Assessment of the Pottery and Fired Clay from Viewly Bridge, Ainderby Steeple to Bullamoor Reservoir Pipeline (ASB03)

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Excavations by Northern Archaeology Associates at Viewly Bridge, on the Ainderby Steeple to Bullamoor Reservoir Pipeline, revealed an area of Anglo-Saxon occupation next to an inhumation cemetery. A boundary ditch separated the settlement from the cemetery. There is at present no independent dating evidence for the activity but the character of the inhumation cemetery suggests a mid Saxon date (i.e. late 7th to mid 9th century).

In total, 67 fragments were examined. These included 19 pieces of fired clay, one sherd of prehistoric pottery, three sherds of Roman pottery, 41 sherds of early to mid Anglo-Saxon pottery and three sherds of post-medieval pottery. Approximately half of the collection was stratified in features of Anglo-Saxon date and the remainder came from topsoil or recent features (Table 1, periods 2 and 34 respectively).

Class	Per.2	Per.4	Grand Total
EMSAX	25	16	41
FCLAY	6	13	19
РРОТ	0	3	3
PREH	1	0	1
RPOT	2	1	3
Grand Total	34	33	67

Table 1

Description

Pottery

Prehistoric

A single abraded sherd of prehistoric pottery was found, in context 1606, an Anglo-Saxon grave fill. The sherd has a fabric containing large angular fragments of basic igneous rock, a fabric which is common throughout northern Britain and particularly common in the Tees Valley and the northern part of the Vale of York (Swain in Thorpe Thewles report REF). The sherd is oxidised throughout, probably through subsequent burning since these vessels typically have a black core with dark brown or black surfaces.

Roman

Three sherds of Roman pottery were found. Two of these were of Eboracum ware, an oxidised gritty redware produced in York in the late 1^{st} to 3^{rd} centuries (1997, E1 and E2). These sherds came from contexts 1000 and 1606. The third sherd is a very abraded sherd of late Roman calcite-tempered ware, probably made in the Vale of Pickering between the late 3^{rd} and the early 5^{th} century (1997, K0). The condition of the sherd is much worse than that of any of the Anglo-Saxon sherds, suggesting that is was no contemporary with them (there are suggestions at both York and West Heslerton that this ware continues in use into the 5^{th} or 6^{th} centuries, Whyman 2001 and Darling & Precious forthcoming, although no certain instances of this have been noted by the author). This sherd came from context 2000.

Anglo-Saxon

Forty-one sherds of Anglo-Saxon pottery were found, coming from no more than 24 vessels (Table 2).

All the sherds were examined at x20 magnification using a binocular microscope and could be divided into four basic groups depending on the character of the main inclusions. These groups are biotite granite-tempered (CHARN), chaff-tempered (ECHAF), sandstone-tempered (SST) and limestone-tempered ware (ESAXX). Within the CHARN and SST groups there were distinct sub-fabrics, based on the occurrence of minor inclusion types and the texture of the matrix. At the most, there are 14 separate fabrics but it is quite possible that some of the distinctions are due to the presence of rare inclusion types which were not visible in the sherds by eye.

Cname	Subfabric	2	4	Grand Total
CHARN	A BIOTITE GRANITE <4.0MM;FINE-GRAINED MATRIX	1		1
	A BIOTITE GRANITE <4.0MM;SILTY MICACEOUS MATRIX	1	1	2
	BIOT GRANITE;CHAFF;SILTY MICACEOUS MATRIX		1	1
	BIOT GRANITE;SSTMG;CHAFF;SILTY MICACEOUS MATRIX		2	2
	BIOT GRANITE;ORGANICS;SILTY MICACEOUS MATRIX	1		1
CHARN				
Total		3	4	7
ECHAF	CHAFF;SILTY MICACEOUS MATRIX	8	9	17
ECHAF		8	9	17

