



ARCHAEOLOGICAL SURVEY
REPORT

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**BARDEN MOOR,
UPPER WHARFEDALE
NORTH YORKSHIRE**

on behalf of

Yorkshire Peat Partnership

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**BARDEN MOOR, WHARFEDALE, NORTH YORKSHIRE
PEAT RESTORATION AND GRIP BLOCKING WORKS**

ARCHAEOLOGICAL SURVEY REPORT

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ARCHAEOLOGICAL SURVEY REPORT

Executive summary

Northern Archaeological Associates were commissioned by the Yorkshire Peat Partnership (YPP) to undertake a rapid archaeological survey and assessment in advance of peat restoration works on Barden and Embsay Moors, on the Bolton Abbey Estate, North Yorkshire (NGR SE 010 580). The project area comprised approximately 24.42km² of upland defined by the Yorkshire Dales National Park Authority (YDNPA) as requiring assessment.

The aims of the survey were to provide a pre-intervention record of any archaeological remains and historic features within these areas; to evaluate the significance of these heritage assets; assess any potential impact from the restoration works, and advise on a suitable strategy to mitigate against the occurrence of any such damage during the consolidation works.

In advance of the fieldwork, an HER audit was undertaken to inform the subsequent survey. This combined NMR and HER data, modern aerial photographic material and First, Second and Third Edition Ordnance Survey (OS) map data, with the aim of establishing the known archaeological resource; defining the extent of identified sites and plotting any potentially new monuments. Bolton Abbey Estates also held a number of useful estate maps, which NAA were allowed to copy. LIDAR data provided by the Environment Agency and held by the YDNPA was also examined. This information was compiled into a GIS prior to survey commencing, and the database and plots were provided to the survey teams as baseline data, to be edited and updated in the field. All identified archaeological sites were visited during the survey and their vulnerability to potential damage during groundworks was assessed. Any previously unknown archaeological remains were also recorded and their vulnerability similarly evaluated.

A total of 381 heritage assets were surveyed, most of which were newly discovered sites, expanding the existing knowledge and understanding of the archaeology of Bolton Abbey Estate. Features relating to the prehistoric landscape comprised two ring cairns of Bronze Age date, which had been previously identified within the HER from aerial photographs but not surveyed. In the medieval period, part of the survey area lay on the boundary of Barden Chase, a medieval hunting chase, and also within the grounds of land held by Bolton Abbey. A boundary marking the division between Embsay and Barden Moors was marked by a series of boundary stones with incised crosses, which are probably of medieval date. On both Barden and Embsay Moors there were complex networks of braided hollow ways leading up onto the higher ground from the many villages which surround the moor. These probably originate in

the medieval period. The hollow ways lead to the parish 'peat pits', the portions of the moor where each parish held turbary rights. Extensive evidence of peat cutting was recorded, corresponding with the positions shown on the early mapping.

The overwhelming majority of the archaeology was post-medieval in date, however, and related predominantly to coal mining (in the form of multiple shafts and drainage levels on Burnsall and Thorpe Fell, and at Deer Gallows), and extensive quarries (particularly of interest at Fairies Chest, where they were manufacturing millstones). Modern archaeology comprised the extensive network of quarries and tramways, and a navy settlement, associated with the construction of the reservoirs, and the shooting lodges and grouse butts which are still in use today.

During the survey, a number of issues and concerns came to light in terms of the reliability of the YDNPA HER data and the condition of the archaeological remains. Several shortfalls in the HER data were identified, many of which are endemic to the HER/SMR system and are shared across all counties and regions. Primarily, many assets lacked accurate or meaningful location information. This is a common HER problem which predominantly arises from the plotting of material from aerial photographs and other mapping. The only way to properly validate HER information is through combined field survey and HER audit. During the survey, accurate information regarding the location and extent of archaeological remains has been collated. It is hoped that this information will be useful in updating the HER.

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ARCHAEOLOGICAL SURVEY REPORT

1.0 INTRODUCTION

- 1.1 Northern Archaeological Associates were commissioned by the Yorkshire Peat Partnership (YPP) to undertake a rapid archaeological survey and assessment in relation to peat restoration works on Barden Moor, Wharfedale, North Yorkshire (Fig. 1). The survey comprised an area of approximately 24.42km², defined by the Yorkshire Dales National Park Authority (YDNPA) as requiring assessment.
- 1.2 The aims of the survey were to provide a pre-intervention record of any archaeological remains and historic features within these areas; to evaluate the significance of these heritage assets; assess any potential impact of the restoration works, and advise on how such damage could be avoided. Peat sections were cleaned and recorded at six locations to examine any variations within the peat whilst assessing its condition and suitability for further analysis (Fig. 2).
- 1.3 This report presents the survey results and includes a table (Appendix A) of all identified heritage assets including known sites which already appear on the YDNPA Historic Environment Record (HER) and/or the National Monument Record (NMR). The heritage assets are illustrated on Figures 3a - 3f. All sites identified during the survey were assigned a Unique Identification Number (UIN), and cross-referenced to existing recorded sites in both datasets where correlation existed.
- 1.4 The significance of each asset has been assessed individually, and as part of a cluster- or group- of monuments within their landscape context (Figs. 4 – 7). This information has been used to compile a plan of important archaeological sites and historic features using a simple 'traffic light' coding system. This is intended to facilitate the grip blocking and consolidation work and, where appropriate, identify proposed 'safe' access routes (Green Zones; Figs. 8a - 8f).
- 1.5 The surveys and all post-survey work was undertaken according to national guidelines (English Heritage 2007 and 2008; IFA 2009) and conformed to the agreed project designs and briefs (YDNPA 2012; NAA 2013).

