



NAA

**ARCHAEOLOGICAL SITE
SURVEY AND EXCAVATION
REPORT**

**TROUTSDALE MOOR,
BROXA-CUM-TROUTSDALE,
NORTH YORK MOORS**

prepared for

Broadland Properties Ltd

Report No: **NAA 012/077**

© NAA August 2012



ARCHAEOLOGICAL SURVEY AND
EXCAVATION

Northern Archaeological Associates Ltd

Marwood House
Harmire Enterprise Park
Barnard Castle

Co. Durham
DL12 8BN

t: 01833 690800

f: 01833 690801

e: pm@naa.gb.com

w: www.naa.gb.com

TROUTSDALE MOOR,
BROXA-CUM-TROUTSDALE
NORTH YORKSHIRE

on behalf of

Broadland Properties

Project No.: 1078
Text: Matt Town
Illustrations: Dawn Knowles

NAA 12/77
August 2012

NAA Document Authorisation

Project name		Troutsdale Moor		Project number	
Report title		Troutsdale Moor, Broxa-Cum-Troutsdale, North Yorkshire. Archaeological Survey and Excavation		1078	
Report No.		12/77			
Revision	Date	Filename	NAA_1078_Rpt_12_77.pdf		
v.1		Description	Archaeological Survey and Excavation		
			Prepared by	Edited by	Approved by
		Name	Matt Town	Penny Middleton	Tania Simpson

This document has been approved for release by: *TS*

TROUTSDALE MOOR, BROXA-CUM-TROUTSDALE, NORTH YORK MOORS
NATIONAL PARK
ARCHAEOLOGICAL SURVEY AND EXCAVATION REPORT

Summary	2
1.0 Introduction	3
2.0 Location and topography	3
3.0 Background	4
4.0 Aims and objectives	5
5.0 Methodology	6
6.0 Earthwork Survey	6
7.0 Excavation	7
8.0 Conclusion	11
References	12
Online Sources	12

