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Archaeological Excavation 1994

Smaws Quarry, Tadcaster, North Yorkshire

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Introduction.

Between 25th November and 16th December 1994 an archaeological excavation was conducted in the north west corner area of Smaws Quarry, Tadcaster, North Yorkshire. The quarry, which is used for the extraction of low grade magnesian limestone, is located approximately 1 km west of Tadcaster and lies in the parish of Tadcaster West at NGR SE46254300. The southern limit of the quarry is bounded by the A659 road whilst the western limit is defined by the road known as Rudgate; both roads are believed to be of Roman origin (Fig. 1).

The soils of the site consists of shallow, brown calcareous earths of the Aberford Association overlaying magnesian limestone of Permian origin, (Jarvis et al, 1984: Mackney et al 1983). Aerial photographic reconnaissance of areas adjacent to the quarry indicate that the site is surrounded on all sides by cropmarks indicative of enclosures and trackways (Finney, 1993).

In accordance with planning constraints placed on the quarry operators, Redland Aggregates, a number of archaeological watching briefs and a geophysical survey have been carried out in recent years as quarrying operations have moved the working face of the quarry northwards, (Finney, 1992; 1993; 1994: Sheil, 1992). This work whilst revealing little in the way of archaeological features has produced finds assemblages suggestive of nearby occupation in the prehistoric and Romano British periods.

The excavation described in this report measured some 39m north-south by some 17m east-west, was located at the extreme north west of the quarry and has followed on from the latest watching brief of 1994. (Fig. 2).

All work has been funded by Redland Aggregates.

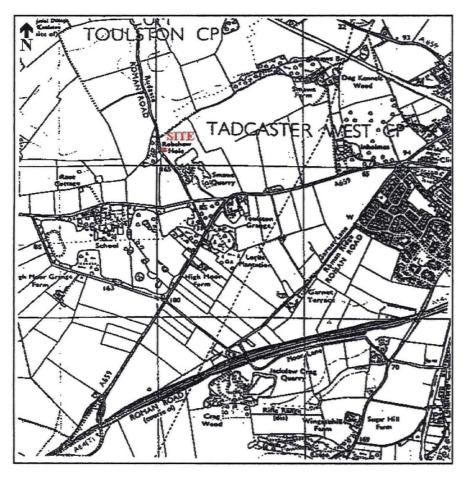


Figure 1 - Scale 1:25000

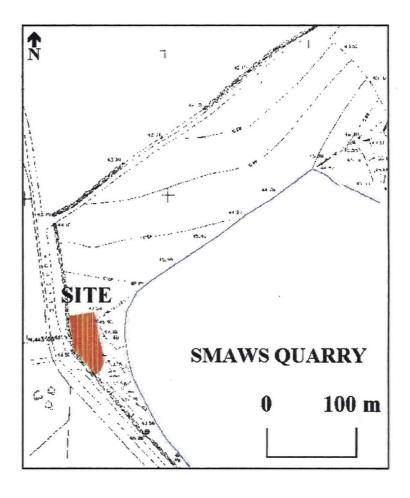


Figure 2

Excavation Methods and Techniques.

Prior to excavation the site had been used for the storage of quarry overburden. This overburden and the topsoil was mechanically stripped by a 360 degree excavator equipped with a toothless 1.8m wide bucket. The area thus stripped was then trowelled clean and a pre excavation plan drawn and levelled (Fig. 3) A number of segments were then excavated across all known and potential features and their sections were drawn. All contexts were recorded. The availability of sufficient time permitted a substantial amount of all features to be excavated. Upon completion of excavation a post excavation plan was drawn (Fig. 4).

Excavation.

The topsoil, context 1, a silty loam varied in depth over the site from 0.20m to 0.35m. Immediately beneath the topsoil lay thin isolated patches of a sandy silt subsoil, context 2; elsewhere the topsoil lay directly over bedrock, context 3. The presence of plough furrows gouged into bedrock demonstrate that the bulk of the subsoil has been integrated into the topsoil by plough action; the isolated pockets of subsoil that had survived lay in shallow depressions in the bedrock. That modern finds were located at the topsoil/bedrock interface demonstrates the likelihood that some at least, of the subsoil destruction took place in recent years. Finds recovered from the topsoil were all of post medieval date with the exception of four pieces of struck flint and five sherds of Romano British pottery; one further pot sherd is unidentified. The most noticeable factor in the topsoil finds assemblage is the total absence of medieval pottery, a point that has been noted in earlier watching briefs at the quarry and may indicate that in the medieval period this area was either pasture or woodland/waste and not manured arable land.

