ART. IV – Stainmore, Cumbria: archaeological investigation on the A66 Stainmore to Banks Gate road improvement scheme

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BETWEEN 1992 and 1994 the Lancaster University Archaeological Unit undertook a phased programme of archaeological assessment and recording on a section of the A66, as part of the Stainmore to Banks Gate road improvement scheme. This six kilometre stretch, lying to the east of Brough, was between Augill Bridge and Palliard (NY 809147-NY 865135). The work was commissioned and funded throughout by Cumbria Highways and Transportation, beginning with an initial assessment of archaeological potential, followed by evaluation through to mitigation recording, including monitoring during the construction process, and culminating in analysis and reporting.

The study area lay wholly within the upland parish of Stainmore, historically part of Westmorland, with all its land lying above 167 m. Carboniferous limestone occurs as an outlier in the Stainmore area, with bedrock outcropping from North Stainmore eastwards to Slapestones, where areas of denuded limestone pavement are visible; the drift geology comprised boulder clay deposited during the last glaciation. The parish forms a westward-facing embayment, which is largely drained by the deeply incised streams which supply the River Belah, a tributary of the River Eden, flowing westwards across South Stainmore. The farmland is characterised by rough pasture with little or no arable cultivation, and stands of trees are to be found only in the steep-sided stream channels. The combination of the poor drainage due to the underlying boulder clay, and high rainfall, has led to the formation of peat bogs on the higher ground, and also limits the agricultural value of the area.

The archaeological investigation was undertaken in three main phases using a number of strategies including documentary and cartographic research, topographical survey, building recording, and trial and open area excavations. The study area was prescribed by the line of the proposed route, with excavation confined within the construction corridor itself, although detailed topographical survey together with targeted documentary research allowed a wider context to be established. Many of the sites or features were earthwork remains which were most effectively recorded by instrument survey. All the sites identified, by whatever means, in or close to the construction corridor were collated into a gazetteer forming part of the project archive.

Historical background

The course of the A66 over the Stainmore Pass approximates to the Roman route over the Pennines between Bowes in County Durham and Brough in Cumbria. The Romans constructed the first durable road, although it seems probable that it was a viable route long before the Roman period (Manby 1965). Limited and scattered evidence points to prehistoric activity on Stainmore, with flint tools, the result of casual loss, and evidence in the pollen record suggesting early human influence on

the environment. Settlements and field systems of Iron Age or Romano-British type have been recorded, and a series of substantial dykes is known on Stainmore, and which may well have its origin as late prehistoric or Roman land divisions (Higham 1977a, 116).

The Roman road across Stainmore (Margary 1957, 434-5) ultimately linked York and Carlisle with forts situated on either side of the pass at Church Brough (Verterae) and at Bowes (Lavatrae). The fortlet of Maiden Castle (NY 872731) stands above the modern road and overlooks the summit of the pass, and a series of smaller earthworks usually interpreted as signal stations (Richmond 1951) complete the chain of communication between Church Brough and Bowes. Archaeological investigations, associated with the construction of the Brough by-pass, identified a road line near Forest Farm, leading towards Church Brough, although there was no clear dating evidence (Jones 1989). Similarly, near Vale House on the eastern side of the watershed, traces of a turf agger, with a possible thin metalled surface, were identified during road improvements (Vyner forthcoming).

Whilst the line of the Roman road frequently lay below that of the A66, a section, known as Low Street, diverged from the modern road to the east of Craco Farm, its course lying in the direction of the Punchbowl Gill signal station, whilst the A66 took a line to the north-east toward North Stainmore. Beyond this, east from Banks Gate to Palliard, the Roman route converged with that of the modern road.