SUMMARY

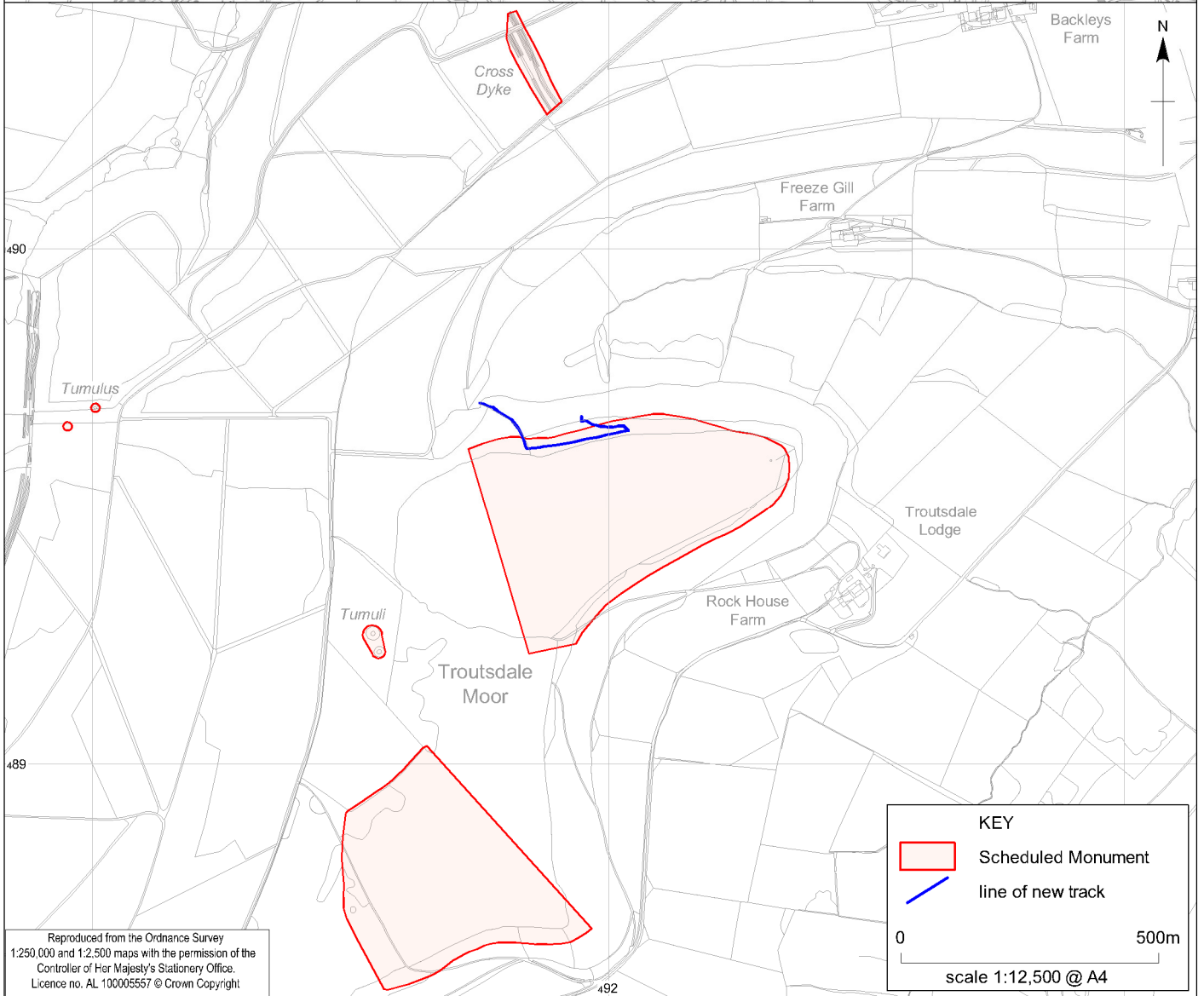
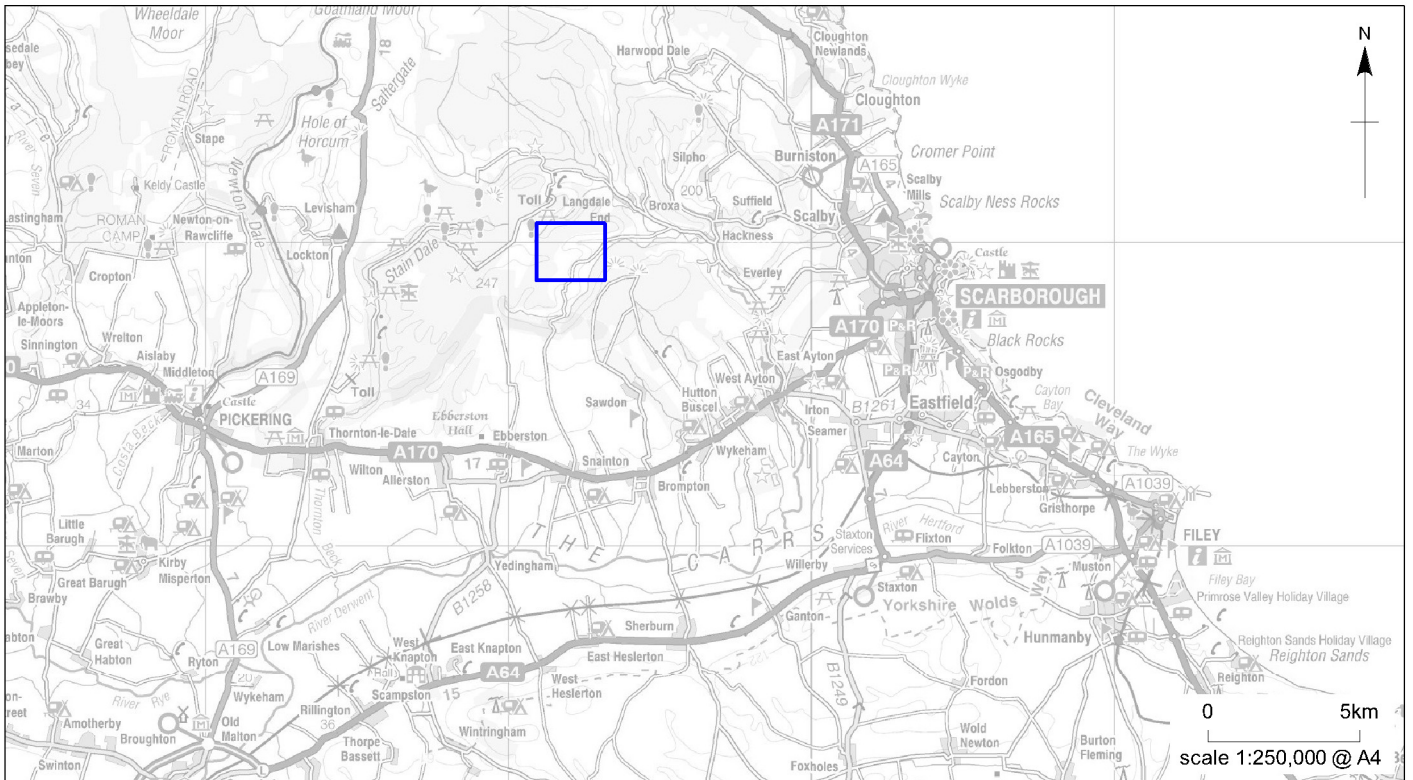
This report presents the results of a programme of archaeological survey and excavation undertaken as a response to damage caused by unauthorised track works on Troutsdale Moor, Broxa-Cum-Troutsdale, North Yorkshire. The recording work was carried out by Northern Archaeological Associates Ltd (NAA) on behalf of the North York Moors National Park Authority and English Heritage, and at the request of the landowner Broadland Properties Ltd.

