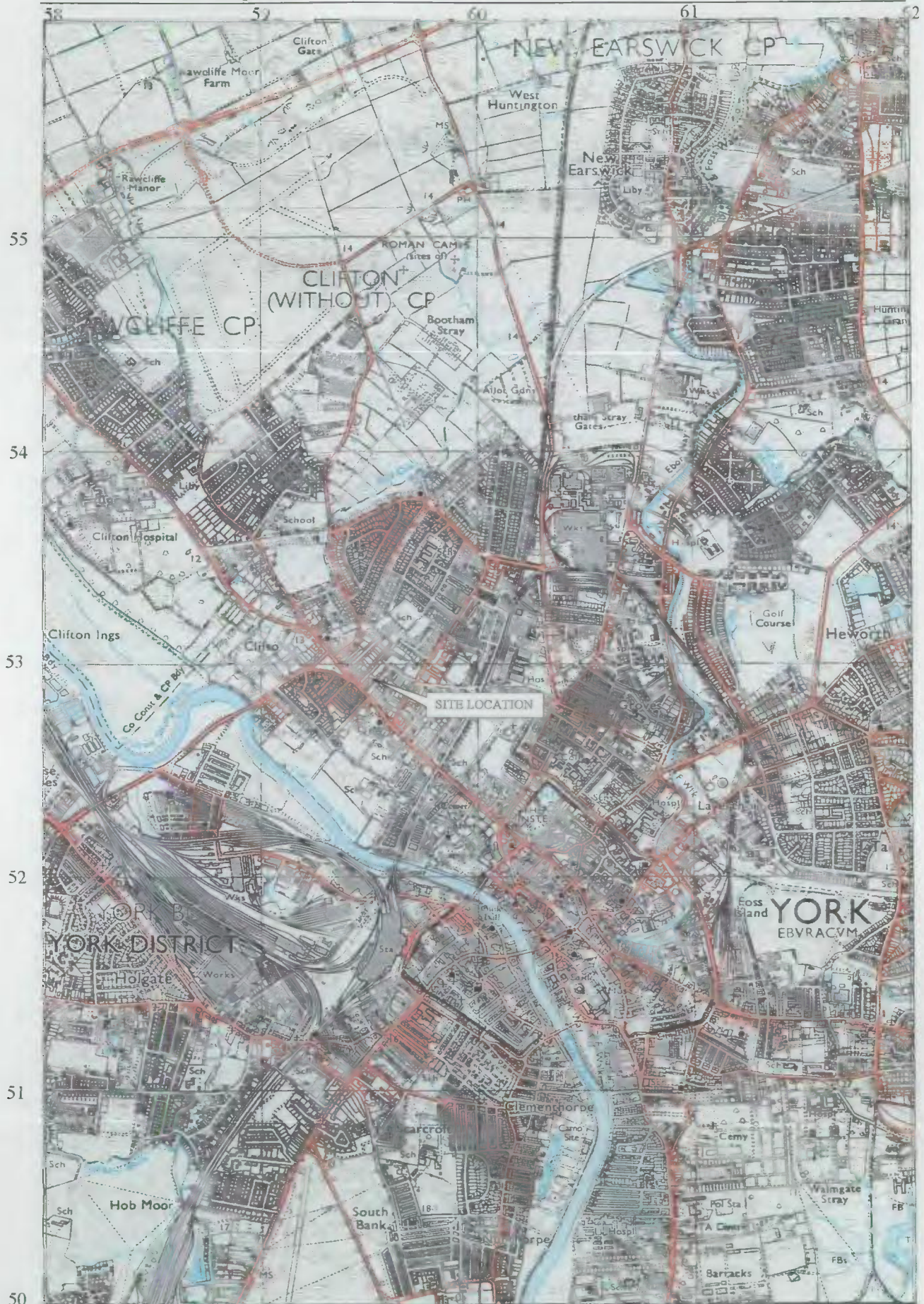


Figure 1. Site Location (NGR SE 5948 5291).

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2.0 Site Location, Geology, Topography and Land Use.

The site is located at NGR SE 5948 5291 near the historic core and village green of Clifton. It lies to the northeast of commercial properties fronting Clifton. It is bounded by residential properties to both sides, and commercial property and yards to the rear. The site is situated on mixed sand and clay glacial deposits, and is relatively level. The evaluated area comprises one large rectangular shaped plot, currently in use as a car and van hire depot. The site has a high point of 13.18mAOD at its northeastern margin, and the rest of the site is level at 13.14mAOD.

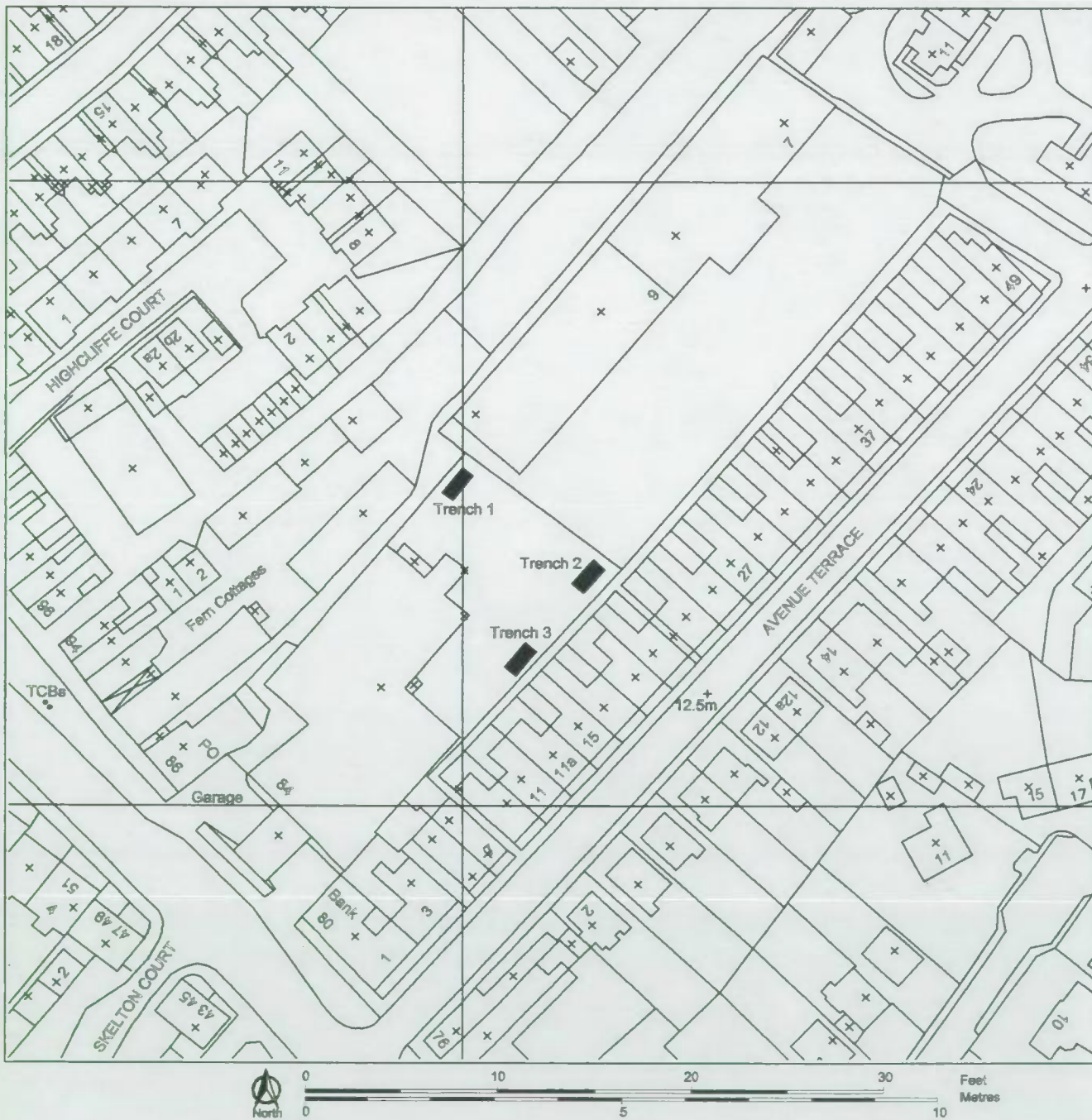


Figure 2. Detailed location map showing position of trenches 1 - 3. (Scale 1:100).

3.0 Archaeological Background.

The site at 84 Clifton is near the historic core and village green of Clifton. It lay along the route from the northwest gate of the Roman fortress, a route that has been maintained to the present day.

The route from the Fortress was utilized extensively in the Roman period. A number of cemeteries have been discovered on both sides of Clifton and Bootham dating to this period.

In the post-Roman period the area seems to have reverted to agricultural usage. At some point in the Medieval period the centre of Clifton was settled again, and it is likely that the land fronting the main road was divided into tenement plots.

Archaeological work at the Magnet site to the rear of 84 Clifton revealed archaeological deposits and features dating to the Romano-British and Medieval periods in four of five trenches.

4.0 Methodology.

The overburden was removed by a JCB fitted with a toothless bucket down to the level of the first visible archaeological horizon. The exposed surfaces were then cleaned by hand in order to detect any archaeological features revealed through textural or colour changes in the deposits. Once this had been completed, sections were hand excavated through the archaeological features that had been identified.

Standard *On-Site Archaeology* techniques were followed throughout the evaluation. This involved the completion of a context sheet for each deposit or cut encountered, along with plans and/or sections drawn to scale. Heights above Ordnance Datum (AOD) were calculated by taking levels from a Temporary Benchmark (TBM), which was then tied in with an existing Ordnance Survey benchmark. A photographic record of the deposits and features was also maintained.

5.0 Results.

5.1 Trench 1, (see fig 3 & plates 1 & 2).

Trench 1 measured 5m x 2m and was located in the northern corner of the site.

A natural geological deposit was seen at a depth of 0.8m below ground level (BGL) or 12.34mAOD in the base of this evaluation trench. It was made up of a mid brown mottled with light brown clay sand (1005). Sealing deposit (1005) was a mottled light grey and light orange brown sand deposit (1004), which was also a geological deposit. Deposit (1004) was seen at a depth of 0.65m BGL or 12.51mAOD.