There is very little solid evidence for activity on Stainmore in the period following the departure of the Romans, although this route probably continued to provide an important link. It is perhaps notable that the only evidence to date for a recognisable "Anglo-Saxon" type of structure in Cumbria should have been found near Brougham along the line of the A66 (Oliver et al. 1996), and that Erik Bloodaxe died at Stainmore in A.D. 954. The numerous Anglo-Scandinavian placenames in the area are mostly topographical in origin, such as Craco Farm (from kraka haugr, meaning "crow" hill) and Slapestone (from the Old Norse sleipr meaning "smooth" stones – presumably a reference to the limestone pavement nearby) (Smith 1967). The border between the growing Scottish and the English kingdoms remained fluid throughout the early medieval period, although for a time in the eleventh century the boundary between the two was marked by the "Rerecross" (Rey Cross) on Stainmore (Kirby 1962).

The route remained important following the Norman Conquest of the area with castles being maintained at both Church Brough and Bowes (English Heritage 1993; Jones 1989). The provision of services to travellers may be reflected in the placename Palliard which seems to have derived from the Middle English *paillet* (a straw bed) and by extension from the Early Modern English *palyard* or *payllard* (a vagabond who sleeps on the straw in barns), suggesting a place where a night's lodging was to be had (Smith 1967, 73).

The crossing remained of great importance throughout the medieval period and was clearly used by a considerable volume of traffic, including the growing droving trade, although it is not clear to what extent the Roman road remained in use. King John was known to have crossed the Pennines by this route in 1206, and Edward I passed across it in 1280, and again in 1300, on his way to and from the Scottish border (Hindle 1977, 86-90). The significance of the route is emphasised by its appearance on the fourteenth century "Gough Map", compiled around 1360 (Hindle 1977, 91), where a

road crossing "Staynesmore" is shown connecting Brough and Bowes.

Stainmore was extensively mined, at least for coal. The moor had been granted to the Clifford family by the thirteenth century and they appear to have been deeply involved in the exploitation of coal in the area from the fourteenth century, when Roger de Clifford was receiving 13s. 4d. rent from a mine on Stainmore (Robertson 1989). Similarly agriculture played a large part in the economy and no less than fifteen vaccaries (Charlesworth 1988) are recorded in the fourteenth century. This large number demonstrates a well-organised manorial system of cattle ranching in the area, suggesting that the population may have been as great as it is now. The droving of cattle also became very significant, and large cattle and horse fairs developed in the area. The Clifford family created two deer parks within the manor before 1300, one probably in the vicinity of Augill Castle (IPM 8 Ed. 2).

In the post-medieval period the significance of the route did not decline, although the road itself was in a poor state: in the 1530s Leland commented on its ". . . excedinge poore . . ." quality. Locally, mining, cattle farming and droving were thriving and there was some increase in the population in the late sixteenth and early seventeenth centuries (Jones 1989). The apparent prosperity of this period saw an expansion and upgrading of settlements and farmsteads with the earliest stone buildings on Stainmore dating from this period when the population was sufficiently large to require the services of a school and a chapel.

The Clifford family was investing heavily in mining in the seventeenth century (Spence 1991, 101) to supply their own industrial needs, and the mineral rights remained in the family until the late eighteenth century; for instance, in 1787 a collier was commissioned to drive a level in Bluegrass pasture (Robertson 1989, 36). Lead, silver, and barytes were also mined from Stainmore, lead in particular being an important part of the local economy until the late nineteenth century. The limestone of the moors was quarried widely from small quarries, to be used in building, although it was also burnt for lime.

The increased population (the 1787 census gives 621 inhabitants for Stainmore alone (Jones 1989, 144)) resultant on the increased prosperity of the early post-medieval period led to a substantial intake of "improved" land from the late sixteenth century onwards, until the 1830s when the population of the area appears to have reached a peak (Jones 1989, 144). Craco, Bluegrass Pasture, Forest Farm, and Penistone Green are amongst the farms known to have improved waste at a relatively early date (CRO WD/HOTH/Box 34), thereby implying their existence in at least the late medieval period, probably being the sites of some of the vaccaries listed on Stainmore in the fourteenth century.