2.0 LOCATION, TOPOGRAPHY AND GEOLOGY

- 2.1 The survey area is located on Barden Moor, Wharfedale, North Yorkshire situated c.3km to the north-west of Skipton. It covers an area 24.42km² and

takes in Burnsall and Thorpe Fell, Cracoe Fell, Rylstone Fell, Emsay Moor and part of Barden Broad Park. The moor ranges in elevation from 300m to 506m AOD at Thorpe Fell Top and generally comprises rough moorland surrounding Upper Barden Reservoir.

- 2.2 The solid geology of the site comprises sandstone of the Millstone Grit Series (Institute of Geological Sciences 1979) overlain within the eastern part of the survey area by boulder clay (Institute of Geological Sciences 1977). The soils are mapped as fine loamy upland soils belonging to the Wilcocks 1 Association to the south-east and perennially wet blanket peat of the Winter Hill Association to the west and north (Soil Survey of England and Wales 1983 and Jarvis *et al.* 1984).

3.0 HISTORICAL BACKGROUND

- 3.1 The moor has been occupied since prehistoric times with the sites of two Bronze Age ring cairns recorded within the survey area and the recent discovery of lithic material (microliths) being made in the vicinity. An Iron Age gold torc was reputedly found on Emsay Moor in the 19th century which is now lost. No evidence for the use of the moor during the Roman period is recorded although finds of this date have been identified within Drebley and Cracoe.
- 3.2 At the time of the Norman Conquest the lands in the vicinity of the survey area were owned by the Earls of Mercia with Earl Edwin's residence located at 'Bodeltone', or Bolton. Soon after the conquest, William the Conqueror granted manors to the Norman baron Robert de Romille. These lands included the Manor of Bolton which became the seat of administration for the area. At the time of Domesday settlements are recorded at Bolton Abbey, Halton East, Emsay, Rylstone, Burnsall and Drebley; Barden is notable by its absence.
- 3.3 During the early 12th century a monastery was founded at Emsay. The site of the monastery was soon moved to Bolton (Lunnon 2013) when lands were given to the Augustinian Canons by Lady Alice de Romille of Skipton Castle in 1154 forming a large agricultural estate (Sheard 2007). The monastery would no doubt have exploited resources common on the moor, such as peat and stone, and grazing land for sheep as the most profitable enterprise was wool, which was exported to Flanders and Italy (*ibid*). At this time Emsay Moor appears to have belonged to the Bolton Abbey whereas the remainder of the fell represented common land that was exploited by the adjacent townships.
- 3.4 Following the dissolution of the monasteries Bolton Abbey was sold to Henry Clifford, 1st Earl of Cumberland who was resident at Skipton Castle. It was at this time that Barden Tower, located to the east of the development area was re-constructed as a fortified house, replacing a hunting lodge that had been in the possession of the Clifford's since the early 14th century (Sheard 2007). The tower was later extended during the mid-17th century by Lady Anne Clifford and currently survives in ruins.

3.5 Barden Moor is recorded as being used for hunting during the medieval period, although it undoubtedly served this function from much earlier. The name Barden means ‘the valley of the wild boar’ in Anglo Saxon and it must therefore have been used to hunt such animals at that time (Sheard 2007). By the 14th century a series of parks, hunting chases and lodges are recorded forming the lower part of the township of Barden (Whitaker 1878), some of which are later recorded on Speed’s Map of The West Riding of Yorkshire in 1610 (Plate 1).



Plate 1: Extract from Speed’s map of The West Riding of Yorkshire, 1610.

3.6 During the late 16th century a dispute is recorded between the Earls of Cumberland and the Norton family of Rylstone following impounding of the earls deer at Norton Tower (Whitaker 1878). Following resolution of this dispute Rylstone became the Earl’s possession, and part of it was promptly enclosed, including the fell above (Rylstone Fell), as a deer park. This park was probably associated with the site of a hunting lodge, named Clifford’s Tower, recorded on the Estate Map of 1854.