A small feature was cut into the natural deposit (1004). This cut [1003] measured 0.28m by 0.26m and was 0.31m deep. It had vertical sides and a concave base. Within the feature was fill (1002), a light grey sand. Very small fragments of CBM were noted in this fill.

Sealing the fill [1002] was a mid grey brown silt sand deposit (1001). This trench-wide deposit was seen at a depth of 0.37m BGL or 12.73mAOD.

Sealing the entire trench was a light brown grey sand and gravel deposit (1000), which varied from 0.14m to 0.40m in depth. This formed the surface of the car park area across the site.

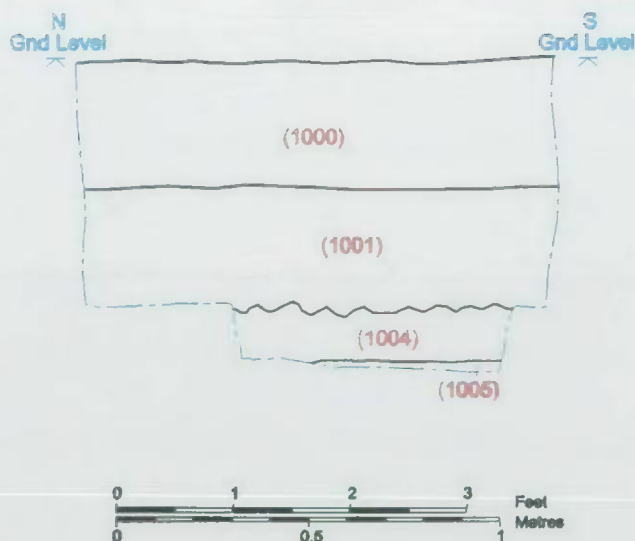


Figure 3. West facing section of Trench 1. (Scale 1:20).

5.2 Trench 2, (see figs. 4-6 & plates 3-5).

Trench 2 measured 5 x 2.5m and was located in the eastern corner of the site.

The geological natural deposit (2021) was seen at a depth of 0.79m BGL or 12.35mAOD. Deposit (2021) was a light red brown clay that was seen only in the southern half of the trench, as it had been truncated by deep cut features in the rest of the trench.

Overlying the natural deposit was a mid grey sand silt clay deposit (2013). Deposit (2013) measured over 1.6m by over 1m and was 0.12m thick and contained occasional sherds of medieval pottery. This deposit may have been held within a shallow cut [2014].

Deposit (2013) was cut by a wide linear feature [2012], which was aligned northwest to southeast. This feature measured over 1.35m in width by over 2.46m long. The base of the feature was not reached at a depth of 0.53m at 1.34m BGL or 11.95mAOD.

Within cut [2012] was a mid grey sand silt fill (2011), which contained medieval and post-medieval pottery, the base of which was not reached. A light grey clay deposit (2019) seen at the northeastern end of the trench may also be a fill of this large feature. Over fill (2011) was fill (2020), a mottled light grey and light orange brown clay. This fill was very similar to another possible fill of the feature (2018) that was over (2019).

The large feature was cut by an oval shaped cut [2007] in the centre of the evaluation trench. This feature measured 1.40m by 1.22m, and was 0.55m deep, with a base at 1.31m BGL or 11.83mAOD. Within the feature was a primary fill (2004), a mid brown yellow sand clay, and secondary fill (2003), a mid grey brown silt clay. These fills both contained medieval and early post-medieval pottery.

These fills were truncated by a large cut feature [2016], that measured over 2.4m by 1.8m, and was at least 0.42m deep. The base of the feature was not reached at 1.51m BGL at 11.67mAOD. Within the feature was fill (2015), a mid grey silt clay, and fill (2002), a mottled mid grey and orange brown silt clay. The latest fill again contained a mixture of medieval and post-medieval pottery, the latest of which was dated to the late 17th century. It also contained a small assemblage of clay pipe fragments, which suggested a slightly later, early 18th century date.

The large feature appeared to be cut to the northeast by a much smaller feature [2010]. The relationship between these two features was somewhat unclear and may be reversed. The cut measured over 0.77m by over 0.62m, with a depth of approximately 0.36m at 1.45m BGL or 11.73mAOD. A mid grey silt clay primary fill (2009) was overlain by a similar fill with a lot of CBM in it (2008).

Also cutting the large feature [2016] was a circular feature [2006] 0.35m in diameter and 0.49m deep. This cut had vertical sides and a concave base at 1.27m BGL or 11.87mAOD. Within [2006] was a mid grey brown silt clay fill (2005).

Sealing the cut features across the trench was deposit (2017), a dark grey clay silt deposit 0.33m thick. This was overlain by deposit (2001), a dark grey sand silt deposit 0.25-0.30m thick. Deposit (2001) was sealed by a light brown grey sand and gravel deposit (2000), 0.20m thick, which formed the surface of the car park.

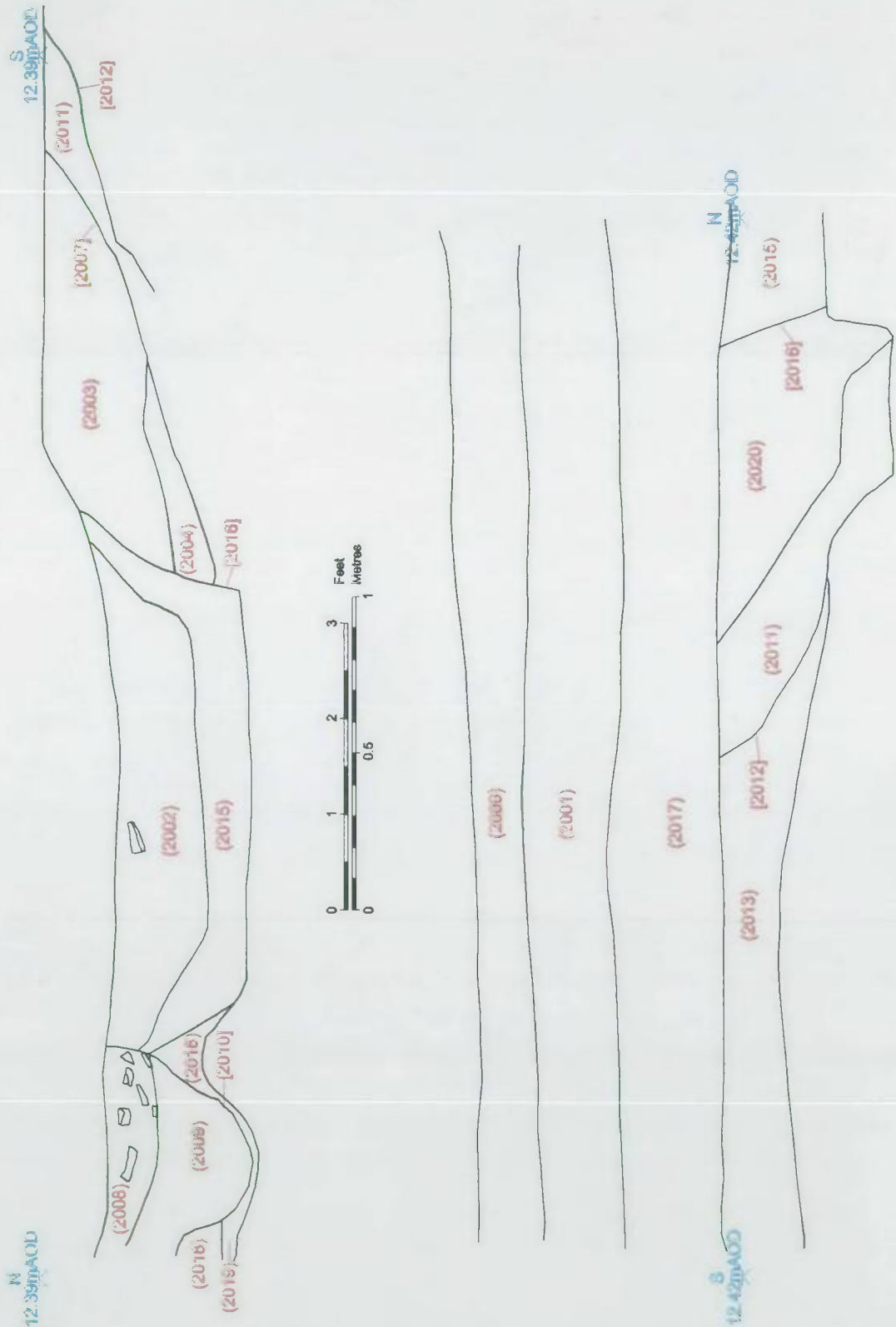


Figure 4. West facing section of Trench 2, showing pits [2016], [2007], [2010], & ditch [2012]. (Scale 1:20)
 Figure 5. East facing section of Trench 2, showing ditch [2012] & pit [2016]. (Scale 1:20)

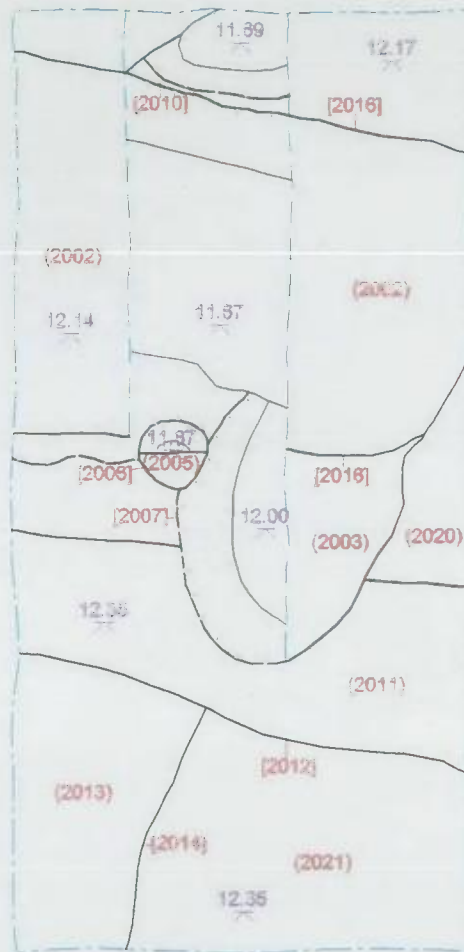


Figure 6. Trench 2, plan showing pits [2007], [2016], posthole [2006] & ditch [2012]. (Scale 1:40).