Table 2	2
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ESAXX	SA LIMESTONE >2.0MM;S SA RED IRONSTONE;LIGHT- COLOURED SILTY MICACEOUS MATRIX	1		1
ESAXX Total		1		1
SST	SSTMG <4.0MM;SILTY MICACEOUS MATRIX	6		6
	SSTMG;ANG FINE-GRAINED SST;FINE MATRIX	1		1
	SSTMG;ANG RED FE;SILTY MICACEOUS MATRIX	1		1
	SSTMG;BIOT;PYS;FINE-GRAINED MATRIX	1		1
	SSTMG;BIOT;SILTY MICACEOUS MATRIX	1		1
	SSTMG;FINE-GRAINED MATRIX	2	1	3
	SSTMG;SILTY MICACEOUS MATRIX	1	2	3
SST Total		13	3	16
Grand Total		25	16	41

Total

Key: A = abundant, ANG = angular, BIOT = Biotite, SSTMG = Millstone Grit sandstone, SA = subangular, S = Sparse, SST = Sandstone, PYS = Permian Yellow sand

These fabrics have in the main been observed in other northern pottery assemblages of early Anglo-Saxon and mid Saxon date. For example, the Fishergate site in York (1993), on which occupation started in the early 8th century, produced sherds of CHARN, ECHAF and SST with similar macroscopic characteristics to those seen here (Vince 2003). The limestone-tempered fabric has not been noted at York but similar vessels have been observed at Catterick, Norton and Piercebridge although they are only common at the latter (Vince in prep a, Vince in prep b, Vince in prep c). Thinsection and chemical analysis suggests that the limestone in these examples may be of Permian date although, as in this case, the actual inclusions are mostly leached out and the identification is based mainly on a high MgO frequency.

So far as can be seen all of the sherds come from jars or deep cylindrical bowls. In one case the vessel has a short, vertical neck and rounded rim whilst in another the rounded rim appears to come from a vessel with a cylindrical body and in a third an everted rim with a flattened top is present. None of these forms is chronologically distinctive and examples can be found in both early and mid Saxon

contexts in northern Britain. However, it has been noted at Fishergate, West Heslerton (Tipper pers comm) and Whitby (Jennings pers comm) that the most common rim form in the mid Saxon period is a short, everted rim on a shouldered vessel, a form which is not present in this small collection.

Decoration is restricted to a single sherd with a grooved line and ring stamp and to the presence of burnishing on the exteriors and insides of the rims of a few vessels. Although stamping is a feature of some 7th and 8th-century coarsewares in southern England it is not found in northern Britain after the early 7th century.

A high proportion of the pottery shows signs of use in cooking. These traces consist of black vesicular deposits on the inner surfaces of vessels (noted on 14 sherds, 4 of CHARN and 10 of SST) and sooting on the exterior surfaces, especially on the necks and undersides of rims (13 examples, 4 of CHARN and 9 of SST). There are no traces of use on the ECHAF sherds but this may be more a feature of the soft, silty fabric, whose surfaces do not survive as well as those of the other fabrics, than of a difference in use.

Although individual sherds in the collection could certainly be paralleled at Fishergate and could therefore be of 8th-century date, as a group the pottery appears to be somewhat earlier, perhaps 6th or early 7th century.

Cat No	Context	Cname	Form	Subfabric
1	1658	CHARN	JAR	A BIOTITE GRANITE >4.0MM;SILTY MICACEOUS MATRIX
2	1000	SST	JAR	SSTMG;SILTY MICACEOUS MATRIX
3	2000	SST	JAR	SSTMG;BIOTITE;SILTY MICACEOUS MATRIX
4	2000	SST	DECORATED JAR	SSTMG;BIOTITE;PYS;FINE-GRAINED MATRIX
5	2014	SST	JAR	SSTMG <4.0MM;SILTY MICACEOUS MATRIX
6	2000	ECHAF	JAR	CHAFF;SILTY MICACEOUS MATRIX

Table 3 Catalogue of illustrated sherds

Post-Medieval

Three post-medieval sherds were found, all from context 1000. The types present: Humber ware (HUM, 1987, 157-9), Midlands Yellow ware (MY, also known as Reverse Cistercian ware, 1992) and Ryedale ware (RYEDALE, 1987, 162-3) were all current in the later 16th century although individually each type has a longer date range. The sherds are slightly abraded and consistent with a manuring scatter in ploughsoil.