Removal of the surviving remnants of the topsoil and subsoil during cleaning exposed a surface of limestone bedrock incorporating a small number of peri-glacial solution hollows. This surface sloped down from south to north dropping some 1.10m over a 39m distance and was seen to be cut by three ditches. The bedrock was overlain in the north west corner area of the site by a sandy silt, context 10, that was indistinguishable from the subsoil. A segment cut into 10, showed the material to occupy a large, shallow hollow area (Fig. 6, section E-F). Given that 10 was indistinguishable from the subsoil, was very irregular in plan and was cut by all three ditches; it is very likely that the material is a surviving area of subsoil that occupies a large hollow of natural origin.

The three ditches occupied the north and west sides of the site and proved to be the only archaeological features present. Ditches 1 and 2 located at the north of the site were both curvilinear in plan and for most of their east—west courses were parallel to each other at an equidistant gap of some 0.30m. Only at the extreme west of the site did the features diverge, ditch 1 continuing on a westward course in the direction of Rudgate and ditch 2 turning to the north west, possibly on an alignment parallel with Rudgate. Due to the gap between ditches 1 and 2 there was no stratigraphic evidence to provide a sequence between the two features. Ditch 3 extended from the south west portion of the site on a slightly curvilinear course towards the north west area of the excavation where it was observed to cut both ditches 1 and 2. Just beyond this point of intersection ditch 3 showed a change of alignment to the north west on a course approximately parallel to that of ditch 2.

Ditch 1

Upon completion of cleaning, ditch 1 had the appearance of a uniform single entity. Excavation of a number of segments across this feature proved this not to be the case. The fill of ditch 1 (contexts 7, 9, 27 and 36), showed little variation being a

dark brown, slightly clayey sandy silt containing a large amount of angular fragments of limestone (approximately 30% of fill) of a size range mostly 0.05m to 0.20m, this stoney component having a slight tendency to occur more densely in the upper part of the fill. Only in the westernmost segment was a markedly different fill apparent (context 39), a darker, sandy silt of comparatively stone free fill occupying a slot at the base of the ditch, (Fig. 7, section e-f).

The exposed cut, or more specifically cuts, of ditch 1 showed considerable variation both in plan shape and profile. The eastern half of the feature consisted of two steep sided, flat based cuts of slot like form separated by a 1.8m wide shallow "causeway" that lay under only some 0.05m to 0.10m of fill. The westernmost slot measured 2.80m in length by up to 0.65m wide and had a depth of up to 0.30m. The easternmost measured up to 0.93m wide, up to 0.33m deep and was of an unknown length, continuing into quarried areas. Between the westernmost slot and the remaining part of the feature lay a second shallow "causeway" measuring 0.70m wide. The western part of ditch 1 consisted of what had the appearance of forming a single ditch of some uniformity being steep sided on the southern edge and somewhat less steep on the northern edge and having a flattish base. A shallow slot was evident at the base of the feature at the extreme west, becoming progressively less prominent towards the east. Ditch 1 was cut by ditch 3, this being clear in plan and confirmed by section, (Fig. 6, section C-D).

Finds recovered from the excavated parts of ditch 1 consisted of two pieces of struck flint waste, a possible flint blade and fifteen fragments of sandstone pot boilers with a total weight of 1.01kg. A single piece of Romano British Greyware was found on the surface of ditch 1 near its western end during initial cleaning and so cannot be definitely attributed to the fill of the ditch.