Troutsdale Moor is a Scheduled Monument, situated on moorland to north of Snainton, within the North York Moors National Park. The Scheduled Monument comprises regular aggregate field systems, visible as a series of small enclosures, laid out roughly on two perpendicular axes. At least 10 fields have been identified, defined by shallow ditches and low earthen banks.

In 2012, track construction work undertaken by the landowner inadvertently caused damage to the northern edge of Scheduled Area, through confusion with regards the position of the Scheduled Monument boundary. A trackway 213m in length was excavated by machine along the northern edge of the promontory, running west to east, with a smaller 85m strip adjoining this at the eastern end and running broadly north-west and downslope. Following a preliminary site assessment by English Heritage and the North York Moors National Park Authority, the landowner agreed to fund a programme of earthwork survey and excavation to evaluate the extent of any potential damage to the archaeology of the moor.

Preliminary examination of the trackway had identified eight areas of peat deposits within the machined corridor, which were considered to be of archaeological potential. Each of these areas was cleaned and recorded, however, no definable archaeological features were identified either within or sealed by the peat. The extent of the machined area and the position of each peat deposit was surveyed by Total Station Theodolite. In addition, a 10m strip on each side was examined for evidence of earthworks relating to the field system extending into the affected area. No such earthworks were identified; although it is acknowledged that visibility on site was poor, due to the height of the vegetation in this area. An examination of the wider landscape did identify some earthworks in the general vicinity, but none of these features appeared to extend into the area affected by the track.

The recording work demonstrated that the earthworks relating to the scheduled field system have not been affected by the recent track construction and that these remains lie further to the south on the higher ground. No further recording or investigation of the machined corridor is considered necessary. It is recommended that consultation is undertaken with English Heritage and the North York Moors National Park Authority in advance of any future works on this section of the moor.



Reproduced from the Ordnance Survey 1:250,000 and 1:2,500 maps with the permission of the Controller of Her Majesty's Stationery Office. Licence no. AL 100005557 © Crown Copyright