5.3 Trench 3, (see figs. 7-9 & plates 6 & 7).

Trench 3 measured 5.10 x 2.25m and was located approximately half way along the southeastern border of the site.

The geological natural deposit (3013) was seen in this trench at a depth of 1.01m BGL or 12.20m AOD. It was made up of a light red brown silt clay. This was cut by a wide feature [3012] measuring over 2.2m in length (the width of the trench) by over 4m in width, and 0.50m in depth. The base of the feature was not found at a depth of 1.53m BGL or 11.64m AOD. Within this cut was a red grey silt clay with lenses of sand silt fill (3007), containing Romano-British pottery, which was overlain by a dark grey brown silt clay deposit (3005). The interface between these deposits was diffuse, and they may be part of the same deposit. However, in addition to containing Romano-British material the later deposit also contained fragments of pottery dated to the medieval period. Together, the deposits/fills extended well beyond the side of cut [3012], measuring over 4.7m by over 2.2m.

Deposit (3005) was cut by two discrete rectangular cut features. Cut [3002] was rectangular, measuring 0.80m by 0.50m, and was 0.23m deep. Cut [3004] was also roughly rectangular, measuring 0.35m by 0.25m, with a depth of 0.11m. Cut [3002] held fill (3001), a dark grey clay silt, and cut [3004] held fill (3003), also a dark grey clay silt. Both of these fills contained medieval pottery.

The rectangular features were sealed by a trench-wide grey brown clay silt deposit (3011) that was 0.65m thick.

The deposit (3011) was cut by feature [3008], which measured 0.45m by over 0.20m, with a depth of over 0.60m. The sides of this feature were vertical and the base was not reached at a depth of 1.09m BGL or 12.12m AOD. It held fill (3006), which was dark grey mottled with yellow red sand silt and clay.

This feature was sealed by a trench-wide deposit (3010), a dark grey/black ash silt sand and clinker deposit 0.35m thick.

The depositional sequence was completed by deposit (3009), a pale yellow crushed limestone and gravel, 0.10-0.20m thick, that formed the car park surface.

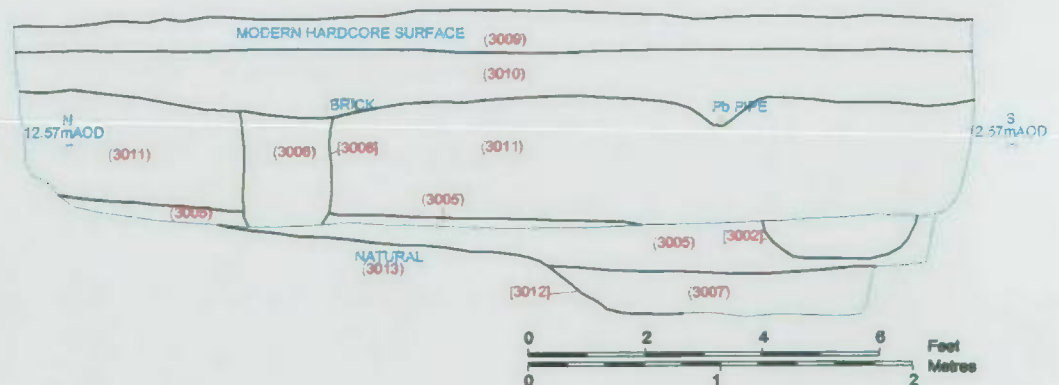


Figure 7. West facing section of Trench 3. (Scale 1:40).

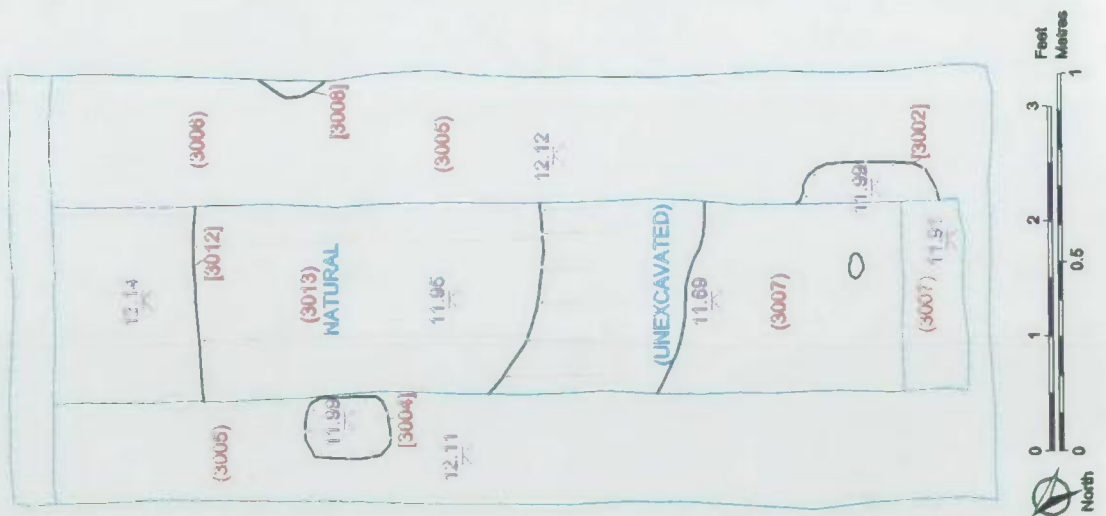
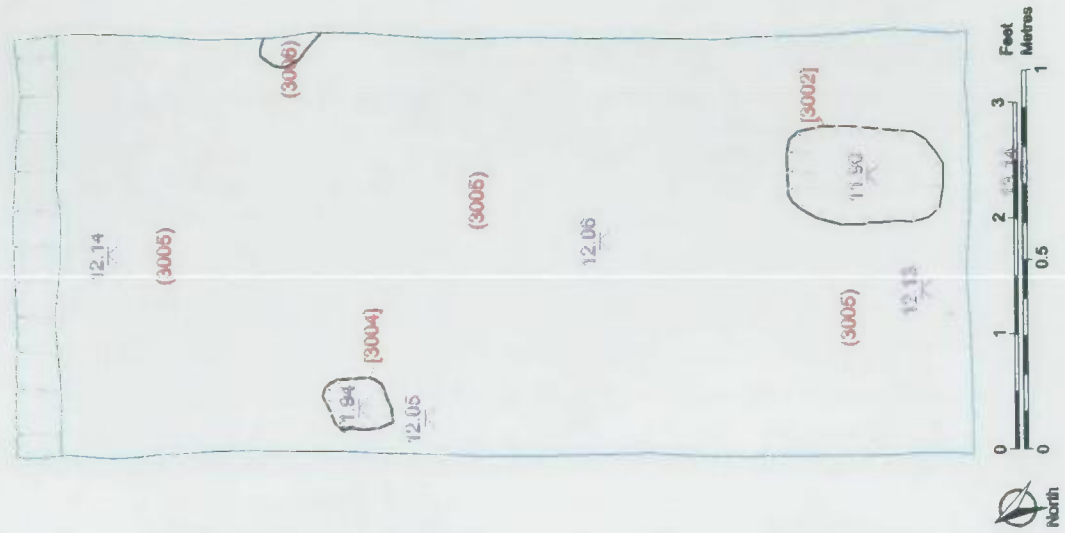


Figure 8. Trench 3, plan of pits [3002], [3004] & [3006]. (Scale 1:40).

Figure 9. Trench 3, plan of pits [3002], & [3004] & ditch [3012]. (Scale 1:40).

6.0 Discussion.

6.1 Trench 1.

Feature [1003] shows a clear post setting, but its function is unclear when seen in isolation. It held one scrap of unidentified Roman pot, which was small and possibly intrusive. The post-hole cannot be securely dated to this period therefore.

The interface between (1001) and (1004) shows clear undulations that are probably plough-marks. The pottery assemblage from deposit (1001) ranges in date from the Roman period to the late 14th Century. This range of pottery types is consistent with what might be found in a plough-soil horizon, where ploughing ends in the late medieval period.

The car park surface gravel (1000) is located immediately over the plough-soil, which suggests that post medieval make up deposits located elsewhere on the site were removed prior to the gravel being laid down.

6.2 Trench 2.

Deposit (2013) may just be a remnant of a plough-soil horizon that sits within a depression, and not within a shallow pit. It is very similar to the plough-soil horizon (1001) in Trench 1 and the pottery recovered from (2013) is of a consistent date range, containing residual Roman material and 11th and 12th century pottery.

The ditch [2012] is of uncertain date. Pottery recovered from its fills (2011) and (2020) is similar to that in the plough soil through which it cuts. There is a portion of residual Roman material and medieval pot from the 12th to 14th century in the assemblage. Also from fill (2011) was recovered one sherd datable to the 16th Century. That sherd is of a similar date to pottery recovered from pits that cut the ditch, so it is possible that it is intrusive from them. The nature of the fills in the respective features would also suggest a medieval rather than post medieval date for the ditch.

The other side of the ditch was not seen, and deposits (2018) and (2019) are likely to be fills of the same feature. If so, the ditch is at least 4.0m wide. Fill (2019) looks like alluvial clay which if a fill of the ditch indicates water movement and deposition of fine silt over time. This may suggest a different function from a simple boundary ditch.

Pits [2007] and [2010] are probably pits for domestic refuse. Animal bone and pottery dating mainly from the 16th Century was recovered from these pits. The large feature [2016] is most likely also a refuse pit whose original purpose is unclear, perhaps a clay quarry, that was eventually filled with refuse in the late 17th to early 18th century. This type of pit sequence is the type of activity that would be expected at the rear of property strips fronting Clifton Road.