Ditch 2

Located immediately north of ditch 1, ditch 2 had a yellowish brown, sandy silt upper fill (contexts 12, 19, 21, and 31), that was slightly clayey in places and that extended for the full exposed length of the feature. This fill contained an amount (approximately 10–20%) of angular fragments of limestone of a size up to 0.20m. In certain of the excavated segments in the eastern part of the ditch a less stoney and siltier yellowish red primary fill was apparent (contexts 20 and 32), this being thicker at the northern edge than the southern. The very lowest parts of this fill were slightly paler in colour, contained slightly more small limestone fragments and arguably represents a separate context, (context 35).

The cut of ditch 2 showed considerable regularity, particularly in the eastern half where the profile was of a steep northern edge, a less steep southern edge and a flat base. Dimensions in this area were up to 1.10m wide and up to 0.52m deep. Towards the west where ditch 2 starts to change alignment to the north west the ditch became slightly shallower and less steep sided. In this same area a small step in profile was evident and although no variation in fill was noticeable it may be that this step indicates a re-cutting in this part of the ditch (Fig. 6, section C-D). Ditch 2

was cut by ditch 3, this being demonstrated in both plan and section (Fig. 7, sections g-h, i-j)

Finds from the excavated parts of ditch 2 consisted of three pieces of struck flint waste, one of which may be a core fragment, thirty five fragments of sandstone pot boilers with a total weight of 3.90kg and four pieces of Romano British pottery. It was noted that with the exception of four fragments of pot boiler and one piece of flint all the finds were retrieved from the upper fill.

Ditch 3.

In all places where excavated ditch 3 proved to contain a single fill (contexts 16, 17, 22 and 29), although some textural and colour variation was apparent along its length. In the southern area the fill was a yellowish brown sandy silt containing a small clay component whilst in the northern part the fill was recorded as being a dark brown sandy silt. Along the entire course of the feature frequent inclusions of limestone fragments of a size range mostly 0.05-0.15m were noted, these tending, at least in the northern and southern thirds of the ditch, to occupy the central areas of the fill.

The profile of the ditch displayed some variation, being wider and deeper at the north and south, up to 1.16m wide and up to 0.33m deep, than in the central areas where it measured only 0.50m wide and barely 0.05m deep. In most places the ditch sides were steep and the base flat or slightly concave; only in the north beyond the point of intersection with ditches 1 and 2 did the feature have more gently sloping sides and a concave base. The small dimensions of ditch 3 in the central areas may be accounted for by a greater depth of plough erosion although it cannot be ruled out that the ditch may originally have been shallower here. It was clearly observed in plan that ditch 3 cut both ditches 1 and 2, this subsequently being confirmed in section (Fig. 6, section C-D and Fig. 7, sections g-h, i-j).

The finds retrieved from ditch 3 were composed of a broken flint scraper that showed signs of "crazing" due to its having been burnt, four fragments of sandstone pot boilers with a total weight of 0.37kg and three sherds of pottery, two of which were Romano British, the third piece being unidentified.

Discussion

Although the number and range of finds recovered from the ditches was limited, a Romano British date is suggested, at least for ditches 2 and 3.

Firm stratigraphic evidence was recovered to demonstrate that ditch 3 cut both ditches 1 and 2 though none exists to prove the sequence between the latter two. It has been noted that for much of their courses ditches 1 and 2 are equidistantly spaced, ie: there is a respect of alignment. This suggests that the two features are either contemporary, even if for only part of their functioning lives, or that enough of the last vestiges of one survived to influence the course of the other. Should this latter be the case it is noted that continuity of at least part of a boundary is implied. Whilst it cannot be proved a case can be postulated to suggest that ditch 1 precedes ditch 2; this case rests on two arguments. Firstly, in the western part of the site ditch 1 continues on a course in the direction of Rudgate whilst ditch 2 turns north west, the possibility here being that whereas ditch 2 may be respecting the alignment of Rudgate by taking a course alongside it, ditch 1 may run a course beyond the road and precede it. Secondly, although it is conceded that the datable finds evidence is very limited it has already been noted that ditch 2 produced four sherds of Romano British pottery, whilst there are none that can be securely attributed to ditch 1. The possibility exists therefore that ditch 1 could be of Iron Age date.