3.7 Following the death of Lady Anne Clifford in 1676, the Bolton Abbey Estate became the property of the Earls of Cork and Burlington, and then in 1755 passed by marriage to William Cavendish, who became the 4th Duke of Devonshire (Sheard 2007). The estate remains in the care of the Dukes of Devonshire to the present day. The moorland continued to be used for hunting, although with the increased popularity of game shooting during the 18th and 19th centuries, it has become used for the rearing and shooting of grouse. The grazing of sheep also continued, as attested by a number of sheepfolds upon the moor.

3.8 During 1845 Thorpe and Burnsall Fell became the property of Charles Robert Tempest, with this ownership being preceded by a boundary dispute between Tempest and the then Duke of Devonshire who owned the rest of the moor. Resolution of this dispute is illustrated on a map drawn in 1843 (Beatty) and the boundary was formalised by the erection of a number of boundary stones along its length. Tempest owned Thorpe and Burnsall Fell until 1860, and it appears that during this period it was worked for coal with Thorpe, Burnsall and Onion Hill collieries all functioning at this time.

3.9 During the late 19th and early 20th centuries three reservoirs were constructed on and around Barden Moor including Upper Barden, Lower Barden and Emsay Reservoirs. The two Barden reservoirs were constructed by the

Bradford Corporation Water Works to supply water to Bradford, whereas that at Embsay was constructed by Skipton Urban District Council to provide water to Skipton. Only Upper Barden Reservoir is located within the survey area (Plate 2).



Plate 2: Upper Barden Reservoir, looking north-east.

4.0 ASSESSMENT

- 4.1 All of the known archaeological sites recorded in the YDNPA HER and the NMR were visited during the survey, and their potential vulnerability to damage during the groundworks was assessed. The area was also surveyed for previously unknown archaeological remains; the vulnerability of these was also assessed.
- 4.2 A number of datasets were assessed prior to the survey commencing, and the results compiled into a GIS. Aerial photos were used to complement the data gathered on the ground and to accurately define the full extent of the archaeology present. First, Second and Third Edition Ordnance Survey (OS) maps were also used to inform the field survey.
- 4.3 A total of 381 heritage assets were recorded within the survey area. Of these, 98 were sites recorded in the HER and/or the NMR. The remainder of the sites were identified from the desk-based annotation of the available datasets or during the field survey. These have been divided into three significance based categories: Red Zones; Amber Zones; and Green Zones as defined below and illustrated on Figures 8a - 8f.

Red Zones: Absolute constraint areas

- 4.4 Red Zones include scheduled sites and other remains which are potentially of national significance. These areas must be avoided during the groundworks. No vehicles or plant must track through, work within, or be stored in these zones.
- 4.5 Two red zones have been defined within the survey area to protect the remains of two nationally important Bronze Age cairns (10213 and 10073). The first red zone is located within the north-eastern part of the survey area between Folly Top and Intake Plantation, and the second is located to the south-east on Tewit Bogs.

Amber Zones: No access areas

- 4.6 Amber Zones include significant remains that appear on the YDNPA HER or have been identified as part of the rapid archaeological survey. These areas should be avoided during the peat restoration and grip blocking works.
- 4.7 If, due to the practicalities of the restoration works, access through an Amber Zone is required then this should only be undertaken after consultation with the YDNPA Archaeologist. Such access has the potential to cause damage to significant archaeological remains and, therefore, should be kept to a minimum.

Green Zones: Potential access areas

- 4.8 Green Zones are areas within the Amber Zones which have been identified as potential access routes and generally follow the course of existing tracks. Vehicles can be tracked across these routes, in order to reach those areas of grip blocking cut off from other access by large contiguous areas of archaeology.

Other areas and remains

- 4.9 The remainder of the surveyed area is generally free from significant visible archaeological remains, although known archaeology is still evident within some areas. Where this is the case the remains have been assessed as of lesser significance than elsewhere, due to preservation or prevalence. There is also the potential for sub-surface features or finds to be identified during the course of the restoration works. It is advised that all care should be undertaken during the groundworks to avoid damage to any obvious upstanding remains not covered by the scope of the archaeological survey and assessment.

5.0 RESULTS AND SIGNIFICANCE

- 5.1 The results of the survey, and assessment of the survey area, are summarised within Table 1 which includes an outline assessment of significance. The

heritage assets recorded within the study area included sites dating to the prehistoric, medieval, post-medieval and modern periods and comprised large numbers of hollow ways. The hollow ways are likely to have provided access to the moor from the adjacent townships during all periods, but appear to have been largely defined during the post-medieval period, therefore discussion of this asset type is presented within that sub-section. All of the numbered heritage assets are defined with Amber Zone buffers unless otherwise stated.

Prehistoric (Fig. 4)

- 5.2 Only two heritage assets dating to the prehistoric period are recorded on Barden Moor which represent the sites of two ring cairns (10213 and 10073; Plate 3) that date from the early to mid-Bronze Age. Both had previously been recorded by aerial photographs, but had not been previously surveyed. A number of flint microliths have also recently been found on the moor representing further evidence for occupation during the prehistoric period, although their find spots remain unknown.