Fired clay

Nineteen fragments of fired clay were recovered (Table 3). Most of these are extremely small scraps and it is not possible in many cases to establish that they are actually deliberately or accidentally fired clay artefacts rather than burnt subsoil. Nevertheless, each of these fragments was examined at x20 magnification and the collection was divided into six sub-fabrics. By contrast with the early to mid Saxon pottery, the fired clay fabrics include examples which are likely to be derived from Permo-Triassic strata. These include fine-textured clays and clays with abundant fine quartz sand together in some cases with large angular fragments of fine-grained red sandstones. Three very small fragments appear to contain numerous bone fragments.

A single fragment with a flat surface is likely to be daub, although no wattle impressions were present. Another fragment was coated with black, vesicular slag and is likely to be hearth lining. A third piece is probably a fragment of doughnut-shaped loom weight. Such loom weights were replaced by bunshaped loom weights in the mid Saxon period and this piece, therefore, is probably of early Anglo-Saxon date.

Subfabric	ND	DAUB	HEARTH LINING	Loom Weight	Grand Total
A ANG FINE-GRAINED SST;SANDY MATRIX	1				1
BONE?;FINE-GRAINED MATRIX	3				3
CHAFF;SILTY MICACEOUS MATRIX				1	1
FINE-TEXTURED MATRIX		1			1
MICACEOUS SILTY MATRIX	1		1		2
SANDY MATRIX	11				11
Grand Total	16	1	1	1	19

Table 4

Assessment

There is evidence for prehistoric and Roman activity in the area but probably not on this site itself.

Activity starts in the early to mid Anglo-Saxon period and it is likely that the settlement precedes the cemetery, although it is possible that the cemetery is contemporary with the later phases of settlement. It may be significant that the boundary ditch separating the two produced no sherds of pottery. There is no obvious difference in the character of the pottery from the settlement area (contexts in the 1000's)

and pottery from the cemetery area (contexts in the 2000's) and it is clear that none of the potsherds found in the cemetery were deliberately buried with the inhumations. They may include contemporary material accidentally incorporated into the grave fill but they may be entirely residual. Table 3 shows the incidence of the major and minor fabric groups by area. The concentration of the chaff-tempered pottery in the area of the settlement may be significant, but many of these sherds come from a single, thick-walled vessel, present in contexts 2000, 2002 and 2006. It may be significant that this fabric is the only one paralleled in the fired clay, having the same fabric as the loom weight, suggesting the possibility of relatively local production (although the difference in fabric between the loom weight and the other fired clay might conversely imply that the loom weight is a traded item).

Table	5
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Cname	Subfabric	cemeter	ysettlemer	Grand tTotal
CHARN	A BIOTITE GRANITE >4.0MM;FINE-GRAINED MATRIX	1		1
	A BIOTITE GRANITE >4.0MM;SILTY MICACEOUS MATRIX	2		2
	BIOT GRANITE;CHAFF;SILTY MICACEOUS MATRIX		1	1
	BIOT GRANITE;SSTMG;CHAFF;SILTY MICACEOUS MATRIX		2	2
	BIOTITE GRANITE;ORGANICS;SILTY MICACEOUS MATRIX		1	1
CHARN Total		3	4	7
ECHAF	CHAFF;SILTY MICACEOUS MATRIX	1	16	17
ECHAF Total		1	16	17
ESAXX	SA LIMESTONE >2.0MM;S S RED IRONSTONELIGHT- COLOURED SILTY MICACEOUS MATRIX		1	1
ESAXX Total			1	1
SST	SSTMG <4.0MM;SILTY MICACEOUS MATRIX		6	6

	SSTMG;ANG FINE-GRAINED SST;FINE MATRIX		1	1
	SSTMG;ANG RED FE;SILTY MICACEOUS MATRIX		1	1
	SSTMG;BIOTITE;PYS;FINE-GRAINED MATRIX		1	1
	SSTMG;BIOTITE;SILTY MICACEOUS MATRIX		1	1
	SSTMG;FINE-GRAINED MATRIX	1	2	3
	SSTMG;SILTY MICACEOUS MATRIX	2	1	3
SST Tota	al	3	13	16
Grand				
Total		7	34	41

There is no pottery of the types found in Period 3 at Coppergate in York (1990) and therefore it is likely that both cemetery and settlement are earlier than the late 9th century.