The road was turnpiked in the mid-eighteenth century, having been described in the first Turnpike Act 1742-3 (CRO WD/HH/171) as in dangerously ruinous condition. The turnpike road improved and speeded communication across Stainmore, to be followed by the railway which was built to the south of the road in 1861, but its course, through Kirkby Stephen not Brough, must have been a blow to the local economy (Jones 1989, 145).

Today the economy of the moor is based largely on sheep farming and tourism, with the road once again bringing a vital supplement to the income of subsistence farmers on the moor, directly or indirectly providing accommodation and entertainment for holidaymakers.

Survey results

In this upland landscape many of the sites identified were earthwork features, such as routeways, field systems, and boundaries. A record of such landscapes can best be achieved by detailed topographical survey, providing a relatively complete record and aiding the interpretation and understanding of the features, since it is neither feasible nor appropriate to excavate large-scale landscape features in their entirety. Experience has shown that many such features survive only within the topsoil, leaving little or no below ground evidence when excavated, and they seldom produce dating evidence. Initial assessment had identified a number of sites which were evaluated, and seven sites directly affected by construction were subject to further detailed recording. Individual sites were, of course, part of wider complexes, and where appropriate and feasible the survey was extended beyond the limited construction corridor to encompass the extent of individual elements or groups of associated features. The types of site most commonly recorded can be grouped thematically under the broad headings of communications, land division, agrarian activity, mineral extraction and settlement.

The line of the Roman road was thought to coincide with that of the A66 between Palliard, in the west, and Bluebell House where it diverged to the south of the A66 passing the signal station at Punchbowl Gill, on an east-west alignment and converging with the modern route between Cooper House and Craco Farm. The western end of the alignment (known as Low Street) comprised a pronounced terrace (up to 5-6 m across), its southern edge defined by a moderately steep south-facing slope (near vertical in places and up to 0.75 m high). Where it lay close to the A66, its northern extent lay below the field boundary and modern road embankment. It was visible up to a field wall, beyond which the alignment continued as a broad terrace (a distance of 230 m) until truncated by a hollow-way and streams flowing down the slope. Although its alignment beyond this point could be inferred along a hollow-way (a further 150 m), there were no distinctive surface features attributable to Roman construction. No evidence was found to the south of Craco Farm of a second posited road alignment of Roman origin.

Numerous hollow-ways, some well defined, others apparent as gentle undulations, were recorded alongside the A66, many following the general east-west alignment, although some, near Craco Farm and at Craco Dub, pursued a north-south course leading down the south-facing slope toward Powbrand Sike. One such hollow-way clearly truncated the Roman road terrace where its line converged with the A66. Dependent on the terrain and local conditions some areas were marked by deeply worn hollows, such as the multiple, interweaving hollow-ways at Newton Garth, which had been worn into the slope rising up toward the Punchbowl as the most suitable course was sought through frequently muddy ground. Some of the tracks recorded were associated with mineral extraction, such as limestone quarrying and coal mining. At Bluegrass Pasture a series of bell pits was recorded, which was not shown on any maps and may have dated to the eighteenth century or earlier.

Other earthwork features were also recorded including field boundaries and small enclosures, as at Palliard, as well as a substantial dyke (ditch and bank) near Augill Bridge. The dyke was aligned north-west to south-east extending from the south side of the A66 down to Powbrand Sike. Its earthen bank was 4.50 m wide and up

to 1 m high with a rounded profile and a slightly flattened top, it was bounded on its western side by a ditch 1 m wide and up to 0.60 m deep. A possible continuation of the dyke lay on the northern side of the A66, seen as a short section of bank (0.25 m high and 5 m across) partially overlain by the boundary wall for the former A66.

Excavation results

Augill Bridge

Approximately 5 m of identifiable ditch and bank of the substantial dyke at Augill Bridge lay within the construction corridor and was subject to excavation in advance of road construction. In this part the earthwork was not well preserved, the top and western face of the bank had been damaged, the area was affected by waterlogging, and there was some disturbance caused by tree roots.

