

TR18	209	PRIA-RB	H1	1	M	rim sherd	everted rim		Slightly rounded tip			
TR18	209	LPRIA	H1	1	M	rim sherd	sharply everted rim with blunt rim tip					
TR18	209	RB, 2-3?	GRB1	8	A	bodysherd	closed vessel		DIRTY SHERDS	burnished	acute lattice	outside body
TR18	209	PRIA-RB	H1	20	M	bodysherd	closed vessel					
TR18	209	RB	GRB1	1	A	bodysherd						
TR18	209	RB	GRB1	2	V	rim sherd	everted rim		Non adjoining rim and body pos from same vessel	cordoned	single	outside body
TR18	209	PRIA-ERB	H1	1	A	simple base sherd	flat base with rounded junction of base and body					
TR18	209	LPRIA-ERB	H1	1	M	rim sherd	small jar with short, thin everted rim, slight rebate					
TR18	209	LPRIA-ERB	H1	2	M	rim sherd	small jar with short, thin everted rim, slight rebate					
TR18	209		BR BONE	2								
TR18	209		STONE	2								
TR18	209		FC	4	M	bodysherd						

TR18	209		H1	1	M	simple base sherd	flat base with rounded junction of base and body	BM ISB				
TR18	210	PRIA-RB	H1	3	M	bodysherd	closed vessel					
TR18	211	PRIA-RB	H1	2	A	bodysherd						
TR18	211	RB, 2-3	GRB1	1	M	bodysherd	closed vessel			groove	double	outside the neck
TR18	213	RB	GRB1	1	M	bodysherd						
TR18	213	PRIA-RB	H7	2	A	bodysherd						
TR18	213		FC	1	V	scraps						
TR18	213		BURNT BONE	1								
TR18	213		STONE	2								
TR18	213	ERB?	H7	1	A	bodysherd	concave body					
TR18	213	PRIA-RB	H	2	V	scraps			Fabrics uncertain			
TR18	213	PRIA-RB	H1	4	A	bodysherd	closed vessel	BM ISB				
TR18	213	LPRIA-3	H1	1	A	rim sherd	everted rim with blunt end forming triangular tip and slight internal rebate					
TR18	213	LPRIA-3	H1	1	M	rim sherd	everted rim with blunt end forming triangular					

							tip and slight internal rebate?					
TR18	213	ERB	GRB1	1	M	bodysherd	carinated jar			cordoned	single	outside the middle body
TR18	213	PRIA-ERB	H1	1	M	bodysherd						
TR18	213	PRIA-RB	H1	17	A	bodysherd	closed vessel					
TR18	214	PRIA-RB	H1	5	V	bodysherd						
TR18	219	PRIA-RB	H1	2	M	bodysherd		BM ISB				
TR18	219	PRIA-RB	H1	1	V	bodysherd						
TR18	219	2-3	GRB1	1	M	rim sherd	everted rim probably from large lugged jar as Hayes and Whitley 1950 type 4					
TR18	222		NOT POT									
TR19	290	PRIA-RB	H7 VESIC	1	A	bodysherd						
TR20	104	RB	GRB1	1	M	bodysherd	closed vessel					
TR20	104	LPRIA-ERB	H7 VESIC	3	M	rim sherd	everted rim, blunt tip has slight groove giving suggestion of a bifid					

							rim					
TR20	107	RB	OAB1	1	V	scraps						
TR20	107	PRIA-RB	H1	2	V	scraps						
TR20	230	PRIA- ERB	H3	2	M	bodysherd	closed vessel					
TR21	Unstrat	PRIA-RB	H1	3	M	bodysherd	closed vessel					
TR21	Unstrat	LPRIA- ERB	H1	2	M	rim sherd	everted rim, blunt tip has slight groove giving suggestion of a bifid rim					
TR21	113	RB	GRB1	3	M	bodysherd						
TR21	113	RB, 2	GRB1	1	A	rim sherd	rebated rim			Not a common form, prob L2-M3		
TR21	113	RB	GRB1	1	M	rim sherd	everted rim					
TR21	113		H/FC	1	V	scraps						
TR21	113	PRIA-RB	H1	1	M	rim sherd	rim fragment, probably everted tapering to narrow rounded tip					
TR21	113	PRIA-RB	H1 VESIC	1	A	bodysherd	closed vessel					
TR21	113	PRIA-RB	H1	10	M	bodysherd	closed vessel					