Archaeological Importance

This small collection of fired clay and pottery is of considerable interest and importance for the archaeology of this part of Yorkshire. There are very few domestic assemblages of 5th to 9th-century date from the Vale of York. That at Piercebridge is heavily contaminated with residual Roman pottery, and in any case is totally without any archaeological context. The material from Catterick is much better excavated and is well published. Catterick therefore forms a useful early Anglo-Saxon assemblage for comparison with that from Viewly Bridge. There is a very small assemblage from West Lilling of early Anglo-Saxon date (excavated by On Site Archaeology). The only other assemblages from the vale come from the environs of York. There are cremation cemeteries at The Mount and Heworth and domestic occupation sites at Heslington Hill (early Anglo-Saxon) and Fishergate (mid Saxon, probably all early 8th century). If we move farther afield, there are comparable sites in the Tees Valley, the Vale of Pickering and the Yorkshire Wolds, primarily the large collection from West Heslerton. We can conclude, therefore, that the Viewly Bridge collection is of regional importance simply because there are so few comparable collections in the vale of York. This importance is augmented because of the association of the pottery with a potentially datable inhumation cemetery, which probably provides a *taq* for the pottery assemblage, and the apparent lack of earlier occupation on the site, which makes it likely that all the sherds, even featureless body sherds, are of early to mid Anglo-Saxon date. Furthermore, the pottery is in the main fresh and the sherd surfaces survive well.

Further Work

Ideally, each of the 14 distinct early to mid Anglo-Saxon pottery fabrics would be sampled for thin section and chemical analysis. The thin sections would probably reveal details of the rock and mineral

inclusions and the character of the groundmass not visible by eye, even using a binocular microscope. Differences at this level exist between the pottery found at Piercebridge, Norton and Catterick and samples from Fishergate. If the vessels turned out to be more similar to those from mid Saxon York than to early Anglo-Saxon Catterick, Piercebridge or Norton this might suggest a mid Saxon date for the assemblage. Chemical analysis would be able to test which of the fabrics were likely to be made from similar clays and would enable the ESAXX sherd to be compared with those from Piercebridge and Norton. It would also be profitable to include samples of some of the fired clay fabrics to test the suggestion that the daub and hearth lining is likely to be obtained locally whereas the loomweight and the chaff-tempered pottery were not. It is therefore recommended that samples of the daub, loomweight and hearth lining are taken for analysis, bringing the total to 17 samples.

The survival of burnt food residues on the inside of the vessels and sooting on the outside suggests that there has been little degradation of the potsherds after burial and that it might be possible to extract organic residues from the vessels. Certain sherds have been separately bagged by NAA for residue analysis. It should be noted, however, that if organic residues are indeed present then they will be bound to the clay minerals in the pottery body rather than present in these outer coatings, which probably consist of almost pure carbon and are, in any case, exposed to contamination by groundwater. So little is known about the function of pottery in this part of the country in the Anglo-Saxon period that any result from residue analysis would be useful.

Several of the sherds contain chaff or similar organic debris. This is interpreted as being deliberately added temper rather than natural inclusions in the potting clay. Therefore, it would be possible to obtain high precision C14 dates from these sherds using AMS C14 dating.