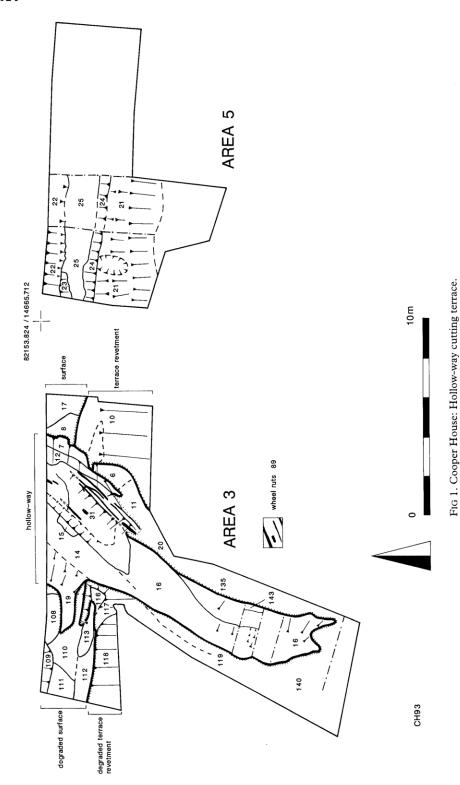
The ditch (1.40 m across at the top, 0.90 m wide at the base, by 0.35 m deep) was cut through natural clay subsoil with the upcast material forming the bank on the eastern side of the ditch. The bank was retained to the east (outer edge) by a low drystone kerb and there was a step or berm (0.85 m across) between the western base of the bank and the edge of the ditch. The ditch was flat based with steep sides, and at its western edge there was the possible base of a drystone wall, although there was no clear evidence that the wall had stood to any height, and may simply have revetted the ditch edge, protecting it from damage or erosion. The ditch appeared to have silted up naturally with no clear evidence for recutting or cleaning. The upper portion of the bank had not survived and therefore no form of superstructure, such as paling, could be discerned on top of the bank, if any had ever existed. The ditch and bank complex, from the eastern, outer stone kerb to the possible revetment wall, at the western edge of the ditch, measured 6.75 m across with a combined (ditch and bank) vertical barrier of 1.55 m.

On the basis of this evidence the most likely interpretation is that the ditch and bank had been constructed as a deer park boundary, in the medieval period, perhaps part of an emparkment by the Cliffords, although the paucity of finds, whilst not uncommon, meant that it could not be dated with any certainty. The possibility of earlier origins for the boundary, however, and its later re-utilisation, cannot be dismissed entirely.

Cooper House

Eight areas were opened over the east-west stone-revetted terrace thought to be the line of the Roman road (Low Street), and to the west where a stone structure had been identified during trial trenching.

The stone-revetted terrace survived in varying states of preservation. It was characterised by large footing stones (set at its southern edge) retaining stone make-up deposits which had been laid to achieve a level surface, compensating for the natural slope. The stony make-up was in places clearly deposited as separate dumps of material, frequently with a bed of large stones (up to 0.50 m across) at the base (placed on the natural clay subsoil) followed by a series of spreads of smaller stones (0.03 m-0.15 m across) in silty clay matrices used to build-up to the required level.



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At its southern edge the terrace was marked by a bank, rising above the footing stones, forming a fairly steep face. The bank was also constructed with layers of stone, occasionally interspersed by shallow spreads of stone-free clay, which appeared to be part of the same construction process as the levelling deposits. In places it was evident that a layer of turf had been incorporated into the mound of stone, presumably to provide stability or cohesion to the bank. Again this appeared to be integral with the construction of the revetment.