Feature [2006], which cut the large post medieval pit [2016], is quite clearly a post-hole of uncertain function. No datable finds were recovered from its fill, but stratigraphically it is unlikely to date to before the 18th century.

The overburden in this trench clearly consists of late post-medieval make up (possibly garden soil) (2017), overlain by 19-20th century garden soil (2001) and sealed by the modern car park surface (2000).

6.3 Trench 3.

The wide linear feature [3012] is a possible boundary ditch related to road. Finds from its fill (3007) suggest a 2nd or 3rd century date of deposition. These finds were heavily abraded which suggests that they were in an exposed soil horizon, like an open ditch. Deposit (3005), which appeared to be similar to (3007), but extended beyond the cut for the ditch, also held finds dating to this period, along with some from the medieval period. The medieval finds are of a similar date range to the finds in plough-soils in the other trenches.

These rectangular pits [3004] and [3002] may be post-holes for a structure. Finds from the pits date them from the late 12th to mid 13th Century. Activity during this period suggests that material from the plough-soil horizons of similar date may be disturbed occupation debris rather than manuring activity.

Probable plough-soil/horticultural soil (3011) is most likely to date later than the 12th century, with finds of a similar date and character as those from the other plough-soil horizons on the site.

Pit [3008] was probably 19th or 20th century in date, although no finds were retrieved from the fill. This was overlain by a demolition rubble make-up and the modern car park gravel surface.

7.0 Conclusions.

Activity on the site appears to have begun in the 2nd/3rd century AD with the wide possible ditch feature [3012]. A post-hole in Trench 1 [1003] may also be contemporary with the ditch. The nature of the activity is unclear from such limited evidence, and the amount of residual Roman finds on the site casts some doubt on their true date.

Deposit (3005) appears to have been water lain and may represent a long period of inactivity on the site. A higher proportion of early medieval wares in this deposit and others with Roman material may suggest that the flooding period lasted into the post-conquest period.

Post-holes [3002] and [3004] in Trench 3 indicate a structure that was demolished probably by the 13th century. Much of the similarly dated material from the plough-soil horizons may have been occupation debris relating to this structure. The ploughing activity appears to have ended in the late medieval period.

Ditch [2012] is of uncertain date. It may have been contemporary with the late medieval plough-soil, and certainly post-dates the 12th century ploughsoil horizon (2013). It did however contain one sherd of 16th century date, suggesting a much later date.

The post-medieval period is represented by a pit sequence dating through the 16th and 17th century. This is the sort of activity that would have been common to the rear of properties fronting Clifton Road. The pits in question appear to be for domestic refuse disposal, although one was of a size that might suggest a different original use, such as quarrying.

The archaeological work indicated three distinct periods of activity on the development site. The first period of activity possibly in the 2nd/3rd century AD, the second in the 12th or 13th century, and the third from the 16th century onwards. Any decision regarding the significance of the remains encountered on this site lies with the City of York Council, although it is the opinion of *On-site Archaeology Ltd* that the remains are not sufficiently important as to require *in-situ* preservation and therefore to preclude development. However a suitable programme of archaeological mitigation would need to be undertaken. This mitigation may take the form of sensitive design of the foundations to limit disturbance to the remains, and may or may not entail the need for further fieldwork to be undertaken, either before or during the development. This will be dependant upon the design details of the foundations and services.

8.0 Appendix 1 ~ List of Contexts.

Context	Depth	Dimensions	Description	Interpretation
Trench 1				
1000	0.14-0.40m	Trench	Lt. Brown grey sand gravel	Hardcore surface
1001	0.34-0.42m	Trench	Mid grey brown silt sand	Plough-soil?
1002	0.31m	0.28 x 0.26m	Lt grey sand	Fill of post-hole
1003	0.31m	0.28 x 0.26m	Vertical sided concave base	Cut of post-hole
1004	0.15m	Trench	Mottled lt. grey & lt. orange brown sand	Natural deposit
1005	?	Trench	Mottled mid brown & lt. Brown clay sand	Natural deposit
Trench 2				
2000	0.20m	Trench	Lt. Brown grey sand gravel	Hardcore surface
2001	0.25-0.30m	Trench	Dark grey sand silt	19 th Cent garden soil
2002	0.30m	1.63m x >1.2m	Mid grey & orange brown mottles silt clay	Top fill of post-medieval pit
2003	0.35m	>1.4m x 1.22m	Mid grey brown silt clay	Top fill of pit
2004	0.13m	>0.75m x ?	Mid brown yellow	Primary pit fill
2005	0.49m	0.35m Diam.	Mid grey brown silt clay	Fill of post-hole
2006	0.49m	0.35m Diam.	Vertical sided, concave base	Cut of post-hole
2007	0.55m	>1.4m x 1.22m	Mod sided, concave base	Cut of pit
2008	0.15m	0.75m x 0.63m	Mid grey silt clay	Top fill of pit
2009	0.27m?	>0.4m x >0.6m	Mid grey silt clay	Primary fill of pit
2010	0.36m?	>0.77 x 0.62m	Steep sides, concave base	Cut of small pit
2011	>0.53m	>2.46m x >1.35m	Mid grey sand clay silt	Fill of Medieval ditch
2012	>0.53m	>2.46m x >1.35m	Stepped moderate sides, base not reached	Cut of Medieval ditch
2013	0.12m	>1.6m x >1.0m	Mid brown grey clay silt	Fill of shallow pit or remnant of plough-soil horizon
2014	0.12m	>1.6m x >1.0m	Shallow sides, sloping base	Possible cut for shallow pit
2015	>0.19m	>2.40m x 1.8m	Mid grey silt clay	Fill of pit
2016	>0.40m	>2.40m x 1.8m	Steep sides, base not reached	Cut of post-med pit
2017	0.33m	Trench	Dark grey clay silt	Plough-soil horizon?
2018	>0.20m	>0.80m	Lt. Grey & orange brown mottles	Possible fill of medieval ditch
2019	>0.10m	?	Lt. Grey clay	Poss. alluvial clay, within med ditch?
2020	>0.52m	>2.6m x >1.06m	Mottled lt. Grey & lt. Orange brown clay	Final fill of Medieval ditch
2021	N/A	>1.4m x >2.4m	Lt red brown clay	Natural deposit
Trench 3				
3000	N/A	N/A	N/A	Machining finds
3001	0.23m	0.80m x 0.50m	Dark grey clay silt	Fill of rectangular pit
3002	0.23m	0.80m x 0.50m	Steep sides, flat base	Cut of rectangular pit
3003	0.11m	0.35m x 0.25m	Dark grey clay silt	Fill of rectangular pit
3004	0.11m	0.35m x 0.25m	Steep sides, flat base	Cut of rectangular pit
3005	0.30m	>4m x >2.2m	Dark grey brown silt clay	Final fill of large ditch?
3006	0.60m	0.45m x >0.2m	Dk grey & yellow red mottles sand silt & clay	Fill of pit
3007	0.20m	>2.4m x >1m	Red grey silt clay	Fill of large ditch?
3008	0.60m	0.45m x >0.2m	Vertical sides, base not reached	Cut of modern pit
3009	0.10-0.20m	Trench	Pale yellow crushed limestone & gravel	Hardcore surface
3010	0.35m	Trench	Dk grey/ black ashy silt sand & clinker	Modern make-up deposit
3011	0.65m	Trench	Grey brown clay silt	Garden soil
3012	>0.50m	>4m x >2.2m	Shallow side, base not reached	Cut of possible large ditch
3013	N/A	Trench	Lt. Red brown	Natural deposit

9.0 Appendix 2 ~ Archive Index.

9.1 *Drawing Register.*

Drawing No.	Contexts	Scale	Sheet Size	Drawn By & Date
1	Plan Trench 1	1:20	A3	DS 23/4/03
2	Section Trench 1	1:10	A3	DS 23/4/03
3	Section Pits Trench 2	1:10	A3	DS 25/4/03
4	Plan Trench 3 [3002] [3004]	1:20	A3	GB 25/4/03
5	Plan Trench 2 [2006][2007][2016]	1:20	A3	FP 25/4/03
6	Plan Trench 3 [3012][3002][3004]	1:20	A3	GB 25/4/03
7	Section Trench 3	1:10	A3	GB 25/4/03
8	Section Trench 2	1:10	A3	DS 28/4/03
9	Plan Trench 2 [2012]	1:20	A3	DS 28/4/03

9.2 *Sample Register.*

Sample No.	Context Number	Sample Type	Comments	Volume
1	3001	GBA	Fill of possible post-hole	1 Tub
2	3003	GBA	Fill of possible post-hole	1 Tub
3	2011	GBA	Fill of ditch	1 Tub
4	3007	GBA	Fill of ditch	1 Tub

10.0 Appendix 3 ~ Finds Assessment.

Alan Vince.

10.1 *Summary.*

Seventy-one finds from the archaeological evaluation carried out at Clifton Garage, York, were submitted for identification and assessment. They include a collection of abraded Romano-British pottery, medieval pottery, probably dating from the later 12th century through to the later medieval period, post-medieval pottery of 16th and 17th century date, post-medieval window glass and undatable copper alloy and iron artefacts.

10.2 *Description.*

10.2.1 *Copper Alloy.*

A small scrap of sheet copper was recovered from context 2011. Material of Roman and medieval date was recovered from the same deposit and it is not possible to determine the date of this scrap.

10.2.2 *Glass.*

A fragment of light green coloured window glass was recovered from context 2003. It is likely to be of later 16th or 17th-century date.

10.2.3 *Iron.*

A corroded iron lump was recovered from context 2011. It cannot be assessed until x-radiography has been carried out.

10.2.4 *Pottery.*

Roman pottery:

Thirty nine sherds of Roman pottery were recovered. Most of these are definitely residual in medieval contexts. The exceptions being an unidentified scrap from a post-hole (1002) and a collection from context 3007. However, even the latter assemblage is small and abraded and it is quite possible that all of the Roman pot is in secondary contexts. The pottery is all very abraded, which is consistent with a residual context.