TR21	113	M1-3	DR20	1	M	bodysherd	closed vessel						
TR21	113	L1-E3	GRB1	4	A	rim sherd	carinated jar of Lincolnshire type		Transitional form between the N Lincs/Humberside types in the L1-M3 and the 3rd types at Norton and HOS				
TR21	236	PRIA-RB	H1	11	A	bodysherd	closed vessel						
TR21	263	LPRIA?	H1	3	M	rim sherd	jar with short everted rim, blunt ended						
TR21	265	LPRIA-ERB	H1	2	M	incomplete rim section	everted rim flat at tip						
TR21	265	LPRIA	H1	2	M	rim sherd	jar with short everted rim, blunt ended						
TR21	265	LPRIA	H1	2	M	bodysherd	closed vessel						
TR21	289	PRIA-ERB	H1	1	V	bodysherd	closed vessel						
TR22	108	PRIA-ERB	H1 VESIC	2	V	scraps							
TR22	110	PRIA-ERB	H1 VESIC	2	A	bodysherd							
TR26	300	PRIA-RB	H1 VESIC	6	A	bodysherd	closed vessel						
TR33	154	PRIA-ERB	H1 VESIC	3	A	bodysherd	closed vessel						

Appendix 5:

Assessment of selected diagnostic assemblages from excavations carried out at Newbridge Quarry between 2003-2006

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Assessment of selected diagnostic assemblages from excavations carried out at Newbridge Quarry between 2003-2006

Introduction by I. Roberts

Between 1999-2006 limestone extraction at Newbridge Quarry was preceded by a series of extensive open-area archaeological excavations, initially by the MAP Consultancy and from 2003 by Archaeological Services WYAS. The work identified some evidence for early prehistoric activity in the form of residual finds, but most of the evidence is for Iron Age and Romano-British occupation, with possible post-Roman activity. With the exception of three potential square barrows and an area of Iron Age open settlement, the settlement evidence principally took the form of a series of rectilinear enclosures that were appended to, or were focussed upon, a double ditched trackway (or driveway) that ran north-south through the entire phased extraction area. The enclosures, which were mainly on the eastern side of the trackway, were in some cases superimposed, with most containing roundhouses. Associated features have provided evidence of a generally mixed economy with arable cultivation represented by crop driers and querns, and animal husbandry reflected in the animal bones recovered.

Three extended inhumations were recovered from the settlement areas, although these need not necessarily be contemporary. The commonest form of burial was cremation, with some thirty un-urned examples being recovered, often from the upper fills of the trackway ditches. Their stratigraphic position in the ditch fills suggests that they are probably either of Late Roman or even post Roman date. A possible post-Roman phase to the site has been given further credence by the stratigraphic superimposition of certain enclosures and the, as yet unsubstantiated, identification of post-Roman pottery (D. Powlesland pers. comm.). The 1999-2006 work has been the subject of an interim report (Signorelli and Roberts 2006), that postulated five phases of development from the late prehistoric through to the early post-Roman period.

The early prehistoric evidence is mainly represented by what are believed to be residual artefacts, principally flint tools and waste flakes. The presence of a barrow is unconfirmed. The archaeology of the Iron Age and Romano-British phases offer considerable potential for elucidating the chronology and transitional nature of settlement and settlement economy of these periods. On the face of it the Newbridge site represents a classic example of a transition from open settlement to an enclosed 'ladder' settlement focused upon a driveway. The 'ladder' settlement phenomenon is largely one defined from cropmarks in North East Yorkshire and thus was once thought to have been the product of a single phase of occupation. Newbridge is one of a number of recently excavated sites that reveals that they can be the product of several different phases of development at different periods. The data recovered from the Newbridge Quarry excavations offers the potential for being able ascertain to what degree there was continuity of occupation at different times, the possible degree of settlement migration and any changes to the forms and economies of the settlements, particularly as a result of Roman influence.

If confirmed, the existence of an early post-Roman phase at Newbridge Quarry would demonstrate a degree of landscape continuity that is in contrast to sites such as West Heselton. Very little is known of the settlement forms of this period and it is possible

that West Heslerton is one of many post-Roman forms, some of which may not have changed radically since the later Iron Age. The possible use of un-urned cremations is more akin to later Roman than Anglo-Saxon methods of disposal of the dead in this region and might, therefore, support a post-Roman British, rather than an Anglo-Saxon presence.

In order to more fully characterise the archaeology of this landscape, and thus gauge its significance, a limited amount of specialist assessment has been carried out on material recovered between 2003 and 2006 (NBQ03 - NBQ06). This work is designed support and supplement the trial trenching evidence for the quarry extension area, as well as being an integral part of the work needed as part of the post-excavation process, yet to be formally initiated.