Plate 3: Aerial photograph showing ring cairn 10073 to the right of the frame, facing south.

- 5.3 One of the ring cairns (10213) was located within the north-eastern part of the survey area upon moderately level ground between Folly Top and Intake Plantation. It comprised a sub-circular bank with an external diameter of approximately 20m and an entrance break to the north. The bank was 3m wide at the base and stood to a height of 0.8m, being constructed from rounded cobbles and boulders. Some rounded boulders were exposed at the base of the bank which appeared to represent erosion of the monument rather than a curb. Internally, the cairn was moderately flat, featureless and continued the level of the surrounding moor, although a thick carpet of heather prevented closer

inspection. The cairn generally survived in good condition but had been cut to the north by an east to west aligned drain. Although upstanding, the cairn has not been recorded by historic mapping, possibly as it was located within a plantation (Thompson's Folly Plantation) that remained lightly wooded until at least 1980.

- 5.4 The second ring cairn (10073; Plate 3) was recorded within the south-eastern area of the survey and upon Emsay Moor in the vicinity of Tewit Bogs. This feature was circular with a diameter of 21m. It comprised a slightly raised embanked circle on the south side associated with a stone curb. To the north it was cut into the hillside, producing a flat central area which had been built up to the height of the southern embankment, suggesting it may have represented a platform cairn rather than a ring type. The circle was abutted on the west side by a probable alignment of three recumbent stones. This cairn remained unrecorded by historic mapping, and is incorrectly located by the Historic Environment Records 180m to the north-east.
- 5.5 Ring cairns are prehistoric ritual monuments and are probably associated with burial and/or celebration of the dead. They are among relatively few classes of monuments which can be assigned to the later second millennium BC and are considered of National Importance. The two sites are defined as Red Zones.

Medieval (Fig. 5)

- 5.6 Heritage assets dating from the medieval period include a monastic boundary defined by standing stones, peat pits, and the sites of wells and a hunting tower. A number of stone quarries may also have had their origins during this period, although they had been more intensively exploited during the post-medieval period, and as such are discussed within that section.
- 5.7 During the medieval period Bolton Abbey held land within the south-eastern part of the survey area which comprised Emsay Moor. The north-eastern edge of the monastic land was defined by 19 standing stones and earth-fast boulders marked with crosses (Plate 4) which continued from Halton Heights to the south-east to Yethersgill Head to the north. The stream of Yethersgill Head may have served as the northern limit of the monastic land as it continued to the west and contained Emsay Moor.



Plate 4: Monastic boundary stone (10134).

- 5.8 The sites of the standing stones were visited during survey and twelve survived to be inspected (10126, 10127, 10128, 10129, 10132, 10133, 10134, 10136, 10284, 10378, 10379 and 10380). One of these stones had been moved out of place (10128) and two had collapsed (10126 and 10127). The remainder no longer survived. The standing stones were on average 0.7m by 0.3m by 0.3m in size and had been crudely shaped. The boundary may have been associated with a hollow way (10174) at its northern end which continued to the north-west towards Rylstone. It was overlain to the south by a modern track.
- 5.9 Evidence of peat cutting was identified within the survey area which is likely to have had its origins within the medieval period or earlier, although the surveyed remains represented pits that had been continually exploited into the post-medieval period. Peat represented a key resource, particularly in areas with limited access to timber, as it was used for fuel. The rights to cut peat within a particular area, or turbarry, were often closely guarded with disputes frequently appearing in the documentary records. Eleven distinct areas of peat cutting were identified which included pits that were exploited by the townships of Cracoe and Threapland (10031 and 10268), Thorpe (10264), Burnsall (10269 and 10137) and Eastby (10266 and 10037) and were named as such by the First Edition Ordnance Survey map of 1853. Another extraction area was recorded at Pitshaw (10251) and a previously unrecorded zone was located at Water Crag (10034, 10035 and 10291).
- 5.10 The larger of the extraction areas was Cracoe and Threapland Peat Pits (10031 and 10268) which together formed a single worked zone situated to the west of Thorpe Fell Top. The extraction area was aligned south-west to north-east and was 1.9km by 0.2km in size. It was formed by a relatively uniform series of rectangular bays that were each in the region of 25m by 30m in size aligned north-west to south-east. The bays were defined by spoil banks that were c.3m wide at the base and stood to a height of 1.5m. The southern and eastern extents of Cracoe and Threapland Peat Pits were defined by standing peat sections, which in places achieved heights of 2m above the base level of the bays, indicating the quantities of peat that had been removed from the area. The pits were served by a series of hollow ways including 10239, 10240 and 10243 which provided access onto the fell from the north-west and the relevant townships.
- 5.11 Thorpe (10264) and Burnsall (10269 and 10137) Peat Pits were located to the east of Cracoe and Threapland pits and together covered an area of equivalent size. The pits themselves had been worked in a similar manner, with regular bays, and large standing sections marking the edges of the extraction areas (Plate 5). During field survey an inscribed earth-fast boulder (10325), marked '1849', then upside down 'H. Hird, aged 25, Thorpe', was recorded centrally within the northern part of Thorpe Peat Pits. Both the pits were accessed from the north and north-west by mass complexes of hollow ways which included 10014 and 10205.