Most of the sherds found are oxidized body sherds, probably of Eboracum ware. Greywares, of unidentified types, Nene Valley colour-coated wares, Dressel 20 amphora sherds and single sherds of Dorset BB1 and Central Gaulish Samian ware complete the assemblage. The lack of definite 1st-century material might be a reflection on the poor condition of the sherds but the lack of Crambeck grey and white wares and of calcite tempered wares is conclusive evidence that the collection does not extend into the 4th century.

There is little evidence for the form of the vessels, although many of the Eboracum ware sherds seem to come from flacons and the Nene Valley colour coated sherds are all from beakers. Thus, there appears to be a bias towards vessels used in drinking rather than dining or food preparation. However, in a group of less than 40 sherds no strong conclusions can be drawn.

Medieval pottery.

Forty four sherds of medieval pottery were recovered (Table 1). The earliest definite evidence for activity dates to the later 12th century (a splash glazed sherd from context 2013) although it is possible that some of the York Gritty ware sherds present may be of later 11th to mid 12th century date (Table 1. YG). There is pottery of late 12th/early 13th-century (York glazed ware, Sandy redware), 13th/14th (Brandsby-type ware) and late 14th/15th century date (Humber ware and Walmgate ware) present but all of the assemblages appear to be mixed.

The collection contains no vessel types that suggest anything other than a mixed range of domestic activities.

Table 1.

Context	BRANDBY	HUM	MEDX	MISC	SANDY RED	WALMGATE	YG	YORK	YSPL	Grand Total
1001	2		1			1	1	4		9
2002	3	5					1	2		11
2003	1	5					1	1		8
2004		1						1		2
2009								1		1
2011		1					3	1		5
2013					1		1		1	3
3000		3		1			1			5
Grand Total	6	15	1	1	1	1	8	10	1	44

Post-medieval pottery.

Fifteen sherds of post-medieval pottery were present (Table 2). They include 16th-century wares (Cistercian ware, Ryedale ware) as well as undated post-medieval wares (PMLOC) and late 17th century finewares (Staffordshire slipware and tin-glazed earthenware).

Table 2.

Context	CSTN	PMLOC	RYEDALE	STSL	TGW	Grand Total
2002	1		1	3	1	6
2003	2		4			6
2004			1			1
2008	1					1
2011		1				1
Grand Total	4	1	6	3	1	15

The collection contains no vessel types that suggest anything other than a mixed range of domestic activities.

10.3 Assessment.

10.3.1 Dating and interpretation of stratigraphy.

Trench 1.

The earliest stratified pottery from this trench is a tiny scrap from posthole fill, 1002. It is probably of Roman date but is so small that it gives no real indication of the date of backfilling of the posthole.

The silt deposit that overlies this feature produced a mixed pottery assemblage ranging in date from the Roman period to the late 14th century. This is interpreted as a medieval ploughsoil and if so the sherds may have been brought onto the site with night soil used to manure the fields. The latest sherd present is of late medieval date, suggesting that ploughing may have ceased during the late medieval period.

Trench 2.

The earliest pottery from this trench is of later 12th century or later date and comes from context 2013, interpreted as being a ploughsoil. This is consistent with the evidence from Trench 1.

Pottery was also recovered from feature 2012, which cuts through this ploughsoil. The pottery found in the filling of this feature is mainly similar to that from the ploughsoils but also includes early 16th-century sherds. Similar sherds were also recovered from the rubbish pit, 2007 (fills 2004 and 2003) which cut through the backfilled ditch. Feature 2016, which cut this pit, contains sherds, the latest of which were of late 17th century date. The pottery from pit 2010 would support an early 16th century for its backfill and suggest that it was actually cut by feature 2016 rather than *vice versa*.

Trench 3.

The earliest pottery from Trench 3 consists of a small group of 2nd/3rd century pottery from ditch 3012 (fill 3007). The silty clay deposit which overlay the ditch (3005) contains a mixed assemblage of similar date and character to those found in the Trench 1 and 2 ploughsoils although it contains a higher quantity of residual Roman pottery.

Deposit 3005 was cut by three pits, two of which produced pottery (fills 3001 and 3003). The latest sherds in these pits are of late 12th to mid 13th century date. They are interpreted as the postholes of a structure. If so, then the potsherds would indicate that the structure was demolished at this date or later. However, if so then the pottery from 3005 must be intrusive.

Most of the finds recorded as context 3000 probably come from the plough soil, 3011, which overlay these pits. The ploughing therefore cannot have begun until the later 12th century and most of the finds are of similar date and character to those found in the plough soils in Trenches 1 and 2.

In addition, however, there is a floor tile from this context, which appears to be of late 15th, or 16th-century date, to judge solely by its design. This tile would probably belong more happily in the post-medieval phase of activity.

10.4 Overall assessment.

Table 3.

Phase	Context	2/3	11.2	12.2	13.2	14.2	15.2	16.1	16.2	17.2	18.2	nd	Total
1 roman ditch fill	3007	4											4
2 post-roman silt	3005	31	4	1	1	1					1		39
3 med occupation	3001	1		2									3
	3003	3	1										4
4 ploughsoil	1001	2	1	5	2	1							11
	2013	3	1	2									6
	3000		1			3	1					1	6
5 ditch backfill	2011	7	3	1		1		1				2	15
	2020	2											2
6 pmed pits	2002		1	2	3	5		2		4			17
	2003		1	1	1	5		6	1				15
	2004	1		1		1		1					4
	2008							1					1
	2009	1		1									2
Grand Total		55	13	16	7	17	1	11	1	4	1	3	129

The Roman pottery is mainly extremely abraded and is consistent with it having been in a soil horizon exposed to weathering. The sherds from context 3007 indicate that the pottery probably originated on the site rather than being brought onto the site during the medieval period. It may be significant that the highest quantity of York Gritty sherds come from contexts with high Roman pottery. If so then this phase of low activity/flooding may have extended into the post-Conquest period.

The sequence of activity in Trench 3 suggests that there may have been a phase of occupation on the site in the late 12th century or later. If so, then the pottery of this date found in the ploughsoils across the site may be disturbed occupation debris rather than manuring. It is difficult to see any sharp break in the ceramic sequence which might indicate when the site went out of use and reverted to agriculture. Excluding context 3000, there is only one sherd of late medieval pottery from the ploughsoil and this, like the sherds from context 3005, may be intrusive. However, there is late medieval pottery from the rubbish pit fills, such as 2002 and 2003 although there seems no doubt that they were backfilled in the early 16th century.

There are therefore several distinct phases in the sites history revealed through excavation but because of the small size of the pottery collection and the fact that some sherds are clearly intrusive into earlier deposits it is not possible to adequately correlate these phases with the pottery finds, and thus provide a chronology for them. It seems most likely that the site was sparsely occupied, if at all until the late 12th century and that this occupation may have continued into the later 13th/early 14th century. However, the date of the ploughing episode is uncertain. The presence of late medieval potsherds in the early post-medieval pit fills and their paucity in the ploughsoil might suggest that the ploughing ceased before the end of the later medieval period. It was certainly over before the early 16th century.

The pottery from this evaluation therefore indicates that an interesting sequence of activity took place on the site but fails to securely date it. This failure could be rectified by further excavation.

Appendix A: List of submitted finds.

Context	class	cname	date	subfabric	Form	Nosh	NoV	Description	Part	REFNO
1001	mpot	BRANDSBY	13.2		JUG	1	1	CUGL	BS	
1001	mpot	BRANDSBY	13.2		JUG	1	1	OVAL HANDLE;FOUR VERT GROOVES DOWN BACK:CUGL	BS	
1001	mpot	MEDX	12.2	ROUNDE D RED FE;S RQ;SST> 2.0MM	JUG	1	1	THUMBED BASE:CUGL SPOTS	B	
1001	mpot	WALMGATE	14.2		JUG	1	1	CUGL	BS	
1001	mpot	YG	11.2		JAR	1	1		BS	
1001	mpot	YORK	12.2		JAR	1	1		BS	
1001	mpot	YORK	12.2		JAR	1	1	EVERTED FLAT-TOPPED RIM	BS	
1001	mpot	YORK	12.2		JUG	1	1	CUGL;VERT COMBED LINES	BS	
1001	mpot	YORK	12.2		JUG	1	1		BS	
2002	mpot	BRANDSBY	13.2	BLACK INT	CIST	1	1	BUNG HOLE:EXT PLAIN GL	BS	
2002	mpot	BRANDSBY	13.2		CIST	1	1	STRAP HANDLE TWO THUMB IMPRESSIONS AT B/H JOIN:PLAIN EXT GL	BS	
2002	mpot	BRANDSBY	13.2		JUG	1	1	CUGL	BS	
2002	ppot	CSTN	16.1		CUP	1	1	APPLIED WHITE LINES: ROLLER STAMPED	BS	
2002	mpot	HUM	14.2		JAR	1	1	INT AND EXT PLAIN GL	BS	
2002	mpot	HUM	14.2			1	1	UNGLAZED	BS	
2002	mpot	HUM	14.2	BLACK INT	JUG/JAR	1	1		BS	
2002	mpot	HUM	14.2		BOWL	2	2		BS	
2002	ppot	RYEDALE	16.1		BOWL	1	1	INT CUGL	BS	
2002	ppot	STSL	17.2		POSS	3	3		BS	
2002	ppot	TGW	17.2			1	1	BLUE DEC	BS	
2002	mpot	YG	11.2		JAR	1	1		BS	
2002	mpot	YORK	12.2		JAR	1	1		BS	
2002	mpot	YORK	12.2		JAR	1	1		BS	
2003	PMGL	PMGL	16.2	LTGR	WIND	1	1		BS	3
2003	mpot	BRANDSBY	13.2		JUG	1	1	CUGL	BS	
2003	ppot	CSTN	16.1		CUP	1	1		BS	
2003	ppot	CSTN	16.1		CUP	1	1		BS	
2003	mpot	HUM	14.2		CAUL	1	1	DUTR-STYLE FOOT:EXT BROWN SLIP:INT PLAIN GL	BS	
2003	mpot	HUM	14.2		JUG/JAR	1	1	EXT BROWN SLIP	BS	