The level area to the rear of the bank comprised a well-made rammed cobbled surface which appeared to extend northward, beyond the excavated area, possibly representing the edge of a running surface (1992 Trial Trench 4). However, where the northern edge of the cobbled surface was evident (Area 5) it formed a surface only 1.64 m wide, its edge marked by a mound of stone make-up, similar to the stone deposit at the top of the outer bank. This stone mound, lying at the edge of the excavation, may have represented a repair or later reuse of the surface or it may have formed an integral part of the terrace construction providing perhaps some form of drainage system at the terrace edge, with the road surface lying to the north, below the line of the modern road.

The nature and function of the area immediately to the rear of the terrace bank was further complicated by the absence of any surfacing material in the areas to the east (Areas 7 and 8). Whilst to the west later wear and disturbance may have removed evidence of a surface (Area 3), to the east there was little evidence that the level clay surface, beyond the made-up ground at the terrace edge, had ever been surfaced or subject to a volume of traffic. The apparent irregularity of these sections reinforced the suggestion that this cobbling was not intended as a running surface and the actual road surface lay to the north.

The terrace itself was sealed, in part, by silt and sand deposits, which also accumulated downslope of the terrace. It appeared that whilst this material may have been washed downslope over time, material from the stony bank had not been disturbed in the same manner as there was little or no evidence of stone material from the bank lying further downslope.

Whilst there was no dating evidence relating to the construction or use of this road, a horseshoe of possible late medieval date was recovered from the interface of a degraded stone make-up deposit and the overlying sands. Given the apparent lack of road construction programmes until the eighteenth century, this reinforces the suggestion that this road terrace is indeed of Roman origin, and in use over the next thousand years.

A broad hollow had been worn in the revetted terrace (Site 14 Z, Area 3), through prolonged and heavy use, presumably by traffic to and from Craco Dub (a ford and one-time sheep-wash to the south). The base of the hollow was flat (1.90 m across) and bore the marks of wheel ruts, which had subsequently been surfaced with stone, although this had become very worn. The sloping sides of the hollow were also covered in stone, presumably to give purchase to vehicles attempting to gain level ground. As silt subsequently washed into the base of the hollow this had in turn become marked by wheel ruts.

A well-constructed stone surface lay to the south of this hollow-way, forming a curving band of stone, with a pronounced camber, sloping down from west to east where it was limited by a line of kerb stones. The angle and narrowness of the

cobbled surface did not appear to be particularly suitable for wagons and carts, but presumably served to enable the movement of traffic on the last part of the slope before gaining the hollow-way. Further excavation (Area 4) provided little evidence of sub-surface remains that would indicate the route of traffic ascending the slope from Craco Dub.

A hollow-way (Site 25 E), possibly crossing the slope from Craco Dub and rising toward the level ground at the top of the field, proved in excavation (Area 6) to be a broad, partially silted, hollow. Several sections of low bank (Sites 25 B1 and 14 CC) lying to the south of and parallel to the road terrace were found to be ill-defined in excavation (Trial Trench 4, Areas 7 and 8), with a possible ditch line on the northern side. These may represent a boundary which respected the line of the terrace, suggesting continued use and importance of the terrace, at least as a landscape feature.

To the south of the terrace alignment three sections of well-built drystone wall [37, 60, 130] (surviving to a height of 0.30 m) appeared to form part of an enclosure which would have measured 16.50 m east-west, and its eastern wall would have been in excess of 13.50 m in length. Although forming separate sections the walls were probably contemporary, comprising a northern boundary wall, with a return to the south at its eastern end, whilst to the west the wall apparently terminated after a slight turn to the south. The walls (between 0.60 m and 0.66 m wide) comprised medium-sized angular, undressed stone, with little core material, and were generally built directly over the natural terrain, following the local topography with the exception of the north-south wall [37]. This was built over a broad surface of closely packed small angular stones on the same alignment, although it was not clear if this was an intentional part of construction or coincidental.

