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**Bridge Farm (Phases 3 and 4)
Catterick
North Yorkshire**

Archaeological Watching Brief

February 2001

Report No 885

JIB

C L I E N T

RMC Aggregates (Northern) Ltd

Bridge Farm (Phases 3 and 4)

Catterick

North Yorkshire

Archaeological Watching Brief

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Summary

An archaeological watching brief during Phases 3 and 4 of gravel extraction at Bridge Farm Catterick identified the truncated remains of a probable late medieval early post medieval limekiln and a single pit. The kiln was of a similar size albeit of different shape to another limekiln excavated on the same site some 100m to the north during a previous phase of work. A small number of artefacts were recovered during the course of the watching brief including some abraded Roman period pottery brick and tile and worked stone blocks of probable post medieval date.

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1 Introduction

- 1.1 Archaeological Services WYAS were commissioned by RMC Aggregates (Northern) Ltd to carry out an archaeological watching brief during Phases 3 and 4 of gravel extraction at Bridge Farm Catterick. The site lies approximately 120m north of Catterick village to the east of Lemming Lane and to the south of the River Swale. The area of permitted gravel extraction is centred on NGR SE 234 989 (Figs 1 and 2).
- 1.2 The site is situated on the flood plain of the River Swale. The local geology is of gravel with occasional pockets of alluvial silt overlying limestone bedrock. The Soil Survey of England describes Wick 1 Association soils as well drained coarse loamy soils.
- 1.3 The majority of the 25.7ha extraction area comprises a broad level field undulating slightly towards the south eastern corner. Phases 3 and 4 of the gravel extraction covered approximately 6ha in the north eastern corner of the site.
- 1.4 The archaeological watching brief was carried out periodically between 28th June 1999 and 17th July 2000.

2 Archaeological Background

- 2.1 The Catterick area has long been recognised as an important multi period landscape. The area contains many known and potential prehistoric sites but is best known for the Roman town of *Cataractonium* which is situated approximately 1km to the north west of the site. Situated on the south bank of the River Swale the site of the Roman town commanded both the river and Dere Street an important communications line to the north. Evidence of settlement during the Roman period has also been identified south of the modern village of Catterick where a roadside settlement straddling Dere Street (now part of the A1) was identified in the vicinity of Bainses Farm (Busby *et al* 1996). Between the current area of investigation and Leeming Lane is a Roman marching camp identified from aerial photographs and geophysical survey (Bartlett & Boucher 1991). Further Roman marching camps have also been identified to the west of Leeming Lane and to the north of the River Swale.
- 2.2 To the south-west of Leeming Lane excavations within the grounds of Catterick Racecourse identified an area of multi-period occupation spanning 4000 years (Moloney *et al* forthcoming). A late Neolithic/early Bronze Age burial cairn and associated pits comprised the earliest evidence for activity on the site. The cairn was subsequently incorporated into a substantial ringwork potentially a henge monument which later became the hub of a series of unenclosed and enclosed Iron Age settlement enclosures. During the Roman period the ringwork may also have been remodelled as an amphitheatre. The final phase of activity on the site comprised a 5th/6th century Anglian inhumation cemetery.
- 2.3 An archaeological watching brief carried out during Phases 1 and 2 of gravel extraction at the site of the current investigation (Stone 1997a) and during groundworks associated with the construction of an Aggregate Crushing Site (Stone 1997b) have revealed primarily evidence of a medieval rural landscape comprising probable field boundaries and two structures a well preserved limekiln and a rectangular building interpreted as a barn.