Context	class	cname	date	subfabric	Form	Nosh	NoV	Description	Part	REFNO
2003	mpot	HUM	14.2		JUG/JAR	1	1	HORIZ GROOVES ON SHOULDER;WHITE SLIPPED EXT	BS	
2003	mpot	HUM	14.2		JUG/JAR	1	1	UNGLAZED	BS	
2003	mpot	HUM	14.2		JUG/JAR	1	1		BS	
2003	ppot	RYEDALE	16.1			1	1	INT CUGL;OVAL SECTIONED HANDLE	BS	
2003	ppot	RYEDALE	16.1		BOWL	3	1	INT PLAIN GL	BS	
2003	mpot	YG	11.2		JAR	1	1		R	
2003	mpot	YORK	12.2		JUG	1	1	CUGL	BS	
2004	mpot	HUM	14.2		JUG/JAR	1	1	WHITE SLIPPED EXT;CUGL SPOTS	B	
2004	ppot	RYEDALE	16.1		BOWL	1	1		BS	
2004	mpot	YORK	12.2		JAR	1	1		BS	
2008	ppot	CSTN	16.1	WRENT HORPE?	CUP	1	1	CLUSTER OF WHITE BLOBS ON GIRTH	BS	
2009	mpot	YORK	12.2		JUG	1	1	CUGL	BS	
2011	COPP	COPP	nd		SHEET	1	1	THIN SHEET;ONE HOLE AND ONE ORIGINAL EDGE;BLACK COATING ON BOTH SIDES	BS	2
2011	IRON	IRON	nd		OBJECT	1	1	POSSIBLY A TRAPEZOIDAL BUCKLE	BS	1
2011	mpot	HUM	14.2		JUG/JAR	1	1	WHITE SLIPPED EXT	BS	
2011	ppot	PMLOC	16.1		BOWL	1	1	INT PLAIN GL	BS	
2011	mpot	YG	11.2		JAR	1	1		BS	
2011	mpot	YG	11.2		JAR	1	1		BS	
2011	mpot	YG	11.2		JAR	1	1		BS	
2011	mpot	YORK	12.2		JUG	1	1		R	
2013	mpot	YG	11.2		JAR	1	1		BS	
2013	mpot	YSPL	12.2	OFFWHI TE	JUG	1	1		BS	
3000	mpot	HUM	14.2		JUG/JAR	2	2		BS	
3000	mpot	HUM	14.2		JUG	1	1		BS	
3000	mpot	MISC	nd	LOWISH IRON;FIN E Q SAND	JAR	1	1	WHEELTHROWN	BS	
3000	mpot	YG	11.2	REDDIS H BODY;R ED SST SAND;C ARB	CHERT	JAR	1	1		BS
3001	mpot	YORK	12.2		JUG	2	2		BS	
3003	Mpot	YG	11.2		JAR	1	1		BS	
3005	mpot	BRANDSBY	13.2		JUG	1	1		BS	
3005	mpot	HUM	14.2		JUG/JAR	1	1		BS	

Context	class	cname	date	subfabric	Form	Nosh	NoV	Description	Part	REFNO
3005	emod	LPMED	18.2		FLP	1	1		BS	
3005	mpot	NLFS	11.2		JAR	1	1		BS	
3005	mpot	YG	11.2		JAR	1	1		BS	
3005	mpot	YG	11.2		JAR	1	1		BS	
3005	mpot	YG	11.2		JAR	1	1		R	

11.0 Appendix 4 ~ Ceramic Building Material Assessment.

Graham Bruce.

The investigation produced an assemblage of ceramic building material, totalling 122 fragments, contained within two plastic tubs. This has been quantified by fragment count, per context with each fragment being examined to ascertain its form and identify any unusual characteristics. The quantification employs a simple classification of fragment size: small (< 50mm), medium (50mm – 150mm) and large (> 150mm).

The small size of the assemblage and its fairly homogenous character means that it is of little use for refining the dating of the stratigraphic sequence, which has principally been derived from pottery.

The most frequently represented identified material is plain flat roof tile (42 fragments = 34%), which may have originally been either nib or peg attached. A further three fragments of roof tile included peg holes, representing the only attachment methods present in the entire assemblage. These could be of either medieval or post-medieval date and the pottery assemblage for the site indicates activity during both these periods. One fragment of peg tile included an indistinct animal paw print (its size would suggest a dog) and another had two deep finger marks on one face. None of the small quantity of brick fragments included significant dimensions to assist in their dating.

A fragment of floor tile decorated with a line-impressed design over a thinly applied white slip was found in context 3000 (unstratified, Trench 3). The fabric is unusual and it is likely to be of late medieval date and may be a Flemish import. The source could be confirmed by chemical analysis, by comparison with a large body of chemical data collected from various sites in England and Flanders.

A small quantity of Roman (or possibly Roman) fragments were recovered (31 fragments) several of which were noticeably more abraded than the clearly post-Roman material found on the site. The majority of this was in the form of small unidentifiable scraps, which have been tentatively assigned to the Roman period on the basis of similarity in fabric to the Romano-British pottery and the clearly Roman tile. Of the identifiable fragments the majority are roof tile, in the form of fragments of tegulae or imbrex. One fragment of possible tegula (which may alternatively be a fragment of box flue tile) included faint lines forming a rough right angle towards one corner. This may be the remains of a stamp, but it is too indistinct to read clearly. Alternatively this may be graffiti, a maker's mark, or simply scoured keying if this was in fact box flue rather than tegula.

Almost half the assemblage (58 fragments) is in the form of small, unidentified fragments, whilst only 3 large fragments were recovered. Assemblages containing a high proportion of small fragments tend to be indicative of material, which has been retrieved from reworked deposits and secondary dumping, rather than from primary demolition, collapse or structural sequences. This is confirmed by the high degree of abrasion exhibited by many of the

fragments. With the exceptions of contexts (2002) and (2003), (which each produced 31 fragments) no context generated more than 16 pieces of CBM and in a number of instances contexts contained only a single fragment.

No further work is required on the majority of this assemblage at this stage. However, it should be retained within the site archive to allow the potential comparison with material retrieved from other recently excavated sites, and any future investigations within the immediate vicinity. One find worthy of further study is the floor tile, which should be illustrated. Scientific analysis of the fabric would probably identify its source.

Costing

Illustration of floor tile £15 plus VAT
 Chemical analysis of floor tile (including report) £25 plus VAT
 Total £40 plus VAT

Context	Fragment No. (by size)	Description/Comment
1001	1 (small)	Tegula
2002	1 (med)	Peg tile (round hole)
	2 (large)	Plain
	12 (med)	Plain
	7 (small)	Plain
	2 (med)	Brick
	7 (small)	Unid.
2003	2 (med)	Peg tile (1 round, 1 square hole) 1 includes indistinct animal paw print
	11 (med)	Plain (1 has two fingerprints)
	2 (small)	Plain
	6 (med)	Brick
	10 (small)	Unid.
2004	1 (med)	Plain
	4 (small)	Unid.
2005	1 (small)	Plain
2008	2 (med)	Plain
	6 (small)	Unid.
2009	1 (small)	Unid. (but of a probably Roman fabric)
2011	1 (med)	Plain
	1 (med)	Tegula
	11 (small)	Unid. (but of a probably Roman fabric)
2013	1 (med)	Plain
	2 (small)	Unid.
2020	2 (small)	Unid. (but of a probably Roman fabric)
3000	1 (med)	Floor tile with line impressed design. Poss Flemish import
3003	1 (small)	Unid.
3005	12 (small)	Unid. (but of a probably Roman fabric)
	2 (med)	Imbrex ? (abraded), flat roof tile (med)
	1 (large)	Tegula or box tile? (abraded) Flange has been roughly broken off. Poorly defined stamp/keying/graffiti on one face.
	1 (small)	Plain
3007	1 (large)	Tegula
	1 (med)	Imbrex ? (abraded)

1 (med)	Plain
2 (small)	Unid.

12.0 Appendix 5 ~ Clay Pipe Assessment Report.

Graham Bruce.

12.1 *Summary.*

The investigation produced eight fragments of clay tobacco pipe, all from context (2002). One of these fragments is a near complete bowl, of a type produced in the early to mid 18th century. The other fragments are all lengths of stem, with a range of bore diameters. This deposit also contained a range of sherds of pottery dating from the medieval and post-medieval periods, the latest of which were assigned a late 17th century date.

12.2 *Bibliography.*

Lawrence S, (1979), *York Pipes and their Makers*. In: *The Archaeology of the Clay Tobacco Pipe. I. The Midlands and Eastern England*. (Ed. P. Davey), British Archaeological Reports 63.

13.0 Appendix 6 ~ Zooarchaeological Remains Assessment Report.

Tania Kausmally.

13.1 Summary.

A small quantity of animal remains were recovered during an evaluation carried out by *On-Site-Archaeology* at Clifton Garage in York, North Yorkshire. The remains revealed the presence of domesticated species such as cow, horse, pig, sheep/goat and dog. The majority of the elements were of extremities suggesting that they may be remains of butchery as well as general domestic refuse, though no butchery marks were observed. Only one smaller long bone splinter, which could not be identified to species, had been exposed to high temperatures. The majority of the skeletal elements were fully fused. A minimum of two horses were recovered and aged to 2-3 years and 3-11 years. One of three medium-sized dog exhibited healed fractures to the proximal phalanges and had an estimated age of minimum 8 months.

Keywords: Clifton Garage, York, North Yorkshire, Medieval, zooarchaeological remains

13.2 Introduction.

A small number of animal bones were recovered from Clifton Garage in York during an evaluation carried out by *On-Site-Archaeology* during spring 2003. The site is of post medieval and medieval date and revealed a number of features within the trial trenches excavated.

13.3 Method.

The animal remains were washed and identified by *On-Site-Archaeology*. Each element was identified to species where possible. Observations were made on stage of fusion, dental eruption/attrition, modifications, butchery, sex criteria and pathology. All the data was entered into an Excel spread sheet and analysed. The Minimum Number of Individuals (MNI) was calculated on the basis of each context being an entirely separate event, apart from (3005) and (3007) which are spits from the same context.