Plate 5: Spoil banks defining cut bays at Thorpe Peat Pits (10264), looking south-west.

- 5.12 Eastby (10266 and 10037) and Pitshaw (10251) Peat Pits were located to the south, in the vicinity of The Whams and Pitshaw Top and were individually smaller than those to the north being c.250m by 150m in size. The peat had been extracted in a less ordered manner than the previously discussed pits although the method of extraction, resulting in spoil banks defining small bays, remained the same.
- 5.13 Eastby Peat Pits were located at a significant distance from Eastby township (4km) which was probably due to Embsay Moor being under the control of Bolton Abbey and the need to extract peat from common land. The pits contained the remains of a square stone structure (10320; Plate 6), measuring 3m by 3m, which may have represented a shelter for peat cutters. The building was of drystone construction and had been terraced slightly into the backside. It contained a fireplace within the northern wall and an entrance to the south. Access to the pits was from the south by track ways that had been subsumed into the hollow way groups 10163 and 10044, which had been extensively redefined during reservoir construction within the late 19th century.
- 5.14 Pitshaw Peat Pits (10251) was the only area recorded where the name did not correspond with that of the township it was exploited by and instead related to the location of the pits. The main trackway serving the extraction area appeared to continue to the north-east on the course of a modern track before crossing Standard Flat and Simm Bottom as part of hollow way groups 10244 and 10200, suggesting the pits were the turbary of the population of Drebley.



Plate 6: Possible peat drying house within Eastby Peat Pits (10266), looking north-east.

- 5.15 Another area of peat cutting (10035, 10291 including 10030 and 10036) was identified to the south of Cracoe Peat Pits on Water Crag. These extraction areas were not recorded by historical mapping. The site comprised an irregularly shaped area measuring approximately 600m by 480m with a second small area of cutting (10034) recorded to the north-east. The workings themselves appeared less intensive than those to the north. It is possible that these sites represented an early phase of peat cutting on the moor which had ceased to be worked by the 19th century and were therefore not recorded at that time. However, the extraction area was located at the northern edge of Rylstone Fell and was served by an abraded network of hollow ways (10178) which approached the site from that direction, suggesting extraction was undertaken by the population of that township.
- 5.16 Many of the peat pits identified on Barden Moor, particularly Cracoe, Threapland and Thorpe Pits, survive in good condition and are therefore of considerable significance as evidence of peat cutting is often found to be indistinct and prone to damage and loss.
- 5.17 A number of well sites are recorded on historic mapping upon the moor. During field survey each of the sites was visited and none was found to represent more than a spring, therefore their sites have not been ascribed buffer zones. These springs may once have been associated with a well head structure, although none survived, and would have been a source of clean water for both people and livestock during the main phases of exploitation of the moor from the medieval period onward.

- 5.18 The site of Clifford's Tower (10377; Plate 7) is recorded by the 1854 Estate Map at the western edge of the survey area upon Hellfield Crag and was associated with a second name, New Hall on the First Edition Ordnance Survey map. The building was mapped as a rectangular structure with a north-east to south-west alignment and may have been constructed around 1600. The remains have previously been recorded as 'a small mound of heather covered masonry' by the HER, although no trace could be identified during field survey. It seems likely this building was associated with a park constructed to the north on Rylstone Fell by the Earl of Cumberland in the late 16th century.



Plate 7: Clifford's Tower (10377) as recorded on Estate Map of 1854.

Post-medieval (Fig. 6a and 6b)

- 5.19 Post-medieval use of the moor appears to represent the most intensive period of its exploitation. The hollow ways became increasingly well defined at this time through the movement of both people and materials. Two land boundaries were formalised by standing stones, and substantial areas of coal mining and stone quarrying were recorded.
- 5.20 During field survey, hollow ways were found to be ubiquitous across the area, and although those recorded are likely to have been defined during the post-medieval period, they probably follow much older routes originating within the medieval period or earlier. The main hollow way groups included numerous braided trackways which provided access to the moor and its resources from the surrounding townships (Plate 8) and many are recorded by the First Edition Ordnance Survey map.



Plate 8: A series of hollow ways providing access to the moor.

5.21 Well worn braided hollow ways were recorded from the settlements of Thorpe (10009, 10013 and 10143), Burnsall (10022 and 10214) and Threapland (10008, 10239 and 10240) which included examples that pre-dating the enclosure wall; Drebley (10200 and 10214); Eastby (10258 and 10163), Emsay (10253, 10255, 10184, 10183 and 10179) and Rylstone (10177 and 10178). As well as pedestrian and cart traffic some of these routes appeared to include wagonways, as suggested by a deep cutting (10233) identified on the northern side of Thorpe and Burnsall Fell (Plate 9).