The eastern end of the east-west wall [60] merged into a band of small angular stones that curved round to meet the northern end of the north-south wall [37]. The spread of stones may have represented a robbed-out area or perhaps a temporary barrier such as a fence or a gate; iron nails found within this deposit may reinforce the later supposition. A short curved length of wall [130] at the western end of the east-west wall [60] was built into a natural hollow, or drop, in the underlying subsoil (resulting in five courses of the wall surviving), probably in response to local wet, possibly boggy, conditions; a purpose-built gap had been incorporated in the curving end of wall [60] which aligned with a similar gap in the wall [130] immediately to its south, presumably to allow free drainage.

Situated toward the top of a slope as it rises from Craco Dub (Site 15), and just short of the revetted terrace, the "enclosure" may well have functioned as a means of penning or controlling the movement of livestock. The walls cannot be dated securely, although the scant artefactual material associated with the silt deposits suggest a post-medieval date.

The walls had been deliberately dismantled leaving very little tumble (and were presumably reused nearby), apart from a section to the south where it appeared that the basal stones had been disturbed by later activity, possibly by ploughing. Following the demolition of the walls and the subsequent accumulation of silty clay deposits across the site, a drystone field wall [3] had been constructed just to the north of the original east-west wall [60]. A distinctive change in build along its length probably represented the repair of the wall or blocking of a gateway. Again,

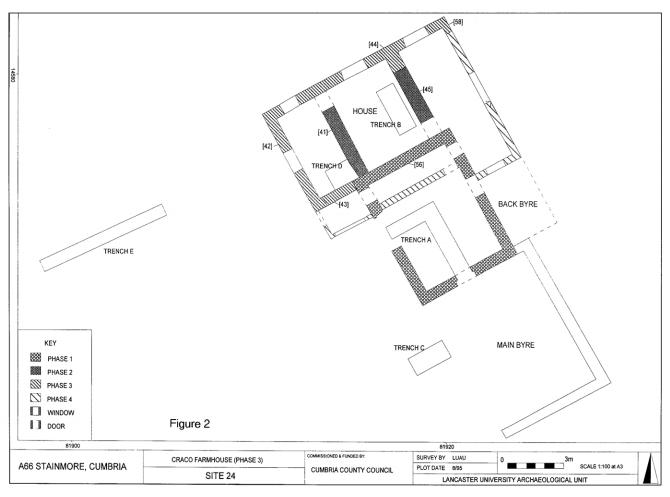


Fig. 2. Craco: Phased ground plan

the wall had been systematically dismantled leaving few tumbled stones, presumably the material being used in the construction of subsequent field walls nearby.

Craco Farm (Fig. 2)

Craco Farm was located on the south side of the A66, 3 km east of Brough (NY 81901458), and was the only structure to lie within the construction corridor; the farm and its out-buildings were therefore subject to fabric recording and excavation. Records demonstrate a tenement at Craco by 1582, and its high rent suggests that Craco was then a substantial property, perhaps originating from one of the vaccaries held by the Cliffords (Charlesworth 1988).

The farmstead layout was of the eighteenth century laithe-house plan found in the northern and central Pennines, and appears to have been typical of small farms of about 30 acres, which would have had "a farmhouse, a barn with threshing floor, and a loft over a stable for two horses, and a cow-house with tying for ten or a dozen cattle" (Brunskill 1974, 81). The farmstead had a linear arrangement, with the house adjoining the barn at right angles, and the byre adjoining the barn to the south on the same roof alignment, but of separate build, and stepped down the slope. This common layout would facilitate drainage and enable covered access to all the buildings. The standing buildings were of two main phases, the barn preceding the house. Demolished walls adjoining the south and east walls of the barn indicated the sites of the former byre and back byre.