3 Method

- 3 1 Given the known archaeological potential of the area outlined above an archaeological watching brief was requested by the North Yorkshire County Council following a proposal prepared by Oxford Archaeological Associates A Written Scheme of Investigation for the watching brief was prepared by Archaeological Services WYAS
- 3 2 A 360° mechanical excavator fitted with a smooth bladed ditching bucket removed the topsoil in large strips to the ploughsoil base The stripped areas were then walked by an archaeologist to determine the potential presence of archaeological features and for the recovery of artefactual material Potential archaeological features were first cleaned by hand and subsequently sectioned Particular investigations were required following the discovery of a limekiln and on two separate occasions following the discovery of large worked stone blocks also within the gravel
- 3 3 All on site recording was undertaken in compliance with the standard Archaeological Services WYAS method Archaeological features hand drawn in plan at a scale of 1:20 and in section at a scale of 1:10 were tied in to fixed points using a 600 series Geodimeter system

4 Results

- 4 1 Limekiln 3001 (Fig 3, PI 1)
- 4 1 1 Limekiln 3001 was discovered almost exactly 100m due south of that identified in a previous stage of work (Stone 1997a) Unlike the previously excavated kiln (Limekiln 3000) it was not apparent at the ploughsoil base and was revealed only during gravel extraction As a result the kiln was considerably more truncated than the previously excavated example particularly on its south eastern side
- 4 1 2 Subsequent excavation revealed the truncated remains of a kiln structure comprising a single roughly cylindrical chamber (313) within an almost vertical sided flat bottomed pit (312) The pit measured between 1.2-1.5m in width and 0.8m in depth and two vertical sided trapezoidal construction slots for the raking vents extended north (309) and east (307) from the sides of the kiln pit Given that the two vents were identical in their corresponding surviving sections, it seems likely that they performed a similar function They would have enabled the removal of the lime whilst at the same time allowing a controlled supply of oxygen to be drawn into the kiln chamber (313)
- 4 1 3 The kiln chamber (313) was cylindrical in profile narrowing slightly towards its base, and comprised up to eight courses of mortared rubble one stone in width The chamber aperture measured approximately 0.8m at the surface and the chamber wall survived to a height of 0.8m from the kiln base Two drawholes built into the base of the chamber wall at the abutment of the north and east vent walls were formed by pairs of squared quartzstone blocks each with a quartzstone capping Only the capstone across the drawhole from the north-south vent survived completely intact the capstone across the eastern drawhole having split under pressure from collapsed rubble above Further large quartzstone blocks appeared to traverse the upper levels of the vent lining walls (306 and 318) and the wall (313) of the kiln chamber The northern and eastern drawholes measured 0.35m² and 0.3m² respectively All the stones of the chamber wall were reddened particularly on the

- internal face presumably oxidised by the high temperatures generated within the kiln. Several of the stones had traces of a mortar render (314) and charcoal staining.
- 4 1 4 The north-south aligned kiln vent (309) measured 4m in length between 1.3-1.5m in width and up to 0.75m in depth, narrowing and deepening towards the drawhole into the kiln chamber. Unlike the east-west kiln vent, the north-south vent appeared in plan at least to have survived intact. The eastern and western sides of the vent were lined with random rubble brought to course (306 and 318), one stone in width and up to seven courses in depth. The walls measured up to 2.2m in length and abutted the quartz stone blocks forming the northern drawhole into the kiln chamber.
- 4 1 5 The east-west aligned kiln vent (307) was considerably more truncated than the north-south vent and survived up to 2m in length, 1.5m in width and 0.65m in depth. The northern and southern sides of the vent were also lined with random rubble (305 and 311), again one stone in width and surviving on the northern side up to six courses in depth. The floor of the vent deepened into a shallow circular hollow towards its north-eastern end, which measured approximately 0.5m in width and up to 0.1m in depth.
- 4 1 6 At the base of each drawhole, a large stone slab had been set flat in the floor of the kiln (317), presumably to facilitate raking out or stoking of the kiln chamber. The floor (317) itself appeared to have been formed from a deliberately laid surface of coarse sand and grits in a lime-rich matrix, effectively consolidating the loose gravel below. The possibility that the floor may have been formed by the accumulation of material produced in the kiln being trampled into the gravel below seems unlikely in this case. The deposit forming the floor covered the entire base of the kiln chamber and vents, shallowing out only at the terminals of the vent walls. In addition, and above the floor (317) in the kiln chamber, a loose deposit of lime-rich material (316) almost certainly appeared to represent debris from the final firing of the kiln. The loose material deepened around the edges of the chamber, particularly around the drawholes.
- 4 1 7 The kiln chamber and vent walls would undoubtedly have extended above the upper level revealed by the excavation, and the vents may also have been partially capped. Most of the cobble stones on the uppermost level of the kiln chamber, and to a lesser extent the walls of the kiln vents, were partially covered in mortar, and numerous additional heat-affected stones were recovered from the filling of the kiln. However, any superstructure which had originally extended above the upper level of the kiln chamber had clearly since been removed, either through deliberate demolition or collapse, and possibly also through deep plough damage.
- 4 1 8 The building debris which had collapsed into the chamber and vents was contained within a homogenous deposit of yellowish-brown sandy silt (308, 310 and 315, not illustrated), which appeared to represent the filling of the feature once it had fallen into disuse. Parts of a large horse had also apparently been discarded into the kiln during this infilling (see 6.2 below).
- 4 1 9 No dateable artefacts were recovered from the kiln or the deposits filling it. However, an unstratified pottery sherd of probable 16th-century date (see 5.3 below) was recovered from the immediate vicinity of the kiln, and the date of this sherd corresponds with the late medieval/early post-medieval date ascribed to the previously excavated kiln, some 100m to the north (Stone 1997a).