5.22 A large number of other hollow ways were also identified which criss-crossed the moor between areas of peat, coal and stone extraction. No formal surfaced tracks would have existed on the moor prior to reservoir construction within the 20th century; therefore these routes would have been used extensively prior to that time. In many instances the hollow ways are bisected by modern tracks. Many of the hollow ways which



Plate 9: Possible wagonway cutting on Thorpe and Burnsall Fell (10233).

once served the main worked areas upon the moor have been defined as Amber Zones whereas those that are isolated, survive in poor condition, or have been extensively redefined during the modern period are undefined.

- 5.23 During 1843 a series of boundary stones were installed which formalised a land boundary following dispute between Charles Robert Tempest, who owned Thorpe and Burnsall Fell, and the Duke of Devonshire, who owned the rest of the moor. The boundary was defined by 16 surviving boundary stones (10058, 10075 - 10078, 10090, 10091, 10292 - 10294, 10302 - 10305, 10312 and 10314) that were finely dressed measuring 1.6m by 0.4m by 0.3m with rounded tops. The stones were each marked 'C:R.T.' (Charles Robert Tempest) facing Thorpe and Burnsall Fell and 'D:D' (Duke of Devonshire) to the south and south-west (Plate 10).



- 5.24 Another boundary was recorded which continued the alignment of the Tempest/Devonshire stones to the west which defined Cracoe from Rylstone commons. The boundary was defined by three boundary stones, a length of bank and two lengths of wall. The boundary stones (10279, 10287 and 10289) were roughly dressed measuring approximately 1.3m by 0.5m by 0.4m in size and were marked 'C' to the north and 'R' to the south. The bank (10232) continued the alignment of the boundary and was c.10m long by 0.5m wide and stood to a height of 0.3m. Two lengths of wall (10288 and 10290) were also recorded which served to bridge natural watercourses located on the boundary line. They were of drystone construction and were up to 7m long by 0.5m wide and stood to a height of 0.6m.
- 5.25 The remains of coal mining was predominantly recorded towards the periphery of the moor and comprised four main groups located upon Thorpe and Burnsall Fell, at Simm Bottom, Black Syke Bridge and Embsay Moor. The coal workings probably represented extraction during the 18th and 19th centuries.
- 5.26 The most extensive area of workings was those recorded on Thorpe and Burnsall Fell which included Burnsall Fell Pits (Plate 11), Thorpe Fell Pits and Onion Hill Colliery (10004 and 10007) which together formed a single mass of workings. During field survey the distinction between the three collieries was blurred, but it seems likely that Thorpe Fell Pits were located to the west, Burnsall Pits to the east and Onion Hill Colliery to the south-east. The combined area was 1.1km by 0.34km in size and formed an east to west aligned band. The First Edition Ordnance Survey map of the area recorded the

Plate 10: Example of C:R.T. - D:D boundary stone (10294).

location of coal pits towards the eastern and northern part of the site, those situated to the north were labelled as 'old coal pits' suggested they resulted from an earlier phase of extraction. However, the majority of the workings recorded during field survey had not previously been mapped. The remains of the colliery comprised approximately 133 shafts which were generally rounded with diameters ranging from 3m to 8m surrounded by low spoil collars. The remains of two level entrances (10298 and 10299) were identified at the northern edge of the site that had been excavated into the north-facing slope providing drainage for the shafts.