Troutsdale Moor: site location

Figure 1

1.0 INTRODUCTION

- 1.1 This report presents the results of an archaeological survey and excavation undertaken as a response to damage caused by unauthorised track works on Troutsdale Moor, in Broxa-Cum-Troutsdale, approximately 7km north of Snainton (Figure 1). Troutsdale Moor is a Scheduled Monument, situated on moorland to north of Snainton, within the North York Moors National Park (NYMNP). The Scheduled Monument comprises regular aggregate field systems, visible as a series of small enclosures, laid out roughly on two perpendicular axes. At least 10 fields have been identified, defined by shallow ditches and low earthen banks. The monitoring and recording was carried out by Northern Archaeological Associates Ltd (NAA) on behalf of the landowner Broadland Properties Ltd at the request of the North York Moors National Park Authority (NYMNPA) and English Heritage (EH).
- 1.2 In 2012, a track was excavated onto Troutsdale Moor at the western end of the shallow valley 0.5km from Freeze Gill Farm. The work was undertaken in order to allow better access onto the moor and to facilitate future tree clearance. The track, which is extremely steep, was excavated by means of a bulldozer, which reprofiled an existing track leading up onto the moor from the valley bottom. Thereafter, the track broadly followed the line of an existing footpath eastwards for a distance of 213m. A smaller strip some 85m in length was then cut downslope to provide a gentler access track down to Freeze Gill Farm, although this section was abandoned before completion.
- 1.3 The track excavation works were carried out by the landowner in the belief that the boundary of the Scheduled Area lay to the south of the footpath, and damage to the Scheduled Monument was therefore caused inadvertently. A meeting was held with the NYMNPA archaeologist and the regional EH inspector, who examined the damage, and identified a number of discrete areas within the track which could correspond with archaeological features relating to the prehistoric field system. The landowner agreed to fund a programme archaeological survey and excavation to investigate the area further, and NAA were commissioned to undertake this work in July 2012.

2.0 LOCATION AND TOPOGRAPHY

- 2.1 Troutsdale Moor lies in the south-eastern corner of the North York Moors National Park, within the Tabular Hills, on an east-west line of distinct hills running from Scarborough in the east to Black Hambleton in the west. The moor occupies a flat-topped plateau overlooking the steep-sided, winding, relatively broad U-shaped valleys of Freeze Gill and Troutsdale Beck, which form tributaries to the river Derwent. The solid geology comprises Corallian Limestones and sandstones, with Oxford Clay and Kellaway rocks to the sides of the upper valley of the Derwent. The valley sides are wooded, with areas of ancient woodland (North York Moors and Cleveland Hills NCA 25). The land rises sharply from 134m AOD at Freeze Gill Farm to 223m at The Pinnacle, a

cone of mortared rubble on the promontory of Troutsdale Moor, a rise of 89m over less than half a kilometre.



Plate1: The excavated track, facing west

3.0 BACKGROUND

- 3.1 Troutsdale Moor is an area of known or presumed Bronze Age activity; little modern excavation has occurred in the area, and therefore most of the dating is morphological rather than definitive. The Scamridge Dykes, probable Bronze Age linear boundaries comprising multiple banks and ditches, run north-south approximately 2.5km south of the site. In the more immediate vicinity there are a number of other features which are probably continuations of this system (including Cross Dyke, to the north, earthworks on Ebberston Low Moor, 1.5km to the east, and the Troutsdale Brow Dyke, which runs between Troutsdale Brow and Bee Dale). These earthworks are associated with a large number of Bronze Age round barrows, most of which are unexcavated, which occupy the higher ground overlooking the valleys. There are two round barrows on Troutsdale Moor, approximately 400m south-west of the site. The northern barrow mound measures 33 metres in diameter and up to 1.5 metres high. The second barrow lies 33 metres to the south east and measures 22 metres in diameter and up to 1 metre high (SM 65211).
- 3.2 The Scheduled Area on Troutsdale Moor comprises two blocks of regular aggregate fields systems, covering approximately 1km² in total. A regular aggregate field system is considered to be two or more enclosed units of land set aside for cultivation and/or pasture, defined by boundaries laid out in a consistent manner, along two axes set at right angles to one another. The

tradition of constructing regular aggregate fields appears to have begun during the earlier Bronze Age and continues through to the post-Roman period. A number of barrows are superimposed upon field boundaries, whilst other boundaries avoid, incorporate or surround barrows and barrow cemeteries, suggesting that they were constructed at a time when the ceremonial monuments occupied a position of significance in both economic and social terms. The excavation of a small group of fields at Crag Bank on the North York Moors, for example, produced Iron Age pottery, while the adjacent settlement continued into the 2nd century AD (English Heritage MPP website).



Plate 2: The edge of Troutdale Moor, looking south-east from the excavated track, showing the nature of the vegetation cover within the survey area.