4.2 Cobble stone spread 303 (Fig 4)

4.2.1 A concentration of large water worn cobble stones was investigated in the central and western areas of the site. The spread was traced for a distance of 22m and initially appeared to be part of one of the numerous natural gravel banks which traverse the site from north west to south-east. However a quernstone fragment and a large brick floor tile (see 5.4 below) appeared to form part of the spread and a sherd of pottery (see 5.3 below) and a brass button were recovered from voids between the stones. Further investigation revealed no cohesive make-up to the spread or any retaining feature. Instead the stones appeared to be randomly distributed within the alluvial soil (303) underlying the topsoil (302). Although the spread was traced for a short distance to the south east no further artefacts were recovered and the large cobbles became progressively more dispersed.

4.3 Pit 300 (Fig 5)

4.3.1 A single sub circular pit (300) measuring 0.76m in length 0.7m in width and 0.23m in depth was located in the south western corner of the site. No other associated features were observed in the area. A single large brick fragment of post medieval date (see 5.4 below) was recovered from the single fill (301) of the feature, a greyish brown sandy silt.

4.4 Concentrations of worked stone (Pl 2)

4.4.1 Two concentrations of dressed limestone blocks with tool marks were identified during the course of the watching brief. The blocks appeared to have been recovered from the natural gravel that underlies the topsoil and alluvial subsoil across the site. The shape, size and working of the blocks differed between each concentration. The first concentration of seven blocks were located during Phase 3 and were rectangular in shape. The stones typically measured either 0.67m by 0.38 by 0.22m or 0.85m by 0.37m by 0.22m. One of the stones had a slot cut along one face but there was no additional working present on the remaining stones. The second concentration of five stones were identified during Phase 4 and were more squared in shape typically measuring 0.65m by 0.37m by 0.3m. Three of these stones had what appeared to be a large capital letter 'M' carved into one face to varying degrees of completion. The two other stones had three parallel shallow grooves carved into one face again to differing degrees of completion. There was no apparent form to the position of the stones in either concentration and none of the stones appeared to be lying in their original setting.

5 **Artefact Record**

5.1 **Summary**

5.1.1 Artefacts recovered during the watching brief (Phases 3 and 4) included cinder (67 fragments) pottery (nine fragments) brick and tile (eleven fragments) a quemstone fragment (Millstone Grit) and a brass button. The pottery, brick and tile and cinder were subject to specialist assessment in the hope of providing dating and further information relating to the features identified during the watching brief.