The farmhouse was a two-bay dwelling of local sandstone construction with sandstone quoins and lintels, and a modern slate roof overall, with sawn timbers supported by the load-bearing house walls. The northern gable end of the house (facing the A66) was of one build with four identical, evenly spaced windows, three of these on the ground floor, the fourth directly above the central ground floor window. These windows were of unusual design for a farmhouse (more typical of a chapel or tollhouse), as they had heavy stone surrounds, squarish at the base and forming a rounded arch at the apex. The upper part of each window was divided by a stone mullion, with an opening triangular light to each side, while the lower part was divided into two panes horizontally, by a timber frame with sash mechanism. The only house door was in the south wall, at right angles to the barn. Above the door was a tall, narrow window, typical of those used to light the stairwell in vernacular stone buildings of the North West.

The internal layout of the house was atypical, as the internal dividing walls ran parallel to the ridgeline, from north to south. There were two rooms in the main house, and two small rooms in an outshut to the east. Accommodation on the upper floor comprised two bedrooms, situated directly above the two ground floor rooms. There was no accommodation above the single-storey outshut.

Five trenches were excavated, in and around the farmhouse, followed by excavation of the ground plan of the building after demolition. The excavations did not reveal any evidence for any structures predating the farmhouse or barn, although the work confirmed that the barn pre-dated the construction of the farmhouse and demonstrated that this farmhouse was extensively modified in the late nineteenth/early twentieth century. The building had been extended by repositioning the

northern wall 1 m to the north, and by moving the west wall out by c. 2 m. The modern roof timbers probably also dated to this phase of activity. More recent alterations had taken place including the addition of a porch to the west. Part of the barn has been incorporated in the house, since 1985, to form cross passages at ground floor and first floor levels, linked to substantial alterations to the eastern outshut.

All the finds recovered from the excavation were relatively late in date, from the late nineteenth century, early twentieth century, and of domestic or structural origin apart from a Roman coin (an As of Nerva's reign (A.D. 96-98)), which had probably had been deposited as a result of colluvial action. The coin seemed simply to reflect the relative proximity of the site to the projected line of the Roman road and the nearby signal station.

Watching brief

A watching brief, conducted during the topsoil stripping of the construction corridor, did not identify any new sites and in general provided only supplementary evidence to sites already recorded or investigated, with the exception of the excavation of a small basin mire at Penistone Green, revealing 7.50 m of organic deposits, the upper 4 m of which comprised a succession of sedge and wood peats. These overlay c. 3.50 m of fine organic muds (or gyttja) which in turn overlay a sticky, silty clay. The organic deposits were contained within a large sandstone basin, which was in places lined with plastic blue/grey clay. This clay appeared to be archaeologically sterile, although it contained several subangular and angular boulders, suggesting that it was of glacial origin.

Red deer antlers, long bones, and a jawbone, from at least two animals, were recovered from the organic muds (gytta deposit). Palaeobotanical investigation of the peat adhering to the antlers and long bones revealed that these had been deposited in the bog in the immediate post-Glacial period, some ten thousand years ago. A high percentage of birch pollen was recorded within the sample, and juniper and willow were also represented. At this date the area around the bog consisted of a tundra landscape, with open vegetation containing dwarf trees and herbs. The deer appear to have been old and have become entrapped in the mire naturally rather than as a result of being hunted.

The upper portion of the mire was formed entirely out of organic brown peat, which contained well-preserved branches and twigs, some up to 0.25 m in diameter. All were orientated horizontally, presumably in the position in which they had naturally fallen. This peat clearly represents the build-up of the fen carr landscape which would have contained trees such as willow and alder, and probably formed the vegetation within the bog for thousands of years until the fairly recent past.

Discussion

Clearly much of the history of Stainmore has been influenced by its importance as an east-west route over the high and somewhat inhospitable upland Pennine terrain. Expressed in Higham's statement that "the early history of the area was dependent

on Stainmore as a route rather than as an area attractive to settlement" (Higham 1977b, 107), this factor has exerted a continuing influence on its development throughout its later history to the present.