- 3.3 The southern block of fields, centred on SE 9168 8877, comprises a series of small enclosures, laid out roughly on two perpendicular axes. At least 10 fields have been identified, defined by shallow ditches and low earthen banks. The north side of the site is overlain by parts of a post medieval boundary system. A post medieval boundary stone is set into a ditch at the north eastern edge of the field system. The northern block, of which the site forms a part, is a continuation of this system, and is centred on SE 9202 8950.
- 3.4 The site is a Scheduled Monument (SM 35447) and is recorded in the North York Moors National Park Historic Environment Record (HER 2915).

4.0 AIMS AND OBJECTIVES

- 4.1 The primary aim of the project was to determine the nature and extent of any archaeological features or deposits affected by the unauthorised works to the Scheduled Monument,
- 4.2 The principal objectives of the project were:

- to identify and record any surviving earthworks by modern archaeological earthwork survey;
- to determine the nature, depth, stratigraphic complexity, level of preservation and date of any archaeological features affected by the unauthorised works using modern archaeological excavation techniques;
- to present a report summarising the results and assessing the impact of the unauthorised works; and
- to prepare a suitable archive for submission to a local museum.

5.0 METHODOLOGY

- 5.1 All methodology was in accordance with the Written Scheme of Investigation (NAA 2012), submitted to, and approved by English Heritage in advance of the works, and in line with current standards and guidance published by English Heritage (2007, 2008a and 2008b) and the Institute for Archaeologists (2009).
- 5.2 Survey control was established using a Topcon GRS1 GPS system. The GPS system was set to static occupation over two stations for one and a half hours per occupation, in order to provide a positional fix within the landscape; this information was subsequently post-processed using Topcon Tools. The earthwork survey was conducted in three dimensions from the established survey stations using a Leica 700R TST; all survey data was tied to the Ordnance Survey national grid. The survey conformed to English Heritage Level 3 survey, at a scale of 1:500.
- 5.3 A rapid examination along the whole 298m strip of the trackway was made to identify any potential archaeological deposits; however, no new material was identified apart from those eight discrete already identified during the preliminary site investigations by EH and the NYMPA. Each individual area was subsequently excavated and hand cleaned. The southern side of the track was deemed to be the most appropriate section for cleaning, due to the spoil from the machining having been pushed into heaps on the north side of the track. The sections were assessed once cleaned, and were recorded by written record, digital and black and white photography and, where appropriate, hand-drawn sections onto permatrace at 1:10 scale.
- 5.4 No finds were recovered from the excavations, and no palaeoenvironmental samples were collected.

6.0 EARTHWORK SURVEY

- 6.1 A measured survey was undertaken using a Total Station Theodolite of the extent of the damage within the Scheduled area, and the location of the discrete areas of peat identified during the preliminary walkover. Once this was

complete, a 10m wide zone on each side of the excavated trackway was inspected in order to identify the location and extent of any archaeological features, particularly those relating to the aggregate field system, which could have been truncated by the excavation of the track.

- 6.2 Despite careful examination, no clear earthworks were identified within this buffer zone. The height of the vegetation, which comprised tree scrub, dwarf shrubs, rushes, grasses and bilberry, was not particularly conducive for survey (see Plate 1). Nevertheless, the surveyors were sufficiently confident that had earthworks been present, they would have been noted, as particular attention was paid to localised changes of topography during the inspection, and in particular where these could relate to deposits of peat identified in the track area. Slight changes in the ground surface close to the track were observed but these all appeared to be relatively modern in nature, relating to an earlier estate path following the line of the later excavated track, or associated with the steep access route onto the moor.



Plate 3: Field boundary lying to the south-west of the survey area showing the nature of the surviving earthworks associated with the monument.