5.2 **Roman pottery by M. Ward**

5.2.1 Three sherds of pottery representing three vessels were recovered, all unstratified (Table 1 below).

Table 1 Roman pottery

Context	No	Description
u/s	1	Part of the footring of a heavy vessel from Central Gaul, probably a deep dish form DR 31R, which was produced c AD160/170-200. The upper surface of the base and the footring itself are badly abraded.
u/s	1	A small fragment of the footring of a Central Gaulish vessel, probably a dish produced somewhere in the range c AD120/140-160/180.
u/s	1	A decorated wall sherd from a moulded bowl produced in Central Gaul; a fragment of ovolo may represent the type Rogers (1974) B143 above a border which was probably type A2. Below a fragment of a vertical panel border survives to the right of a lozenge-shaped motif (U33). The panel contained a large plain double medallion whose contents have not survived. The sherd represents a bowl produced c AD150-170 in the standard style of Cinnamus (cf Stanfield & Simpson 1958, pl 158-16 from Corbridge).

5.3 **Medieval and Post-Medieval pottery by Dr C G. Cumberpatch**

5.3.1 The sherds were all heavily abraded, suggesting that they were derived from plough soil or some similar heavily reworked context (Table 2 below). Few other interpretations are possible on the basis of such a small assemblage.

Table 2 Late medieval and post medieval pottery

Context	No	Weight	Date	Description
303	1	31g	Later C15 th /early C16 th	Base and lower wall reduced sandy ware
u/s (in vicinity of kiln 3001)	1	50g	Late medieval/post medieval probably C16 th	Sandy reduced ware flaked and spalled
u/s	2	33g	C18 th /early C19 th	Brown Glazed Coarseware
u/s	1	4g	Later C18 th to C19 th	English stoneware
u/s	1	12g		Refined earthenware brown slip decoration

5 4 **Brick and tile by Dr J Evans**

5 4 1 A total of eleven fragments of brick and tile were recovered two from stratified contexts (Table 3 below)

Table 3 **Brick and tile**

Context	No	Description
301	1	A brick end post medieval
303	1	Thick floor tile eroded Roman
u/s	9	Seven eroded Roman fragments one of which is probably tegula and two possibly post Roman fragments

5 5 **Clinker by J Cowgill**

5 5 1 Clinker and coal were recovered solely from contexts associated with Limekiln 3001 (Table 4 below) Coal was evidently the main fuel used in the limekiln and judging by the size of some of the pieces it was used in quite large bits although some kindling (a few pieces of charcoal are present) was probably employed to start the fire at the beginning of each burn The magnetic ironstone is probably from sand or ironstone inclusions in the limestone that has become oxidised (and therefore magnetic) when heated in the kiln The iron corrosion flakes are presumably from iron objects deposited in the excavated layers or fittings associated with the kiln and its use The single piece of hammerscale may be a particularly flat corrosion flake

Table 4 **Clinker**

Context	Type	No	Weight	Description
308*	Ironstone	2	<1g	Ironstone
308*	Coal	11	<1g	
310	Clinker	2	126g	Burnt coal crumbling
310	Coal	1	6g	
316	Clinker	13	81g	Burnt coal crumbling
316*	MagMat		2g	Magnetic ironstone and iron corrosion flakes
316*	Clinker	15	12g	Coated in lime/ash
316*	Clinker		6g	Some charcoal
316*	MagMat		<1g	Iron corrosion flakes and ?plate hammerscale
316*	Clinker		10g	Clinker coal some charcoal
316*	Clinker	21	31g	Coated in lime/ash
317*	MagMat		1g	Iron corrosion flakes
317*	Clinker		<1g	Clinker coal charcoal
u/s	Clinker	1	19	Burnt coal
u/s	Clinker	1	73	Burnt coal

* recovered from processing of environmental samples

6 Environmental Record

6 1 Bulk Samples by Dr J Richardson

6 1 1 Three bulk samples were collected during the watching brief and processed for the recovery of ecofactual and small artefactual material. The only botanical remains recovered included some charcoal and a single carbonised stalk from the primary filling (316) of the kiln chamber, a small piece of charcoal from the kiln floor (317) and fragments of eggshell from the filling (308) of one of the kiln vents. All three samples contained clinker and/or coal fragments (see 5 5 above). Two samples were tested with dilute hydrochloric acid for the presence of lime and perhaps not surprisingly a much stronger presence of lime was noted in the primary filling of the vent chamber (316) as opposed to the kiln floor (317).