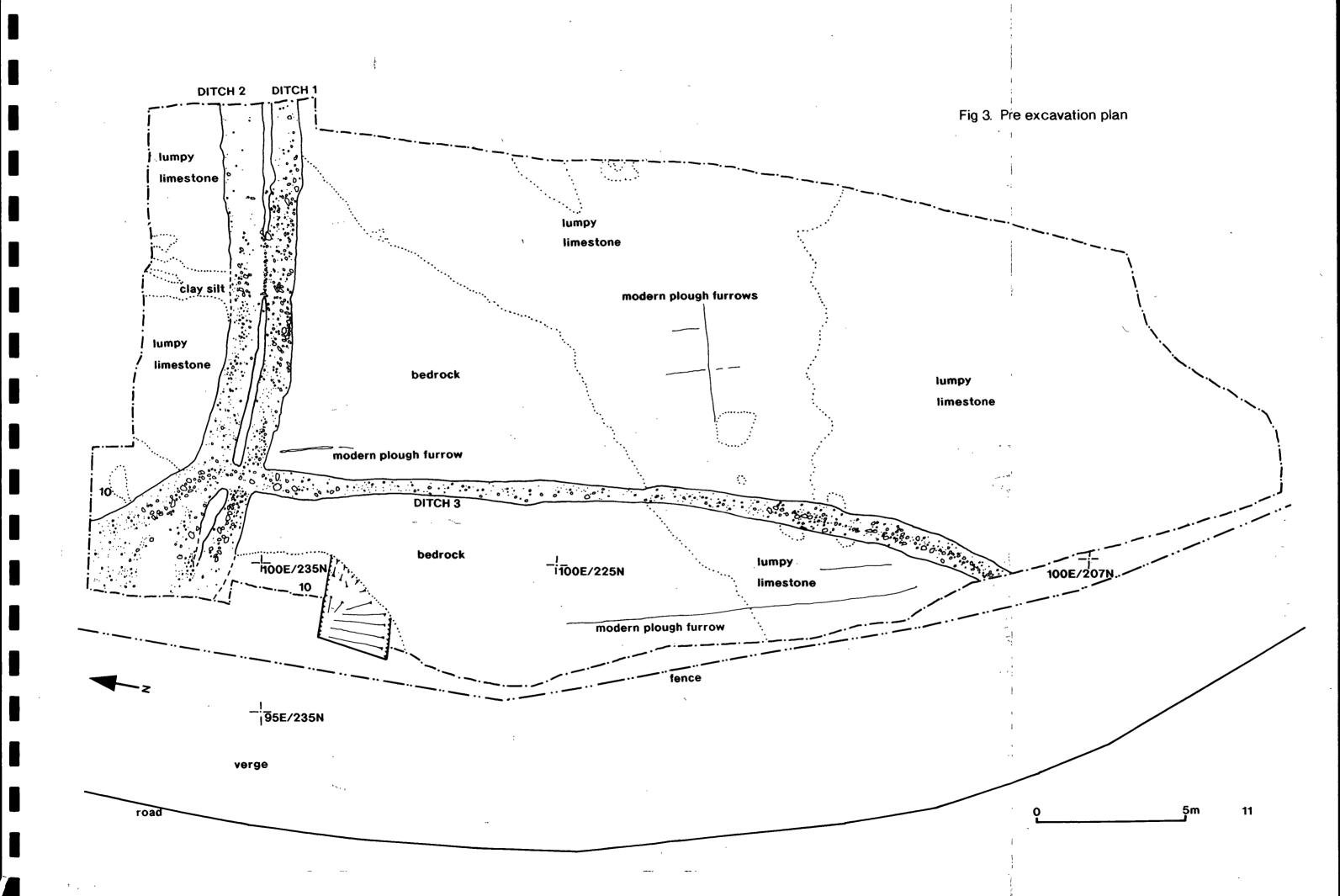
Certain morphological parallels can be made between the eastern elements of ditch 1 and a section of pit alignment/ditch excavated at Cat Babbleton, North Yorkshire (Cardwell, 1989). At Cat Babbleton it appears that the pit alignment, some of the pits of which were elongated in shape, may have been replaced by a later shallow ditch; similarities to Smaws can be drawn here in terms of the ditch 1 slots and shallow "causeways". Other instances of replacement of pit alignments by ditches are known in Yorkshire such as at Heslerton (Powlesland, 1986), and it may be the case that such is evidenced here, this process being more thorough in the western part of ditch 1. It is considered unlikely that the "causeways" were ever entranceways through the ditch as after allowance is made for the contemporary sub and topsoils plus the shallow cuts into bedrock a very considerable depression would be implied which means that the causeways would be too far below the ground surface to be effective.