The specific objectives of this element of the work will be twofold: to confirm the periods of activity represented, with particular reference to the levels of early prehistoric and possible post-Roman activity; and to ascertain the potential for environmental reconstruction with a view being able to make meaningful statements about landscape environment, climate, settlement economy and ritual practices at different times in the past.

To these ends, rapid assessments have been carried out on the of the pottery and flint assemblages recovered between 2003-2006. Additionally, a radiocarbon date has been obtained for one of the cremations found in the upper fill of the trackway ditch and a rapid assessment has also been carried out for the preserved seeds, plant remains and microfauna present in the 222 soil samples already processed.

Assessment and Spot Dating of Pottery by R.S. Leary

A total of 3272 sherds of Iron Age and Romano-British pottery (22083g), 459 fragments of fired clay or daub (615g), three tile fragments and 21 sherds of medieval and post-medieval pottery were submitted for identification. The pottery was examined without the benefit of context information. Given the longevity of many of the handmade vessel forms, this means that some contexts from the same group may be given contradictory dates since some types given a late Iron Age to early Roman date may still have been in use with Roman vessels given a second to third century date range. This is the consequence of the marked conservatism displayed in the "native" pottery repertoire used in the region. The spot dating has been tabulated as Table 15 (below).

Ninety-two percent of the assemblage was made up of handmade wares and 8% of wheel-thrown Romano-British fabrics. Of the handmade material some 81% were calcareous-tempered, 10% contained non-soluble rocks, commonly called erratic-tempered ware, just under 1% had grog-tempering and three sherds contained brown slag temper. The Romano-British pottery included 215 grey ware sherds, 12 parchment ware sherds from a single vessel, a black burnished type sherd, a grog-tempered sherd, two sherds from a white-slipped mortarium, five sherds of samian, four Dressel 20 oil amphora sherds, 14 oxidised sherds and eight sherds in a wheel-thrown grey ware fabric with sparse vesicles.

In this area types current in the Iron Age continued to be made well into the Roman period and are found in second century groups at sites such as Rudston villa (Rigby

1980). In addition some of the less diagnostic vessel types cannot be closely dated within the Iron Age resulting in unsatisfactory date ranges such as mid-Iron Age to early Roman for individual vessel types. A small number of sherds were of early Iron Age type. These comprised grog-tempered sherds from contexts 2699 and 2994, from a cordoned urn and a smaller jar with upright rounded rim respectively. The latter vessel may be slightly later. Further calcareous-tempered sherds from contexts 1550, 2688 and 2690 may also be early Iron Age in date. That from 1550 comprised a sherd from a carinated vessel while two flat-rim vessels from 2688 and 2690 are also of this date. The vessel from 1690 was carinated with triangular impressions on a cordon. Further flat-rim vessels from contexts 1771 and 2858 may be of middle Iron Age date although this type is sometimes present in later groups and a rounded rim sherd from 1286 may be middle or late Iron Age.

The majority of the handmade vessels compared with vessels found in late Iron Age and early Roman groups as late as the second century AD. The most common forms cited by Challis and Harding (1975): everted-rim, sharply everted-rim and thickened everted rim jars were all well represented, often with tapered or flat rim tips and slight internal rebate/cupping caused by the folding in of the clay to form the rim or rim tip. This was, however, unlike the cupped-rims common in the late Iron Age. The jars ranged from very large, wide-mouthed storage vessels to medium-necked jars with constricted mouths and a small number of small jars with short everted rims. Jars with upright rims, flat or rounded, were present but less common and may derive from activity in the middle Iron Age. Vessel surfaces were commonly smoothed or lightly burnished and plastic decoration such as finger impressions on the neck or the top of the rim were uncommon. One vessel had vertical scratches which may have been in the style of the scored ware found in the East Midlands in the later Iron Age.

The jars with tall, sharply outbent rims of rectangular section known as Knapton type jars (Corder and Kirk 1932) were uncommon. This vessel type developed from the late Iron Age-early Roman everted rim jars and undoubtedly the latter grades into the former typologically. However, comparison with the early Roman vessels identified by Corder and Kirk at Langton (1932, fig. 7), Iron Age vessels at Wharram Percy (Didsbury 2004), by Challis and Harding at sites such as Faxfleet "A" and Salthouse School in the late Iron Age to early Roman period and at Levisham Moor, Thornton Dale and Costa Beck in the late Iron Age (1975 figs 39-41, 51-2) and by Rigby at West Heslerton (Rigby 1986), and in her recent study (2004 fig. 7), all suggest that the bulk of the pottery from Newbridge Quarry spans the late Iron Age and early Roman period. The forms were compared with Evans' Hawling Road series (Evans 1999) and parallels there suggested that the site assemblage included a good proportion of handmade jars dating to the early Roman period, in the late first and second century. The presence of Roman sherds in some groups supported a late first to second century date in some cases but without detailed context information it is difficult to know if these are late fill finds, particularly since so much of the Roman pottery was abraded and undiagnostic. The context sequence will clearly provide valuable information and an opportunity to order the sequence of handmade forms relatively.