6 2 Animal Bone by Dr J Richardson

6 2 1 The animal bone fragments came from two deposits (310 and 315) associated with a probable limekiln (3001). In total 132 fragments were retrieved (Table 5 below) although many fresh breaks were recorded.

6 2 2 As the number of animal bones retrieved from the excavations was so small an attempt was made to identify every fragment to element and taxa. Bone condition, fusion states, dental wear and pathologies were also recorded.

6 2 3 Bone structure remained dense although there was some etching of bone surfaces. Fresh breaks were common however and served to artificially inflate the total number of fragments.

6 2 4 All the bone fragments identified to taxa were of horse and the remaining fragments identified only as large mammal were most likely of horse also. In fact all 132 bone fragments appear to belong to one individual. This partial horse skeleton was represented by the skull (but no mandibular fragments), a portion of the vertebral column, both pelves and the left femur and tibia.

6 2 5 The epiphyses of the pelves, femur and tibia were fused indicating that the animal was aged over three to three and a half years at death. Five maxillary teeth and a second incisor were so well worn however that the horse probably exceeded fourteen years. The absence of canine teeth suggests that the horse was female.

6 2 6 The lateral length of the tibia measured 344 mm indicating that the horse stood at nearly 15 hands high (after Kiesewalter 1988 cited in von den Driesch and Boessneck 1974).

6 2 7 A minimum number of five thoracic vertebrae were identified with at least three centra displaying the signs of severe osteophytic lipping. Further vertebral fragments indicate that at least two vertebrae were ankylosed by the ossification of the dorsal longitudinal ligaments. These may indicate joint disease associated with riding traction or advanced age.

6 2 8 The evidence is consistent with the remains of a large and mature horse deposited within the disused limekiln, seemingly a convenient structure within which a large carcass could be discarded. Pathological damage to vertebrae indicated the development of joint disease associated with the stresses of riding traction and/or advancing age.

Table 5 Animal bone

Context	Taxa	Element	Description
310	Horse	Tibia	Left complete fused LI=344mm
310	Horse	Femur	Left complete fused
310	Horse	Pelvis	Left 4 fragments fused
310	Horse	Pelvis	Right 3 fragments fused
310	Horse	Vertebra	MNI 5 thoracic vertebrae 6 fragments pathological
310	Large mammal	Rib	2 fragments
310	Large mammal	Unidentified	25 fragments of pelvis and/or vertebra
315	Horse	Skull	90 fragments including 5 maxillary teeth and 1 incisor

7 Discussion

7.1 Limekiln 3001

7.1.1 The size and form of Kiln 3001 suggest it was an open topped combustion chamber with two draw holes or eyes at the base allowing a controlled oxygen supply into the central chamber and access for raking out the resulting ash and calcined lime. This is typical of a pre industrial kiln in the sense that the central chamber would have contained both the fire and the limestone (hence mixed-feed kiln). It is not possible to be certain whether it was an intermittent or continuous burning kiln as these are very similar in construction at the small local farm level and differences relate more to techniques used rather than construction (Leach 1995).