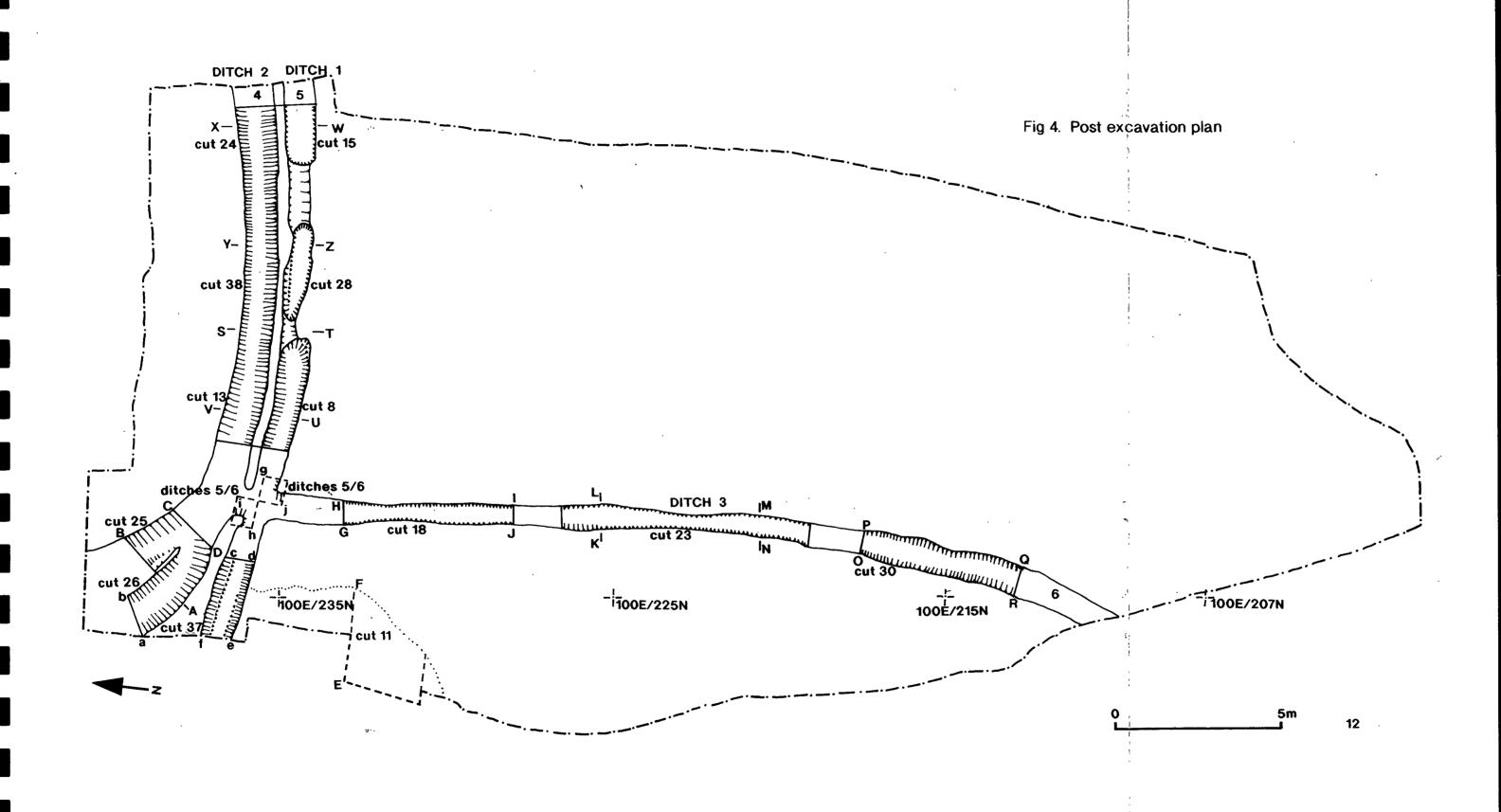
In the case of all the ditches it was not possible to ascertain if banks had ever been associated with them, such evidence having been removed by agricultural erosion.