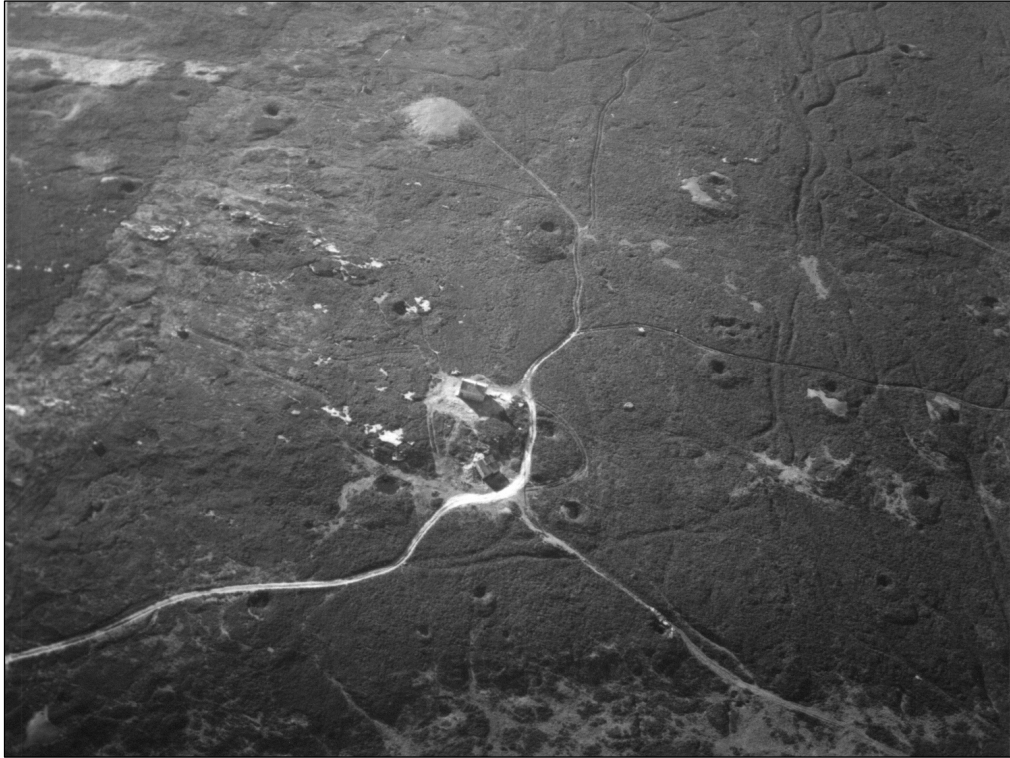


Plate 11: Aerial photograph showing Burnsall Colliery structures 10003 and 10002.

- 5.27 Three structures survived in the vicinity of these collieries that appeared to have originally been associated with mining. The ruins of a rectangular structure and chimney (10001; Plate 12) were recorded at the south-eastern extent of the site and within Onion Hill Colliery. The building was rectangular, measuring 10m by 8m, with a west-south-west to east-north-east alignment. The chimney was located centrally within the western wall and was not keyed into the structure of the building and an entrance was visible within the north part of the eastern wall. The chimney survived in good condition although the main structure of the building was ruinous. Little is known of the origin and function of the structure, it is first mapped by the Ordnance Survey during the years 1979-1980 although its approximate location is recorded as a coal pit on the First Edition Ordnance Survey map of 1853. The form of the building appeared domestic, although the substantial chimney suggested an industrial function. The remains of two shafts (10326) were located immediately to the east of the building suggesting it was associated with mining.



Plate 12: Remains of structure with chimney (10001), facing south-east.

- 5.28 The two other structures (10003 and 10002) were currently used as shooting lodges and were recorded as such by the First Edition OS map, although both were probably constructed as part of Burnsall Colliery. Building 10003 was rectangular measuring 8.2m by 5.6m and had recently been renovated. It was probably constructed during the 18th century. The structure had a ridge and gabled roof finished with stone tiles that contained two chimneys, one located centrally and another built into the north-western gable wall. The north-east facing wall contained the entrance and a window. A second window was located within the south-east gable wall and a blocked window was visible at the first floor level within the north-western gable wall, suggesting the structure once contained a loft space internally. No access to the building was gained and the extant windows were shuttered.
- 5.29 The third building (10002) was located 20m to the north and was a simpler structure which currently functioned as a shelter for beaters and dogs, and as storage. It was rectangular, measuring 6.2m by 4.5m, and had been terraced into the bank side with exposed bedrock forming the rear internal wall. It had a corrugated shed roof and single north-facing entrance with a series of simple wooden benches internally.
- 5.30 Another coal working site, comprising a collapsed level entrance, wagonway, spoil tip, and a ruined building (10327, 10329 and 10328) was identified 180m to the south of the eastern end of Onion Hill Colliery. This site was first mapped by the Ordnance Survey (as the site of a disused tip) in 1979, but appeared to represent mining from a much earlier date.

- 5.31 The area of Rolling Gate Crag, located 200m to the west of Thorpe Fell Pits, also contained evidence for coal working and comprised shafts 10095, 10096, 10097, 10098, 10099, 10296 and 10297. These shafts were recorded on the First Edition Ordnance Survey map as 'Old Coal Pits' suggesting they pre-dated the larger part of the more extensive Thorpe, Burnsall and Onion Hill workings, but may in fact have represented the site, or continuation of Thorpe Fell Pits. The shafts had average diameters of 6m with low spoil collars and two (10095 and 10296) were associated with ruined structures. The structures were located immediately to the east of shafts and were square, measuring 3m by 3m and were constructed with drystone walls which stood to a height of 1m. The buildings were presumably constructed as shelters.
- 5.32 Simm Bottom Coal Pit (10308) was identified within the eastern part of the survey area and was recorded as 'old' on the First Edition Ordnance Survey map. It comprised a single shaft with a diameter of 10m that was associated with a collection of smaller shafts (10103, 10270 and 10271) located predominantly to the west. Four other groups of shafts (10339, 10340, 10015 and 10017), including some possible prospecting pits, were identified to the east and towards the boundary of the survey area which had not previously been mapped. It seems likely that Simm Bottom pits were accessed from the east.
- 5.33 Another area of coal working was identified at Black Syke Bridge (10206) located towards the western edge of the survey area which straddled the boundary between Embsay and Rylstone common. The worked area comprised a linear band of shafts aligned south-south-west to north-north-east that covered an area 550m by up to 120m in size. The individual shafts had diameters of up to 5m with spoil collars and had been recorded as 'Old Coal Pits' by the First Edition Ordnance Survey map.
- 5.34 The final significant group of coal workings was recorded on Embsay Moor and seemed to represent two zones of activity, one on Deer Gallows Plain and the second named as Stirton Pits (Plate 13). The Deer Gallows workings (10250) comprised four substantial shafts that were recorded by the 1854 Estate Map as 'Old Coal Pit Shafts' (which is at odds with the First Edition Ordnance Survey map of 1853 where they are recorded as 'New Coal Pits'). They were recorded during field survey as having diameters ranging from 10m to 12m and were surrounded by low spoil heaps. The shafts were also associated with a level entrance (10381) identified 65m to the south which probably served to drain the shaft group. A similar arrangement of shafts associated with a drainage level was also recorded 800m to the south-west in the vicinity of Brass Castle (comprising sites 10181, 10182 and 10363) which may have represented contemporary workings.