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Appendix: List of finds

ContextCname		Form	NoshNoV Subfabric				
1000	CHARN	JAR	1	1	A BIOTITE GRANITE >4.0MM;SILTY MICACEOUS MATRIX	BS	
1000	ECHAF	JAR	1	1	CHAFF; SILTY MICACEOUS MATRIX	BS	
1000	НИМ	JUG/JAR	1	1		BS	
1000	MY	JUG	1	1		Н	
1000	RPOT	JAR	1	1	EBOR	BS	
1000	RYEDAL	EBOWL	1	1		BS	
1000	SST	JAR	1	1	SSTMG;SILTY MICACEOUS MATRIX	BS	BL
1600	SST	JAR	1	1	SSTMG;FINE-GRAINED MATRIX	BS	sc
1606	FCLAY	HEARTH LINING	1	1	MICACEOUS SILTY MATRIX	BS	
1606	FCLAY		1	1	MICACEOUS SILTY MATRIX	BS	
1606	PREH	JAR	1	1	ANG BASIC ROCK >4.0MM;FINE-TEXTURED MATRIX	BS	
1606	RPOT?	FLAG?	1	1	EBOR?	BS	
1658	CHARN	JAR	1	1	A BIOTITE GRANITE >4.0MM;FINE-GRAINED MATRIX	BS	BL
2000	CALC	JAR	1	1	A CALC >3.0MM;FINE-GRAINED MATRIX	BS	
2000	CHARN	JAR	1	1	BIOTITE GRANITE;ORGANICS;SILTY MICACEOUS MATRIX	BS	BL
2000	FCLAY		1	1	BONE?;FINE-GRAINED MATRIX	BS	
2002	ECHAF	JAR	1	1	CHAFF; SILTY MICACEOUS MATRIX	BS	
2002	FCLAY	DAUB	1	1	FINE-TEXTURED MATRIX	BS	
2002	FCLAY		1	1	A ANG FINE-GRAINED SST; SANDY MATRIX	BS	
2002	SST	JAR	1	1	SSTMG;ANG RED FE;SILTY MICACEOUS MATRIX	BS	BL
2002	SST	JAR	1	1	SSTMG;ANG FINE-GRAINED SST;FINE MATRIX	BS	SC

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ContextCname		Form	Nos	osh NoV Subfabric				
2002	SST	JAR	1	1	SSTMG;SILTY MICACEOUS MATRIX	BS		
2003	SST	JAR	1	1	SSTMG;FINE-GRAINED MATRIX	BS	BL	
							BL	
2006	CHARN	JAR	1	1	BIOT GRANITE; CHAFF; SILTY MICACEOUS MATRIX	BS	IN	
2006	CHARN	JAR	1	1	BIOT GRANITE;SSTMG;CHAFF;SILTY MICACEOUS MATRIX	BS	sc	
2006	CHARN	JAR	1	1	BIOT GRANITE;SSTMG;CHAFF;SILTY MICACEOUS MATRIX	BS	sc	
2006	ECHAF	JAR	2	1	CHAFF; SILTY MICACEOUS MATRIX	BS		
2006	FCLAY		8	1	SANDY MATRIX	BS		
2006	FCLAY		2	1	BONE?;FINE-GRAINED MATRIX	BS		
2006	FCLAY		3	1	SANDY MATRIX	BS		
2006	SST	JAR	1	1	SSTMG;FINE-GRAINED MATRIX	BS		
							BL	
1000	SST	JAR	1	1	SSTMG;SILTY MICACEOUS MATRIX	BS	IN	
		LOOM						
1653	FCLAY	WEIGHT	1	1	CHAFF;SILTY MICACEOUS MATRIX	BS		
1658	CHARN		1	1	A BIOTITE GRANITE >4 0MM·SILTY MICACEOUS MATRIX	R	BL IN	
1000		0/ 11				IX.		
2000	ECHAF	JAR	7	1	CHAFF;SILTY MICACEOUS MATRIX	BS		
2000	SST	JAR	1	1	SSTMG;BIOTITE;SILTY MICACEOUS MATRIX	R		
2000	SST	JAR	1	1	SSTMG;BIOTITE;PYS;FINE-GRAINED MATRIX	BS		
							BL	
2014	SST	JAR	6	1	SSTMG <4.0MM;SILTY MICACEOUS MATRIX	R	IN	
2006	ECHAF	JAR	6	1	CHAFF;SILTY MICACEOUS MATRIX	BS		
					SA LIMESTONE >2.0MM;S S RED IRONSTONELIGHT-			
2014	ESAXX	JAR	1	1	COLOURED SILTY MICACEOUS MATRIX	BS		

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