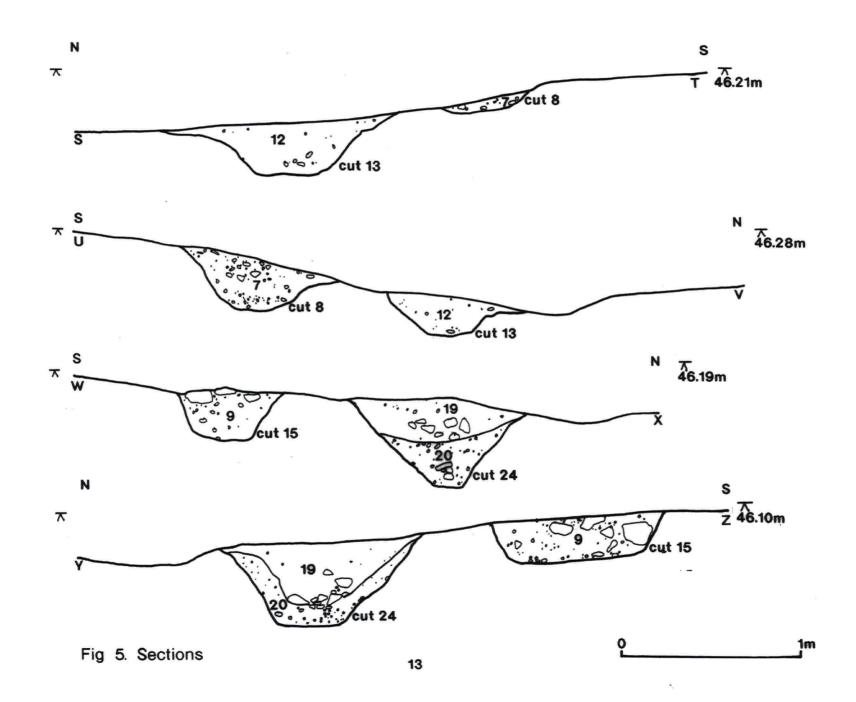
With regards to function it is clear that the three ditches are demarcating boundaries of some sort, the plan shape of which is suggestive of field or land boundaries rather than of settlement enclosing ditches. However, settlement of roughly contemporary date in the near vicinity may well be implied by the large quantity of pot boiler fragments recovered from the ditches as these are likely to have a domestic rather than agricultural or industrial origin.

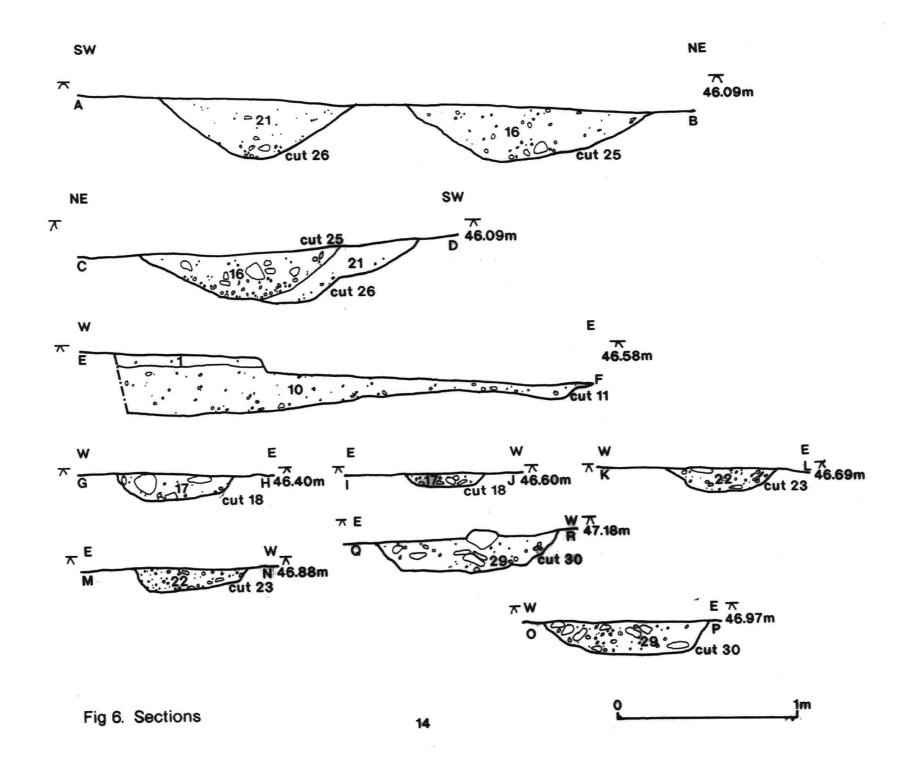
Recommendations.