Late first and early second century types were not identified, although some may be present amongst the samian, and such dating as was possible pointed to a date in the later second or earlier third century for contexts with Roman pottery. The grey wares

were unlike Holme-on-Spalding wares of the later third and fourth century but compared with fabric samples from the Norton kilns beginning late in the second or early in the third century and continuing through the third century. Characteristically fourth century pottery such as Crambeck wares and Huntcliff or proto-Huntcliff wares were very rare and were restricted to contexts 1255, 2401, 2479 and 2682.

It was noticeable amongst handmade vessels that in many cases most or all of a vessel was present. In the case of the Roman vessels, nearly all of a small closed vessel with upright grooved rim and pedestal type base was present with skeleton 2. This vessel was not matched readily elsewhere but the rim form was similar to a small lugged vessel from Crambeck (Corder 1928, no. 88) which is of a similar size to the small beakers or jars with handles (Corder 1928, nos 89-92). The fabric of the vessel from skeleton 2 is not Crambeck ware but the comparison suggests a late date perhaps in the late third century. Certainly the rim form compares with late funnel necked beakers although the funnel neck is foreshortened in this case. A near complete Crambeck parchment bowl type 5a was found in context 240. This was scorched around the rim and body.

Two of sherds were from contexts 2772 and 2870 were unusual in fabric and that from 2870 had an unusual undulating surface. These are considered possibly Anglian, but will probably need petrological and chemical analysis before any confident identification can be made. Further fabric work is needed generally, particularly on the handmade groups, and it is strongly advised that provision be made for petrological and chemical analyses of these groups.

Flint by M. Lightfoot

A total of 148 flints weighing 476g were submitted for assessment. The flints were recovered from four excavation campaigns (2003 to 2006) and the catalogue is divided into four parts covering each year (Tables 16-19). Although the collection is generally treated as a whole, differences between each assemblage are discussed. Each flint was individually examined weighed and assigned to a category according to tool type, debitage etc., categories included flakes, blades, bladelets, chips and shattered pieces. Core rejuvenation flakes were also recorded as was the amount of cortex, recortication and burning.

Table 13: Quantity of flint by phase of excavation

Year	Quantity	Weight
NBQ 2003	42	96g
NBQ2004	40	105g
NBQ 2005	21	151g*
NBQ 2006	45	124g

*Includes 66g core tool

Raw Material, Provenance and Condition

Apart from a few pieces, the flint was of very poor quality, typically pebbles probably originating from local glacially deposited gravels. The small amount of flint from primary sources was a light grey colour, with thin buff cortex (where it existed), probably originating from outcrops in the Wolds area. Some darker flint (see NBQ2006) may have originally been from further a field, possibly from the cretaceous limestone of East Yorkshire. Very little cortex was noted and no cores whatsoever were recovered from any of the phases of excavation, indicating little or

no primary reduction on site. The only direct evidence for flaking on the site comes from NBQ2005 (2329), with two refits. The condition of the flint was varied, recortication was common, and there were some instances of ferrous staining (e.g. 1139 and 1400), probably post-manufacture. Recortication and staining are due to weathering and chemical actions in the soil, some flint materials are more susceptible than others, though local soil conditions may also be a factor. It was noted that recortication was most common from the 2003 phase, though whether this was due to local soil conditions is unknown.

Burnt flint was rare, with only one fire cracked pebble (2015) recorded from NBQ2004. Approximately 38 flints (weighing only 3g) came from a cremation sample (NBQ2004/1609), all appeared to be debitage; flint chips, small flakes and pieces of cortex, none was burnt, so was not part of the cremation, though if it was collected with the pyre debris then this suggests that knapping may have taken place in the immediate area of the pyre.

Date and function

There were very few flints of likely Mesolithic date; only two blades (1152, 1207) and a microlith (1280) from NBQ2003, one blade (1658) from NBQ2004 and no Mesolithic flints from later phases.