7.1.2 Intermittent burn kilns were charged and fired as required in response to demand. A small load of limestone was built into a dome at the base of the pot possibly supported by a wooden frame leaving room for the initial fire charge below. The limestone would then have been placed into the kiln via the top opening and the whole left to roast slowly for some days before being raked out. Continuous burn kilns were charged much as above but with interleaving layers of broken limestone and fuel in this case coal. A charge was set at the base to ignite the lowest layer of fuel as the lime above this collapsed on roasting. This collapse then brought the next level of fuel into contact with the fire below causing it to ignite and roast the limestone above. The lime thus formed could be raked out of the kiln base whilst further supplies of limestone and fuel were tipped in at the top. In this way the continuous burn kiln was more efficient in fuel consumption as the process could continue until sufficient lime had been produced and the kiln did not have to be reheated for every firing. The narrowing of the chamber would also have ensured the steady fall of converted lime towards the base whilst the vents would help drive off the carbon dioxide produced by the chemical reactions within the kiln which would otherwise have smothered the fire.

7.1.3 Kilns such as these have been used to produce lime since Roman times and are described in Cato's *De Agricultura* (dated from the 2nd-century AD). The earliest documented use of lime in the Catterick area is a contract from 1421 pertaining to the building of a bridge over the River Swale which required the builder to excavate sand and limestone and to build limekilns (Stone 1997a). There are also other

indicattons of lime burning in the vicinity The 1st edition Ordnance Survey map of 1857 records two limekilns approximately 3km west of the site close to the River Swale In addition close to Bainesse Farm are Lime Kiln Farm and Limekiln Wood as well as a handful of field names containing a lime kiln element close to Tunstall Beck The banks of the River Swale are particularly suited to the production of lime as at least two of the three necessary raw materials were available a limestone bed exposed through river erosion may have provided the material for roasting and some of the building material to constmct the kiln The river would also have facilitated the wetting of the limestone prior to heating which helped reduce carbon dioxide emissions The river may also have been used to transport the lime up or downstream

- 7 1 4 Clearly the poor survival of both kilns precludes the drawing of any firm conclusions from comparisons between them or other excavated examples However what survives of the stmrctural similarities and dissimilarities between the two features can be usefully discussed and these are summarised in the table below (Table 5)

Table 5 Comparison of Limekilns 3000 and 3001

Feature	Limekiln 3000 (Stone 1997a)	Limekiln 3001
Phases	?Two phase	Single phase
Chambers	Circular aperture 1m ²	Circular aperture 0.8m ²
Drawholes	0.5m ² (E) & 0.5m ² (W)	0.35m ² (N) & 0.3m ² (E)
Vents	2 opposing vents	2 vents at right angles
Vent length	c 2m (walls c 1.5m)	c 4m (walls c 2m)
Vent width	c 0.7-1.6m width	c 0.8-1.6m width
Floors	?Two levels of mortar floor	Single level of mortar floor
Rendering	Mortar	Mortar
Fuel	No evidence	Coal

- 7 1 5 The number of similarities between the two kilns suggests that they were broadly contemporary the close proximity of the two features the use of the same raw materials in constmction, the same roughly coursed walls the similar chamber sizes the use of two subterranean drawholes the mortared floors within the vents and lime rich material in the base of the kiln chamber This contemporaneity is very loosely supported by the finding of 16th century pottery in the immediate vicinity of Kiln 3001 a date which corresponds with the silver cross penny dated 1595 recovered from deposits contemporary with the later phase of Kiln 3000
- 7 1 6 The most striking difference between the two kilns is the unusual arrangement of the vents in Kiln 3001 which are at right angles compared to the more commonly found opposing vents in Kiln 3000 Kiln 3000 also appeared to have an earlier phase of constmction represented by outer walls and an outer chamber whereas the latter phase of the more robust circular chamber corresponds more closely to the single chamber of Kiln 3001 It could be argued that the shape of vent 309 in Kiln 3001 and vent walls 306 and 318 in plan indicate two phases to the kiln with a second kiln (309 306 and 318) utilising the first (313 307 305 and 311) as a second vent However the similar constmction of the drawholes into the chamber (313) and the

lack of evidence for remodelling in the elevations suggests this is unlikely. The shape of Kiln 3000 with opposing vents is closely paralleled by a pair of kilns found on the site of Clementhorpe nunnery in York in 1976 (Cherry 1977) and thought to date to the late 16th century or early 17th-century. The shape of Kiln 3001 is more unusual but is paralleled by a 13th-century limekiln excavated at Cūlgerran Castle Dyfed also coal burning and thought to be an early type of semi continuous kiln (Williams 1989).