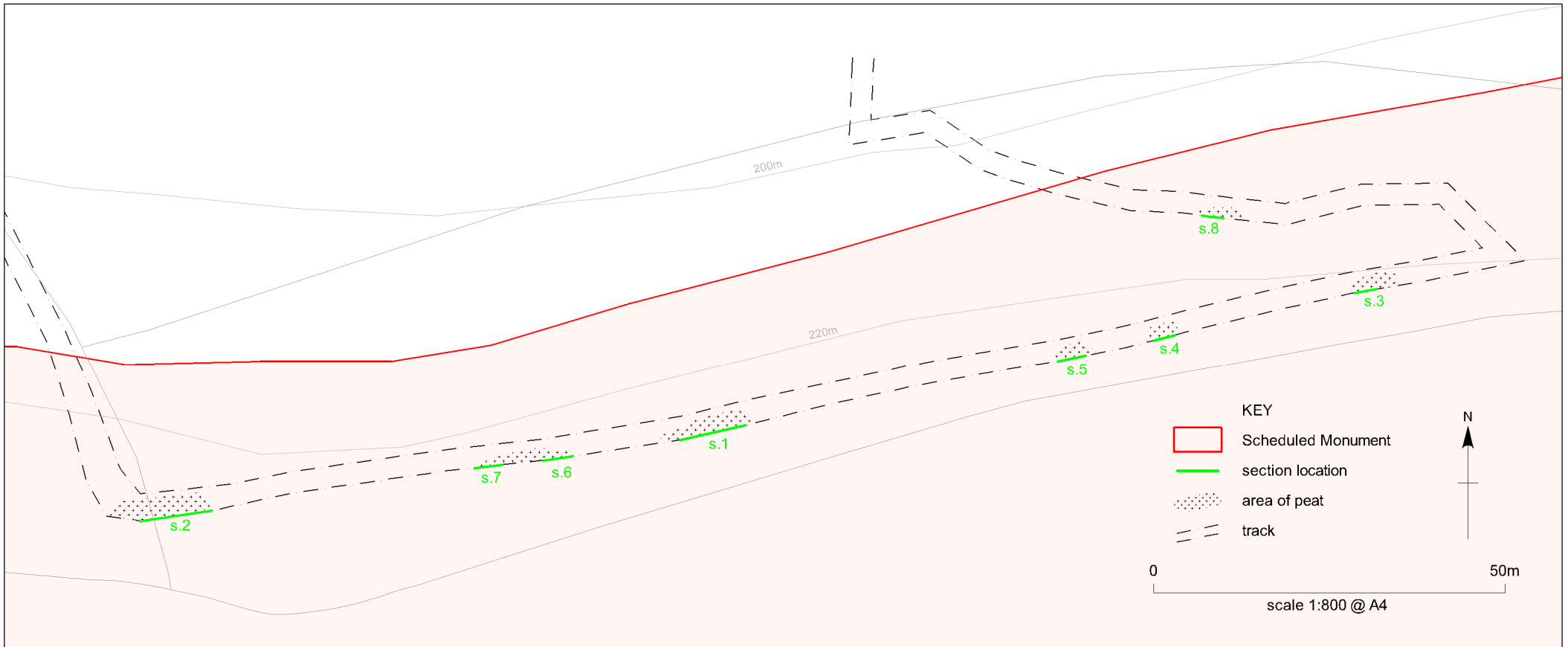
- 6.3 In order to be certain that earthworks in the vicinity of the track were not being missed, the landscape surveyors undertook an inspection of the known earthworks in the wider area, which were under similar ground cover to that within the buffer zone. These earthworks were clear and distinguishable, with banks in excess of 1m in height. Working from these known elements, an attempt was made to trace the earthworks back to the area of the track, but all features petered out well before this point was reached. During this process, a possible shaft with associated spoil collar was identified 167m south of the access track. The shaft measured 3.5m wide and was filled with water. It was surrounded by a low mound some 10m in diameter.



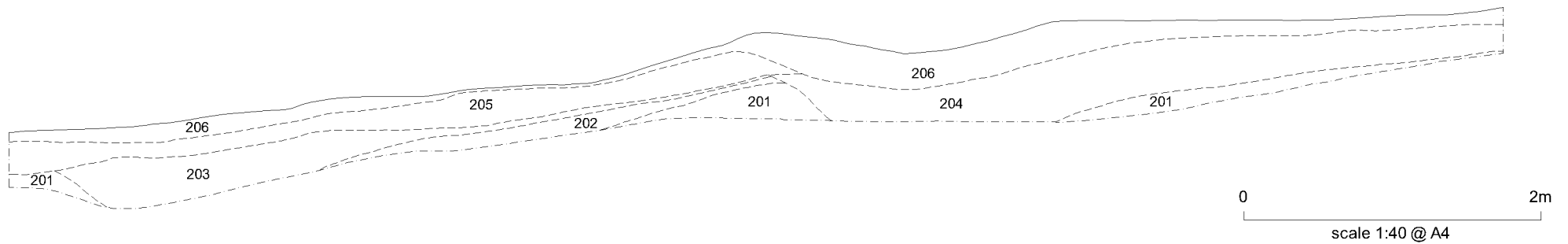
Plate 4: Possible shaft head identified to the south-east of the project area but well outside the 10m buffer zone.