13.4 Results.

The results of the animal bones have been displayed in table 1 below. The general preservation of the bones was good but with a high degree of fragmentation. None of the bones appear to have been exposed to any surface weathering and none of the elements exhibited any butchery marks or gnawing. Only one long bone splinter not identified to species had a white/black colour consistent with burning at temperatures > 550°C (Lyman 1994,386).

Out of the limited 68 elements present 80% could be identified to actual species. The animal remains were mainly from domesticated species of cow, horse, pig, sheep/goat and dog. The MNI has been summarised in table 2 below. 43% of the identified elements derived from context (2003), which contained mainly remains of horse skull and teeth and two elements of

sheep/goat and cow. It was only possible in a few instances to separate elements into sheep or goat, but when possible the remains were identified to sheep. The majority of the elements were of the extremities of the animals suggesting a pattern of butchery, though the assemblage for each period is so limited that it is not possible to conclude any specific activities in relation to distribution pattern of the elements.

Information on the age distribution of the animals is limited. 42% of the elements revealed information on fusion, whereof 90% were fully fused. Of the fully fused elements observed 44% are epiphyses, which fuse at birth and do not reveal any information on the age of the mammal. All elements of cow were fully fused providing an age range of minimum 1-3 ½ years. Pig fusion data appeared to fall within an age of minimum 2 years and sheep/goat to a minimum of 1 ½ - 3 years. Context (2003) revealed dentition of a minimum of two horses. One horse was an estimated age of 1-3 years. The other horse appeared older with an age of 3-11 years. It was further possible to provide a minimum age of the dog remains in context (2002) of 5-6 month. Dog (2005) was estimated an age of minimum 6-7 months, both aged on the basis of dental eruption of domestic dog (Hillson 1986, 217 *after Silver 1969 & Habermehl 1975*). None of the dental remains exhibited any wear suggesting that they may close to the suggested minimum age. Context (2011) contained three metapodials of dog, which were fully fused suggesting an age of minimum 8 months (Silver 1969). All the elements of dog that derived from three different contexts suggested they were medium sized mammals.

The three proximal phalanges of a dog in context (2011), a medieval ditch fill, exhibited extra cortical bone growth and thickening of the shaft believed to be the result of a healed fractures. The dog had at some stage during life had a minimum of two fractures, which probably occurred due to applied pressure to the lower region of the leg.

13.5 Discussion.

The animal assemblage at Clifton Garage was too limited for any major zooarchaeological considerations. The elements, which were identified, revealed the remains of domesticated species such as cow, horse, pig, dog, sheep/goat. Though the highest number of elements derived from horse the MNI revealed that cow and sheep/goat were the most prevalent species. A minimum three medium sized dogs were identified, one of which exhibited fractures to the lower leg. The remains are probably domestic refuse and remains of butchering activities, though none of the remains revealed any cut or chop marks. Only one smaller fragment of long bone of unidentified species had been exposed to high temperatures.

13.6 Archive.

All material is currently stored by *On-Site-Archaeology*, York along with paper and electronic records pertaining the work described here.

13.7 Bibliography.

- Binford, L.R 1970: *Bones – Ancient Men and Modern Myths* – Studies in Archaeology. Academic Press
- Boessneck, J. (1969 2nd edition). Osteological differences between Sheep (*Ovis aries* Linne) and Goat (*Capra hircus* Linne). In D. Brothwell and E. Higgs (eds) *Science in Archaeology*, 331-358. London
- Grant, A 1982: “the use of tooth wear as a guide to the age of domestic ungulates” in (eds) Wilson, B et al *Ageing and sexing Animal bones from Archaeological Sites* pp. 91-108. Oxford BAR – British Series 109.
- Hillson, S. (1986). *Teeth*. Cambridge: Cambridge University Press.
- Hillson S 1996 “*Mammal Bones and Teeth, An introductory guide to methods of Identification*”. Institute of Archaeology UCL, 2nd ed.
- Klein, R.G & Cruz-Urbe, K 1984: “*The Analysis of Animal Bones from Archaeological Sites*”. Prehistoric Archaeology and Ecology Series. The University of Chicago Press
- Levine, M 1982: “The use of crown height measurements and eruption wear sequences to age horse teeth” in (eds) Wilson, B et al *Ageing and sexing Animal bones from Archaeological Sites* pp. 91-108. Oxford BAR British Series 109.
- Lyman, R.L 1994: “*Vertebrate Taphonomy*”. Cambridge Manuals in Archaeology. Cambridge University Press
- O’Conner, T 2000: “*The Archaeology of Animal Bones*”. Sutton Publishing
- Schmid, E 1972: “*Atlas of Animal bones for Prehistorians, Archaeologists and quaternary Geologists*”. Elsevier publishing company
- Silver 1969 “The ageing of domestic animals” in D Brothwell & E Higgs (eds) *Science in Archaeology*. London. Thames and Hudson pp. 283-302

Table 1: Identified elements from Clifton Garage (OSA03EV04).

Cont.	Date	Feature	Pres.	Species	Element	Portion	Side	Fusion	Modifica.	Butchery
1001			Fragm.	Bos	metacarpus	Proximal	R	FF	No	No
1001			Fragm.	Bos?	Atlas	Fragment	C	n/a	No	No
2002			Fragm.	Bos	Humerus	Distal	L	FF	No	No
2002			Good	Canis	Mandible	p4	L	Perm	No	No
2002			Fragm.	Larg mam	Metapodial	Prox/shaft	n/a	FF	No	No
2002			Fragm.	n/a	Long bone	Splinter	n/a	n/a	No	No
2002			Good	Ovis/Capra	metapodial	Prox/shaft	n/a	FF	No	No
2002			Good	Sus	4th metatarsus	Distal	L	FF	No	No
2003	Post med	Pit	Good	Bos	Prox. Phalange	Complete	L	FF	No	No
2003	Post med	Pit	Fragm.	Equus	skull	Various	n/a	UF	No	No
2003	Post med	Pit	Good	Equus	dP	Complete	n/a	Decid	No	No
2003	Post med	Pit	Good	Equus	dP	Complete	n/a	Decid	No	No
2003	Post med	Pit	Good	Equus	dP	Complete	n/a	Decid	No	No
2003	Post med	Pit	Good	Equus	dP2	Complete	n/a	Decid	No	No
2003	Post med	Pit	Good	Equus	Femur	Head	R	FF	No	No
2003	Post med	Pit	Fragm.	Equus	Femur	Distal	R	FF	No	No
2003	Post med	Pit	Good	Equus	Maxilla	I1, I2	n/a	Perm	No	No
2003	Post med	Pit	Good	Equus	Molar	Complete	n/a	Perm	No	No
2003	Post med	Pit	Good	Equus	Molar	Complete	n/a	Perm	No	No
2003	Post med	Pit	Good	Equus	Molar	Complete	n/a	Perm	No	No
2003	Post med	Pit	Good	Equus	Molar	Complete	n/a	Perm	No	No
2003	Post med	Pit	Good	Equus	Molar	Complete	n/a	Perm	No	No
2003	Post med	Pit	Good	Equus	Molar	Complete	n/a	Perm	No	No
2003	Post med	Pit	Good	Equus	Molar	Complete	n/a	Perm	No	No
2003	Post med	Pit	Good	Equus	Molar	Complete	n/a	Perm	No	No
2003	Post med	Pit	Good	Equus	P2	Complete	n/a	Perm	No	No
2003	Post med	Pit	Good	Equus	P	Complete	n/a	Perm	No	No
2003	Post med	Pit	Good	Equus	P	Complete	n/a	Perm	No	No
2003	Post med	Pit	Good	Equus?	Femur	Shaft	R	n/a	No	No
2003	Post med	Pit	Good	Ovis/Capra	Mandible	p4-m3	R	Perm	No	No
2004			Good	Bos	metatarsus	Proximal	L	FF	No	No
2004			Fragm.	n/a	Long bone	Splinter	n/a	n/a	No	No
2004			Good	Ovis	metacarpus	Distal	n/a	UF	No	No
2004			Fragm.	Ovis	Phalange	Distal	R	FF	No	No
2005			Good	Canis	Max. Canine	Complete	R	Perm	No	No
2005			Good	Canis	Max. pm 1	Complete	R	Perm	No	No
2008			Fragm.	Larg. mam	Long bone	Splinter	n/a	n/a	No	No
2008			Fragm.	Sus	Tibia	Distal	L	FF	No	No
2011			Good	Bos	Femur	Head	L	FF	No	No
2011			Fragm.	Canis	Metapodial	Dist/shaft	n/a	FF	Fract	No
2011			Fragm.	Canis	Metapodial	Dist/shaft	n/a	FF	Fract	No
2011			Fragm.	Canis	Metapodial	Dist/shaft	n/a	FF	Fract	No
2011			Fragm.	Larg. mam	Atlas	Fragment	C	n/a	No	No
2011			Good	Larg. mam	Long bone	Shaft	n/a	n/a	No	No

2011	Fragm.	Larg.mam	Pelvis	Fragment	n/a	n/a	No	No
2011	Fragm.	n/a	Long bone	Splinter	n/a	n/a	Burn	No
2011	Fragm.	n/a	Long bone	Splinter	n/a	n/a	No	No
2011	Good	Ovis	metapodial	Dist/shaft	n/a	FF	No	No
2011	Good	Ovis/capra	Femur	Dist/shaft	n/a	FF	No	No
2011	Fragm.	Ovis/Capra	Humerus	Distal	L	n/a	No	No
2011	Fragm.	Ovis/Capra	Humerus	Proximal	n/a	n/a	No	No
2011	Fragm.	Ovis/Capra	Humerus	Distal	L	FF	No	No
2011	Good	Ovis/Capra	metatarsus	Prox/shaft	R	FF	No	No
2011	Good	Ovis/Capra	Phalange	Dist/shaft	L	FF	No	No
2013	Fragm.	Larg.mam	Thoracic	Body	C	FF	No	No
2013	Fragm.	Med.Mam	Scapula	Spine	R	n/a	No	No
2020	Good	Bos/equus	Pelvis	actabulum	n/a	FF	No	No
2020	Good	Equus	Radius	Complete	R	FF	No	No
3001	Fragm.	Sus	pm	Crown	n/a	Decid	No	No
3003	Fragm.	Larg.mam	skull	?	n/a	n/a	No	No
3005	Fragm.	Bos	Astragalus	Body	n/a	FF	No	No
3005	Fragm.	Bos	Radius	Distal	R	FF	No	No
3005	Fragm.	Larg.mam	Scapula	Spine	n/a	n/a	No	No
3005	Good	Ovis/Capra	m1	Complete	R	Decid	No	No
3005	Good	Ovis/Capra	Radius	Dist/shaft	L	FF	No	No
3007	Good	Bos	Max.pm	Complete	L	n/a	No	No
3007	Fragm.	Larg.mam	Scapula	artic.	n/a	FF	No	No