Neolithic and Bronze Age flints were slightly more common, with a discoidal scraper from NBQ2003 likely to be Late Neolithic to Bronze Age, a Neolithic to Bronze Age ovoid scraper (1864) and an unstratified, partially manufactured barbed and tanged arrowhead from NBQ2004. Interestingly, there were no diagnostically Neolithic or Bronze Age flints from the 2005 and 2006 phases, except possibly for a large, unusual, bifacially worked flint, which though quite crude, was possibly a Neolithic knife. This object was quite anomalous in the context of the site, it was unstratified, was far larger than any other flint on the site (66g) and was made from greenish brown flint. It was in good condition and showed no signs of recortication. It is possible that rather than a Neolithic artefact, it may in fact be the broken tip of a large Acheulean hand-axe, or preform, reworked to function as a knife. One other flint of possible intrinsic significance is an unusual 'Y-shaped' implement made from fairly good quality grey flint, two ends seem to be sheared off, though it may simply have been an odd shaped flint, utilised as a scraper, rather than a specifically designed tool.

Flint is a common find on Iron Age sites, and it is generally assumed to be residual. Although this may undeniably be the case with Bronze Age and earlier diagnostic flint tool types, and quite possibly many of the waste flakes, this may not be the case with the whole assemblage. That there was no flint clearly datable to the Bronze Age or earlier at all from the 2005 and 2006 excavations which may indicate that much of the flint was produced and used during the Iron Age. Unfortunately, a distinct Iron Age flint industry has yet to be recognised. However, it is likely with the decline in the value of flint as a tradable resource from the Bronze Age onwards, that people were increasingly compelled to use locally available material, so an Iron Age flint assemblage, might consist of varied, opportunistically and mostly locally acquired material, simple unsophisticated forms, such as retouched, but otherwise unmodified flakes and crude scrapers, but not knives, axes, or other core tools. It is even possible that waste flakes from earlier manufacturing were opportunistically retouched and used on the site and then deposited in contemporary Iron Age contexts.

Environmental Samples Content Assessment by D. Alldritt

A total of 222 flots were assessed for content and preservation of archaeobotanical remains. In addition one hundred and sixty nine retents were also examined for charred fragments. The analysis involved a brief scanning of each flot and retent portion under a low powered binocular microscope, in order to rapidly assess the content and state of preservation of charred plant material in the samples. Preservation was graded on a five-point scale, with 1 being the least well preserved, through to 5 indicating mint condition material. Samples were divided by year of excavation into three tables, site code NBQ2003 in Table 20, NBQ2004 in Table 21 and NBQ2005 in Table 22. Samples taken in 2006 have not yet been processed.

In brief the samples produced a large amount of wood charcoal, mostly oak but with a significant proportion of short-lived material also present, and small amounts of burnt peat, heather stems and rhizomes, suggesting mixed fuel resources taken from both peat / heath land and woodland areas. Some of the wood charcoal was very nicely preserved and included roundwood and other fragments which would be highly suitable for radiocarbon dating, particularly samples 77 (1201), 139 (1429), 282 (1777), 319 (1868), 524 (2348), 538 (2835), and spot samples (1868), (2078) and (2083). The samples originating from cremation contexts were mostly found to produce fuel types, often in large amounts, bone fragments, a 'cramp-like' material and very little else.

Cereal grain was sparse throughout most samples, but, perhaps unsurprisingly, highly abundant in the possible corn drier sample 540 (2390). Other samples notable for good amounts of well-preserved cereal grain included 22 (1051) and 72 (1179). Grains were sufficiently preserved to recognise barley, wheat and oat types, with some six-row hulled barley and bread wheat also present. Other material recorded included a small amount of weeds, and occasional hazel nutshell in certain samples. A large cache of nicely preserved nutshell was present in sample 139 (1429).

A total of 32 flots were graded with a preservation value of 3 or above, indicating generally a very good state of preservation within certain contexts / areas of the site. Samples graded with a 1 or 2 mostly contained small amounts of poorly preserved oak and other charcoal, and occasional degraded cereal grain. Further work on the samples could be done to establish the range of fuel types in use at the site, the extent of the agricultural economy, and to identify material suitable for radiocarbon dating.

Assessment of Animal Bones by J. Richardson

In total, 662 fragments of bone were recovered as a result of hand excavation and environmental sampling (see Table 14 below), although the majority were small, undiagnostic fragments that had been cremated. These fragments may represent animal bones, but the possibility of human bone inclusions cannot be ruled out. Given the small assemblage, all fragments were recorded but diagnostic element zones, which by definition are easily identifiable and non-reproducible, were also noted. Of the 662 bones, only 4% are classified as zones. As such, the assemblage falls well below the minimum reliable sample size of around 500 (with reference to a number of statistical parameters after Van der Veen and Fieller (1982, 296) and has limited interpretative value.