7.0 EXCAVATION

- 7.1 An investigation was undertaken of the eight areas of peat which had been identified (Sections 1-8, Figure 2). There was no definable pattern to the location of these deposits, though a broad grouping could be suggested between Sections 1, 6 and 7, and between Sections 3, 4, and 5. All sections were cleaned and examined in detail for archaeological features, but the majority of these deposits did not extend beyond the section edge and did not extend across the full width of the track (approximately 3m in width). Whilst they may have been partially truncated on the north side of the track by the action of the machine, these deposits appeared not to have been substantial in nature, and certainly were unlikely to be of archaeological origin.
- 7.2 **Section 1:** the section measured 9.5m in length, and extended to 0.52m in depth. The basal deposit (101) comprised a 0.04m deep deposit of grey silty sand, stained by leaching from the peat layer above. The peat layer (102) extended to 0.29m in depth, beneath approximately 0.19m of decaying leaves and vegetable matter (103).
- 7.3 **Section 2:** Section 2 measured 10.25m in length, and extended to 0.5m depth; the section is depicted in Figure 2. Three outcrops of yellowish orange degraded sandstone (201) were identified, at the western, central and eastern ends of the section. The maximum depth of the outcrops was 0.24m. The central outcrop was partially overlain on the east side by a leached silty sand stained with peat (202), which was 0.12m in depth. This deposit was in turn overlain by a greyish brown sandy silt (203), excavated to 0.35m depth, which appears to lie in a hollow, perhaps relating to the trackway which runs onto the



Section 2



moor at this point. Between the central and western outcrop of sandstone (201), a deposit of peat (204), 4.9m in length, was identified, extending to approximately 0.45m in depth. This peat deposit appears also to have accumulated in a hollow.



Plate 5: Section 1, facing south.

- 7.4 Silt deposit 203 was sealed by a deposit of peat (205) which measured 5.3m in length and 0.25m deep. This deposit extended between the central outcrop of sandstone (201) and the eastern end of the section and may have been equivalent to peat deposit 204. The uppermost deposit was formed by 0.13m of decaying vegetable matter, leaves and twigs.
- 7.5 **Section 3:** the section measured 3.1m in length, and extended to 0.41m in depth. The basal deposit comprised a 0.02m deep deposit of grey silty sand (301), stained by leaching from the peat layer above. The peat layer (302) extended to 0.20m in depth, with the upper layer disturbed by vegetation growth and roots (303), to 0.19m depth.
- 7.6 **Section 4:** the section measured 3m in length, and was 0.34m in depth. The deposits in this section were disturbed by roots from two birch trees, and bilberry bushes. The basal deposit comprised a 0.04m deep deposit of grey silty sand (401), stained by leaching from the peat layer above. The peat layer (402) was 0.18m in depth, and included most of the root disturbance. The upper 0.12m (403) comprised decaying leaves and vegetable matter.



Plate 6: Section 2, facing south-east.

- 7.7 **Section 5:** the section measured 4m in length, and was 0.33m in depth. The basal deposit (501) comprised a 0.04m deep deposit of grey silty sand, stained by leaching from the peat layer above. The peat layer (502) extended to 0.18m in depth, with an upper layer of decaying leaves (503), to 0.11m depth.
- 7.8 **Section 6:** the section measured 4.2m in length, and was 0.38m in depth. The natural comprised a mix of grey silty sand (601) to 0.08m depth with outcrops of sandstone. The natural silty sand was stained by leaching from the peat layer above, which comprised a reddish peat (602), 0.20m in depth. The upper 0.10m of the section comprised roots and vegetable matter (603).
- 7.9 **Section 7:** the section measured 4m in length and 0.38m in depth. The natural was similar to that identified in Section 6, but the grey silty sand (701) included more gravel inclusions. The natural silty sand was stained by leaching from the peat layer above, which comprised a reddish peat (702), 0.20m in depth. The upper 0.10m of the section (703) comprised roots and vegetable matter.
- 7.10 **Section 8:** the section measured 3.1m in length, and was located on the downslope spur of the track. The section was only visible in north-facing cut edge of the track, as the bulldozer had cut into the bedrock along this face due to the sharp incline of the hill. As a result the basal layer in the section comprised 0.38m of sandstone bedrock (801). This was overlain by a 0.34m deposit of black silty-sand (802), with some evidence of iron-panning, which was discoloured by leaching from the soils above. Above this was a 0.51m thick deposit of greyish brown silty sand (803), containing sub-angular and