In light of the discoveries made during the course of this excavation and of the potential for nearby contemporary settlement, it is recommended that future archaeological work should take place as new areas of land are opened up to quarrying. Ideally this work should take the form of a geophysical survey followed by a watching brief with the provision for excavation should this be warranted.









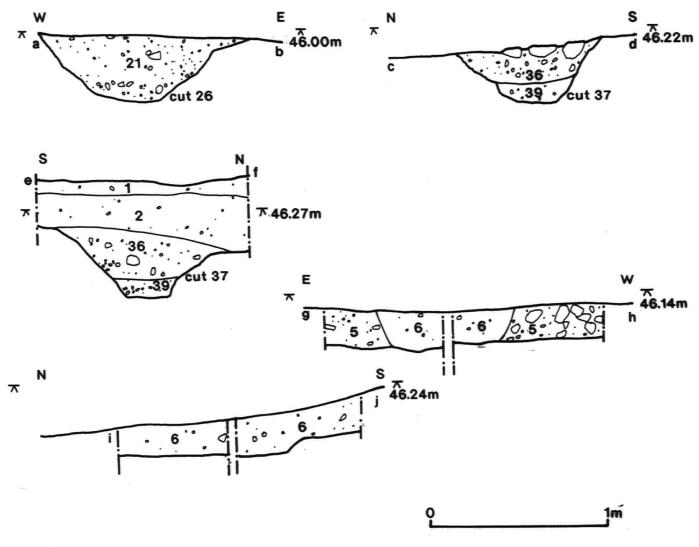


Fig 7. Sections

Bibliography.

Cardwell, P., Excavations at Cat Babbleton Farm, Ganton, North Yorkshire,

1986. Yorkshire Archaeological Journal, 1989, 15-27.

Finney, A.E., Archaeological Watching Brief: Smaws Quarry, Tadcaster.

MAP Archaeological Consultancy Ltd, Malton. 1992.

Finney, A.E., Archaeological Watching Brief: Smaws Quarry, Tadcaster.

MAP Archaeological Consultancy Ltd, Malton. 1993.

Finney, A.E., Archaeological Watching Brief: Smaws Quarry, Tadcaster.

MAP Archaeological Consultancy Ltd, Malton. 1994.

Jarvis, R.A. et al. Soils and their use in Northern England. Harpenden. 1984.

Mackney, D. et al. Legend for the 1:250000 Soil Map of England and Wales. Soil

Survey of England and Wales. Harpenden, 1983.

Powlesland, D.J., Excavations at Heslerton, North Yorkshire, 1978–82.

Archaeological Journal 143, 1986, 55-173.

Sheil, D., Smaws Quarry - Tadcaster. Geophysical Survey. Geophysical

Surveys of Bradford. 1992.

Appendix 1 - Context List.