- 7 1 7 Lime was used for a variety of purposes in the medieval and post medieval periods, including for mortar white wash hide processing flax and wool processing, composting, disinfecting and other uses. The agricultural use of lime is also well attested however this would seem unlikely in this area given the fertile soils. It seems more likely that the kilns were used either in the construction or repair of Catterick Bridge and/or for the construction or repair of nearby buildings. A further possibility is that the lime was used for spreading on the carcasses of diseased livestock after an outbreak of rinderpest a virus which was fatal to cattle and other hoofed animals and which was thought to be prevalent in this area during the late medieval and post-medieval periods (Campling *pers comm*)

7 2 Pit 300

- 7 2 1 Little can conclusively be said about the single pit given its apparent isolation. The large fragment of post-medieval brick seems to have been incorporated into the feature during its infilling and at least provides a reliable if broad date for the feature. Perhaps a context for the feature may be apparent following the stripping of areas to the south.

7 3 Cobble stone spread 303

- 7 3 1 The presence of artefactual material within a naturally formed spread of cobbles is problematic. Similar spreads of cobbles were noted in a previous phase of work on the same site, but these were contained within narrow furrows approximately 1m in width (Stone 1997b) whose alignment corresponded with that of ridge and furrow recorded in the Sites and Monuments Record on the 1st edition Ordnance Survey map of 1857. The presence of a quemstone fragment and a large floor tile mixed in with the cobbles might suggest that the aggregation somehow formed a cohesive and deliberately constructed feature but this was not borne out in section or in plan. The cobbles certainly did not appear to have been deliberately placed with any precision neither did they appear to be lying within a larger feature. One possibility is that the stones formed part of a bank constructed from the clearance of large stones from adjacent fields and that ploughing subsequently reduced the bank. A further possibility is that the stones were put down as part of a track or surface to facilitate movement across a difficult marshy area within the fields, and that the edges of the track have since been removed by ploughing. Both suggestions however seem equally unlikely. The alignment of the stones does not correspond with that of any features identified during the previous phases of work nor does it correspond with the alignment of field boundaries shown on the 1st edition Ordnance Survey map or earlier maps of the area. If the stones had been part of a bank it might be expected that the boundary would have been fossilised influencing later boundary layout. A track might also have been expected to influence the later layout of field boundaries and would surely have required a more compact and solid surface or metalling or have revealed evidence of fitting between the stones. Taking into consideration all

the evidence the most likely explanation would seem to be that the large water-worn cobble stones accumulated at the top of one of the natural gravel banks during the formation of the alluvial subsoil and that the artefactual material has simply been incorporated into the cobbles through deep ploughing in more recent times

7 4 Worked stone

7 4 1 The date and likely usage of the worked stones remains uncertain. The working of the stone and the lack of wear might suggest that they are not of great antiquity. The unfinished nature of a number of the stones suggests that they were probably quarried and worked in the locality and never used. However the context of the stones within what appeared to be the natural gravel is like the artefacts within the cobble stones not easily explained. The stones did not appear to be lying within a larger feature or within individual settings and although it is possible that the edges of such a feature may have been subsequently removed there were no indications that this was the case.

8 **Conclusions**

8 1 The late medieval and post medieval remains uncovered at Catterick are not in themselves of great archaeological significance. The limekilns however can be usefully compared with those excavated elsewhere and were probably associated with repair work to Catterick Bridge and/or the construction and repair of nearby buildings. The worked stone recovered is probably also of late medieval or post-medieval date and appears to have been quarried and worked in the locality of the site, but never used. The Roman pottery and the Roman floor and roof tiles are undoubtedly the result of secondary deposition perhaps originally derived from the town of *Cataractomum* or a satellite settlement and eventually discarded in the nearby fields.

Abbreviations

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