sub-rounded stone inclusions. This was initially flagged as a potential feature, but investigation of this confirmed it was likely to be the result of material falling into a tree throw, or collecting in a localised hollow, rather than being of archaeological origin. The deposit was sealed by 0.32m of reddish brown compact humified peat (804).

Discussion

- 7.11 No definable archaeological features were identified during the excavations, with the areas which had been highlighted for investigation comprising uniform shallow peat deposits extending out from the north-facing track section, and typically truncated by the machining of the track at the northern end. The only potential anthropogenic activity was identified in Section 2, where two definable hollows were identified, which align with the trackway leading up onto the moor, and may represent hollow-ways or cart tracks. This access route may be related to the possible shaft identified to the south, which could indicate some low level industrial activity, which is presumably post-medieval in date.

8.0 CONCLUSION

- 8.1 The detailed examination of the machined track has confirmed that no earthworks or archaeological features were truncated during its construction. The work has also provided some additional information relating to the extent of field systems at Troutsdale. The uppermost section of the track lies broadly at 223m to 224m AOD, whilst most of the scheduled earthworks lie further south, above the 229m AOD contour line. This may indicate that the field system never extended out to the northern edge of the bluff which is, perhaps, unsurprising given that cultivation was more likely to be concentrated on the flatter, more productive area on top of the moor. Here, prior to clearance, erosion and the accumulation of peat, soil deposits would have been deeper and more agriculturally viable. Towards the edge of the moor, the soil profile may have been thinner and the slopes are likely to have been more densely wooded during the Bronze Age period. Evidence of boundary features might have been anticipated in this area, but no such features were observed in either the archaeological survey or excavations.
- 8.2 It should be remembered that the nature of the survey work undertaken during this phase of work has been specifically targeted and relatively localised. As such, despite the apparent absence of features observed along the northern edge of the moor, it is not possible to draw any general conclusions about the extent of the field system and related features without more extensive survey. Much the existing information on the scheduled area is based on features plotted from aerial photograph rather than field investigation. Whilst this method of survey can be very effective for the identification of earthworks in more exposed areas, it is potentially less reliable in areas of shrub and wood pasture. The current Scheduling boundary therefore is important in offering protection to these more marginal areas around the periphery of the recorded features.

- 8.3 Within the scope of the current project, no further work is recommended, although a wider survey of the landscape would be desirable, particularly when the vegetation is lower, or if controlled burning of the vegetation is proposed, particularly above the 229m AOD contour line. Continued caution should be exercised in planning any future works on this section of the moor, in view of the high number of prehistoric monuments within the vicinity, and in particular during any future proposed excavation works. Prior consultation should be undertaken over and formal consent obtained for any intrusive works in this area in future.

References

English Heritage (2000) *Metric Survey Specifications for English Heritage*

English Heritage (2007) *Understanding the Archaeology of Landscape: A Guide to Good Recording Practice*

English Heritage (2008a) *Management of Research Projects in the Historic Environment (MoRPHE): PPN6: development of Procedural standards and guidelines for the historic environment*

English Heritage (2008b) *Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment*

Institute for Archaeologists (2009) *Standard and guidance for Stewardship of the Historic Environment*

Northern Archaeological Associates (2012) *Troutsdale Moor, Troutsdale, North Yorkshire: Written Scheme of Investigation and Tender Submission for archaeological recording and Earthwork Survey*, unpublished document

Online Sources

http://www.naturalengland.org.uk/publications/nca/north_yorkshire_moors_and_cleveland_hills.aspx

English Heritage Monuments Protection Programme Monument Class Description 1988 <http://www.eng-h.gov.uk/mpp/mcd/raf.htm>