Context	Description
1	Topsoil; silty loam, 10YR3/2.
2	Subsoil; sandy silt, 10YR4/4.
3	Bedrock; natural.
4	Group number; (all ditch 2 contexts).
5	Group number; (all ditch 1 contexts).
6	Group number; (all ditch 3 contexts).
7	Fill; of 8, ditch 1 segment, clayey sandy silt, 10YR4/6.
8	Cut; of ditch 1 segment.
9	Fill; of 14,15, ditch 1 segment, clayey sandy silt, 5YR3/4.
10	Fill; (natural) of 11, sandy silt, 10YR4/4.
11	Cut; (natural hollow).
12	Fill; of 13, ditch 2 segment, silty sand, 10YR5/8.
13	Cut; of ditch 2 segment.
14	Cut; of ditch 1 segment.
15	Cut; of ditch 1 segment.
16	Fill; of 25, ditch 3 segment, silty sand, 10YR4/6.
17	Fill; of 18, ditch 3 segment, silty loam, 10YR3/2
18	Cut; of ditch 3 segment.
19	Fill; of 24, ditch 2 segment, sandy clay silt, 5YR4/6.
20	Fill; of 24, ditch 2 segment, sandy clay silt, 5YR4/6.
21	Fill; of 26, ditch 2 segment, sandy silt, 10YR3/6.
22	Fill; of 23, ditch 3 segment, sandy silt, 10YR4/4.
23	Cut; of ditch 3 segment.
24	Cut; of ditch 2 segment.
25	Cut; of ditch 3 segment.
26	Cut; of ditch 2 segment.
27	Fill; of 28, ditch 1 segment, sandy clay silt, 5YR3/4.
28	Cut; of ditch 1 segment.
29	Fill; of 30, ditch 3 segment, sandy silt, 10YR4/6.
30	Cut; of ditch 3 segment.
31	Fill; of 38, ditch 2 segment, clayey silt, 5YR4/6.
32	Fill; of 38, ditch 2 segment, clayey silt, 5YR4/4.
33	Fills; (of ditches 2 & 3 intersection).
34	Cuts; (of ditches 2 & 3 intersection).
35	Fill; of 38, ditch 2 segment, clayey silt 7.5YR4/6.
36	Fill; of 37, ditch 1 segment, sandy silt, 10YR4/3.
37	Cut; of ditch 1 segment.
38	Cut; of ditch 2 segment.
39	Fill; of 37, ditch 1 segment, clayey sandy silt, 10YR3/3.

Appendix 2 - Finds Catalogue.

Context 1	Description brick/tile frags x 16, post med wire x 1, modern clay pipe frag, x 1, post med glass sherds x 1, modern oyster shell frag x 1 coal frags x 2 cinder frags x 2, post med tooth frag, unid x 1 pot, body sherds x 8, 18th–20th century flint, white, x 3, two are struck waste flint, brown, x 1, struck waste pot, x 1, unid pot, x 1, rim sherd, Greyware, Romano British pot, x 4, body sherds, Greyware, Romano British
4	stone, pot boiler frags x 2, 0.24kg pot, x 1, body sherd, unid.
5	stone, pot boiler frags x 4, 0.11kg pot, x 1, base sherd, Greyware, Romano British
6	pot, x 1, body sherd, Romano British pot, x 1, unid
7	flint, white, x 2, struck waste flint, grey, x 1, struck, possible blade
9	stone, pot boiler frags x 9, 0.84kg
10	pot, x 1, body sherd, Samian Ware, Romano British
16	stone, pot boiler frags x 2, 0.13kg
19	stone, pot boiler frags x 15, 1.90kg flint, grey, x 1, struck, waste core frag? flint, white, x 1, struck, waste pot, x 1, rim sherd, Colour Coated Ware, Romano British pot, x 1, rim sherd, Mortaria, Romano British pot, x 1, body sherd, Romano British
20	stone, pot boiler frags, x 4, 0.51kg flint, white, x 1, struck waste

21	stone, pot boiler frags, x 14, 1.25kg
27	stone, pot boiler frags, x 2, 0.06kg
29	stone, pot boiler frags, x 2, 0.24kg flint, white, x 1, broken scraper, burnt pot, x 1, rim sherd, Greyware, Romano British
31	stone, pot boiler frags, x 9, 1.29kg pot, x 1, body sherd, Mortaria
33	stone, pot boiler frags, x 1, 0.21kg
36	stone, pot boiler frags, x 11, 0.84kg