It is probable that a similar route to that established during the Roman occupation may have been a preferred route over the Pennines from prehistoric times (Manby 1965); the crossing, over the Stainmore Pass, being one of the few relatively easy cross-country routes for some distance to both the north and south. There is limited evidence for prehistoric activity and settlement in this upland area, although within the project only a single flint flake was recovered (during fieldwalking); single finds in this environment are not indicative of the scope or intensity of prehistoric activity, but rather highlight the problems of recovering artefactual material from pasture and moorland areas, of what may well have been a transient population (Middleton *et al.* 1995). In the absence of direct evidence of early activity, however, an understanding of the landscape may be gained through the examination of the palaeoenvironmental record: the peat bog at Penistone Green produced the remains of red deer, most probably natural mortalities, which may be comparable with examples of a Neolithic date.

The line of the A66 approximately reflects that of the Roman trans-Pennine route from Brougham to Bowes. Whilst elements of the road are evident in places, such as the earthwork visible at the fortlet of Maiden Castle, the course of the Roman alignment had not been clearly defined in the 6 km Stainmore-Banks Gate section. In the central portion of the corridor, to the east of Craco, a prominent earthwork feature formed a terrace (Low Street), continuing on an easterly alignment toward Newton Garth. Located on the south-facing slope, above the Powbrand Sike, the terrace formed a short, but pronounced south-facing scarp, and was reasonably well defined for a distance of c. 230 m until it was truncated and obscured by a hollowway and streams flowing down the slope. It comprised a well-constructed stonerevetted terrace which formed a level surface accommodating a cobbled surface. From the areas investigated it appeared that the terrace edge formed a verge, or part of the drainage, and the road surface proper lay further to the north. Whilst the origins of the road cannot be securely dated, the nature of the construction would tend to confirm a Roman origin for the alignment rather than it being part of the eighteenth century turnpike route.

The numerous interweaving hollows, frequently adjacent to the modern road, on the same general east-west alignment, bear witness that the general alignment continued in use, as the most suitable route was chosen dependent on local ground conditions, implying deterioration or disuse of the Roman route. The hollow-ways were generally not recorded over long distances, their alignment either disturbed by later activity or petering out as ground conditions changed and the pressure of traffic eased. It is not surprising that prior to the eighteenth century improvements the route over Stainmore was described as hazardous: "Whereas the several Roads leading from Bowes in the County of York, to Brough under Stainmore in the County of Westmorland, are become so very bad and ruinous, especially in the Winter Season, that Travellers cannot pass without great Danger . . ." (Turnpike Acts of 1742-3, CRO WD/HH/171).

Occupation in this area was naturally influenced by the road over Stainmore and the improved communications must have had an impact on the settlement of this region, both in providing services to travellers and due to improved access. However, although frequently described as a desolate area, Stainmore was not simply a routeway: the elements identified within the study area included evidence of the Stainmore dykes which form an extensive network of boundary banks in the area, described as "a Romano-British landscape" (Higham 1977a), although these may be of prehistoric origin. The substantial ditch and bank excavated at Augill Bridge, however, would be in keeping with a medieval deer park boundary, possibly one of the two known deer parks created between Brough and Augill Bridge.

From the number of vaccaries listed on Stainmore (15 in 1315 and 11 a century later), a relatively high level of settlement on Stainmore can be suggested during the medieval period. Increasing prosperity and population from the seventeenth century saw an increase in building and services, suggesting a small settled community. Farming was not the only source of income, mining for coal on Stainmore being undertaken from at least the fourteenth century up until modern times. The moor has also been exploited for its limestone, both for construction as well as for agriculture.

The route over Stainmore has certainly played a part in shaping the landscape and has directly influenced the life and economy of its settlement. Frequently an unsettled and unstable region, the importance of the route is clear from the measures taken to protect it and the evidence of its long and frequent use. Whilst only a segment of the landscape was directly affected by construction, the work has provided an invaluable opportunity to investigate and record elements of that environment, set against a wider context.

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