Table 2: Minimum Number of Individuals in each context

Species	Total MNE	1001	2002	2003	2004	2005	2008	2011	2013	2020	3001	3003	3005/07	Total MNI
Horse	22	0	0	2	0	0	0	0	0	(1)	0	0	0	2
Cow	8	1	1	1	1	0	0	0	0	0	0	0	1	6
Pig	3	0	1	0	0	0	1	0	0	0	1	0	0	3
Sheep/goat	13	0	1	1	1	0	0	2	0	0	0	0	1	6
Dog	6	0	1	0	0	1	0	1	0	0	0	0	0	3
Other	15	0	0	0	0	0	0	0	1	0	0	1	0	-

(1) = May be part of context (2003)

14.0 Appendix 7 ~ Environmental Assessment Report.

Palaeoecology Research Services

PRS 2003/43

*Evaluation of biological remains from excavations at**Clifton Garage, 84 Clifton, York (site code: OSA03EV04)*

by

Deborah Jaques and John Carrott

Summary

Dry residues and 'flots' from four pre-processed sediment samples recovered from excavations of deposits at Clifton Garage, 84 Clifton, York, North Yorkshire, were submitted to PRS for an evaluation of their bioarchaeological potential. Provisional dating of the encountered deposits was to the Romano-British, medieval and post-medieval periods.

Bone recovered from the samples was not particularly well preserved, however, Context 2011 did produce an interesting assemblage which suggests that the deposits at this site show some potential for the preservation of small bones representing mammals, birds, fish and amphibians. Biological remains (other than bone) recovered from the samples were restricted to traces of charred plant remains, in the form of charcoal, and of no interpretative value.

No further work is recommended for the current material. The bone recovered from Context 2011 does show the potential for the survival of vertebrate remains in at least some of the deposits at this site, however. In the event of further excavation this should certainly be considered and a systematic approach to sampling for the recovery of smaller vertebrate remains adopted. The prospects for the recovery of environmental evidence other than bone can be considered poor, though every effort should be made to sample and assess any more promising deposits encountered should further excavations take place.

KEYWORDS: CLIFTON GARAGE; 84 CLIFTON, YORK; NORTH YORKSHIRE; EVALUATION; ROMANO-BRITISH; MEDIEVAL; POST-MEDIEVAL; CHARRED PLANT REMAINS; VERTEBRATE REMAINS

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Evaluation of biological remains from excavations at Clifton Garage, 84 Clifton, York (site code: OSA03EV04)

Introduction

An archaeological evaluation excavation was carried out by On-Site Archaeology, at Clifton Garage, York, North Yorkshire (NGR SE 5948 5291), between the 23rd and the 29th of April 2003.

The site was located near the historic core and village green of Clifton. It lay on the route from the NW gate of the Roman fortress, a route that was much used in the Roman period and that has been maintained to the present day. A number of cemeteries have been discovered on both sides of Clifton and Bootham dating to this period. In the post-Roman period the area seems to have reverted to agricultural usage, with resettlement of the centre of Clifton at some point in the medieval period.

The dry residues and 'flots' from four pre-processed sediment samples ('GBA'/'BS' sensu Dobney et al. 1992) recovered from Trenches 2 and 3 (of 3 excavated) were submitted to PRS for an evaluation of their bioarchaeological potential.

Methods

Four bulk sediment samples ('BS' sensu Dobney et al. 1992) were processed to 1 mm (with a 300 micron sieve for the lighter washover, or 'flot', fraction) by the excavator.

The 'flots' resulting from processing were examined for plant and invertebrate macrofossils. The residues were examined for larger plant macrofossils, bone, and other biological and artefactual remains.

Results

The results are presented in context number order by Trench. Archaeological information, provided by the excavator, is given in square brackets. A brief summary of the processing method and an estimate of the remaining volume of unprocessed sediment follows (in round brackets) after the sample numbers. Sediment descriptions were also supplied by the excavator.

Trench 2

Context 2011 [medieval ditch fill]

Sample 3/BS (approximately 8 litres sieved to 1 mm with 300 micron washover; approximately 2 litres of unprocessed sediment remain)

Mid grey, sandy clay silt.

There was a small residue (of 678 g dry weight) mostly of stones (to 20 mm), pieces of undisaggregated concreted sediment (to 8 mm), a little coal and cinder (to 12 mm), and an occasional fragment of charcoal (to 4 mm). There was also some burnt and unburnt bone.

The tiny 'flot' (approximately 5 ml) was of fine coal and two small bones.

This sample produced 123 (total weight 10 g) small bone fragments of rather battered appearance. Many of the remains were amphibian vertebrae and shaft fragments, which probably represented a single individual. Most of the remaining bones were bird, including a carpometacarpus and a radius of a wader, and tibiotarsus and skull fragments tentatively identified as small duck, possibly teal (*Anas crecca* L.). Sixteen of the bones were bird phalanges, of a size that suggested they may also represent small duck. Two tarsometatarsus fragments from a juvenile bird were recovered, but it was not possible to identify them to species. Additionally, a single sheep/goat first phalanx and a herring (*Clupea harengus* L.) vertebra were present.

Trench 3

Context 3001 [fill of rectangular pit - ?post-hole for a ?medieval structure]

Sample 1/BS (approximately 8 litres sieved to 1 mm with 300 micron washover; approximately 2 litres of unprocessed sediment remain)

Dark grey, clay silt.

The small residue (dry weight 241 g) was mostly stones (to 30 mm) with some coal and cinder/part burnt coal (to 20 mm). A little charcoal (to 6 mm), two iron fragments, a few pieces of brick/tile (to 20 mm), and some bone, were also present. A total of 28 (6 g) fragments of bone were recovered. Most were eroded and had rounded edges; six fragments were burnt. All the fragments represented medium-sized mammals, but only one, a deciduous sheep/goat incisor, was identifiable.

There was an extremely small 'flot' (approximately 2 ml) of fine coal and/or charcoal.

Context 3003 [fill of rectangular pit - ?post-hole for a ?medieval structure]

Sample 2/BS (approximately 8 litres sieved to 1 mm with 300 micron washover; approximately 2 litres of unprocessed sediment remain)

Dark grey, clay silt.

The small residue (dry weight 310 g) was mostly stones (to 30 mm), with some coal and cinder/part burnt coal (to 25 mm), lumps of undisaggregated (concreted) sediment (to 3 mm). Fragments of brick/tile (to 20 mm) and ?pot were also present, together with a trace of charcoal (to 6 mm) and a little burnt and unburnt bone.

Thirty-two bone fragments were recovered from this sample, all of which were less than 20 mm in any dimension and of somewhat variable preservation. Five of the bones were burnt. Most of the fragments could not be identified to species, but several small mammal and amphibian bones were noted.

There was an extremely small 'flot' (approximately 2 ml) of fine coal and/or charcoal.

Context 3007 [fill of large ?Roman ?boundary ditch]

Sample 4/BS (approximately 8 litres sieved to 1 mm with 300 micron washover; approximately 2 litres of unprocessed sediment remain)

Red grey, silty clay.

The small residue (dry weight 425 g) was mostly stones (to 20 mm) and pieces of undisaggregated sediment (to 7 mm, from worm casts and/or root traces), with a little cinder

(to 15 mm), an occasional fragment of coal (to 4 mm), and two small unidentified fragments of bone.

There was no 'flot' from this sample.

Discussion and statement of potential

Bone recovered from the samples was not particularly well preserved, however, Context 2011 did produce an interesting assemblage which suggested that the deposits at this site have some potential for the preservation of small bones representing mammals, birds, fish and amphibians. Interpretation of the bones with regards to the species present is not possible without reference to the hand-collected material.

Biological remains (other than bone) recovered from the samples were restricted to traces of charred plant remains, in the form of charcoal, and of no interpretative value.

Recommendations

No further work is recommended for the current material. The bone recovered from Context 2011 does show the potential for the survival of vertebrate remains in at least some of the deposits at this site, however. In the event of further excavation this should certainly be considered and a systematic approach to sampling for the recovery of smaller vertebrate remains adopted.

The prospects for the recovery of environmental evidence other than bone can be considered poor, though every effort should be made to sample and assess any more promising deposits encountered should further excavations take place.

Retention and disposal

Any decision regarding the retention of the vertebrate material should consider both the hand-collected assemblage and the remains recovered from the samples.

Any remaining sediment from the deposits considered here may be discarded unless it is to be processed for the recovery of non-biological remains.

Archive

All material is currently stored by Palaeoecology Research Services (Unit 8, Dabble Duck Industrial Estate, Shildon, County Durham), along with paper and electronic records pertaining to the work described here.

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References

Dobney, K., Hall, A. R., Kenward, H. K. and Milles, A. (1992). A working classification of sample types for environmental archaeology. *Circaea*, the Journal of the Association for Environmental Archaeology 9 (for 1991), 24-6.

15.0 Appendix 8 ~ The Plates.



Plate 1. Trench 1, posthole [1003]. (Scale of 0.5m).



Plate 2. Section through Trench 1. (Scale of 0.5m).



Plate 3. Trench 2, ditch [2012]. (Scale of 0.5m).



Plate 4. Trench 2, pit [2016]. (Scale of 1m).



Plate 5. Trench 2, post medieval pits. (Scale of 1m).



Plate 6. Trench 3, postholes [3002] & [3004]. (Scale of 1m).



Plate 7. Trench 3, ditch [3012]. (Scale of 1m).