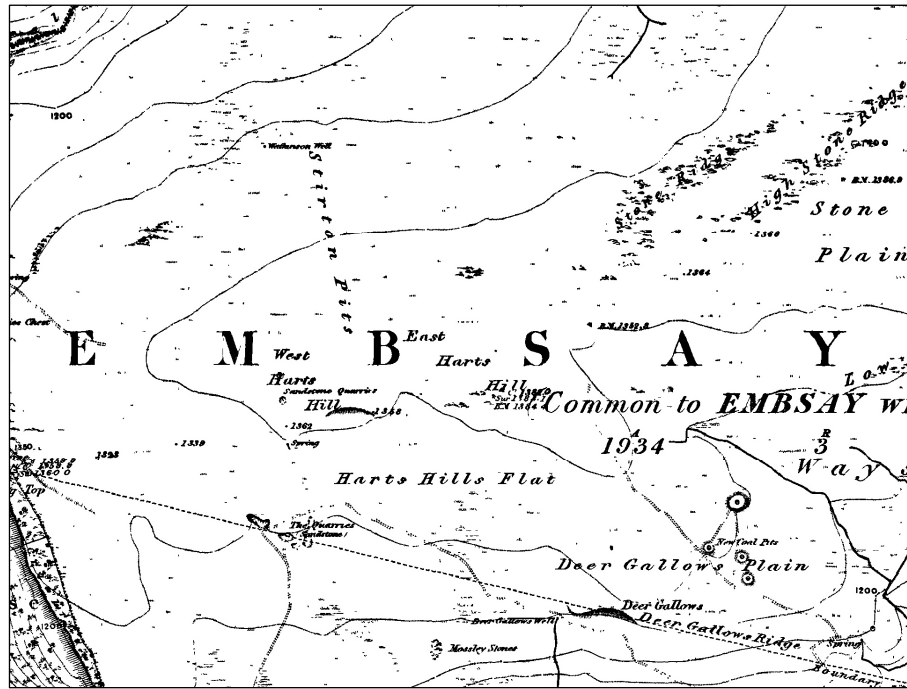


Plate 13: Deer Gallows and Stirton Pits on Emsay Moor, as mapped on First Edition Ordnance Survey map of 1853.

- 5.35 Stirton Pits (10341) were recorded by the First Edition Ordnance Survey map within the north-western part of Emsay Moor, although no individual features forming what presumably must have been a complex are illustrated there. The pits served the township of the same name, situated 4km to the south. Field survey of the area identified an area of coal working comprising at least 20 shafts (10341) with diameters of between 2m and 7m that were clustered around the location of a cairn. The shaft group was associated with a possible jack-roller base formed by two large stones, the remains of a small structure that had been rebuilt as a shooting butt (10343), and a possible stone lined coal bunker (10342). The Estate Map dating to 1854 recorded three buildings, two square and one 'L'-shaped labelled as Stirton Pit Head that were located 400m to the south-east of shaft group 10341. These structures were not identified during field survey.
- 5.36 Numerous other shafts were recorded during field survey that may represent isolated episodes of mining or prospection.
- 5.37 Stone quarries were recorded widely across the survey area which would have served the needs of the individual townships during the post-medieval period (Lunnon 2013). The quarries are generally recorded by the First Edition Ordnance Survey map and were therefore being exploited during the mid-19th century, although they are likely to have earlier origins.
- 5.38 The earliest recorded quarry workings were identified on Emsay Moor where accounts associated with the addition of a tower to Skipton Castle during 1437 record payment for 115 cart-loads of stone from 'Staynrig' (Stone Ridge) to the castle (Raistrick 1973; Plate 14). These quarries comprised three distinct

worked areas cut into the north-west face of Low Stone Ridge situated on Stone Ridge Plain (10152, 10367 and 10368). Another quarry situated to the north-east (10153) in the vicinity of Rotten Park may also have been associated. The main worked area was Stone Ridge Quarry located at the northern end of the ridge. It covered a total area of 120m by 60m and comprised a number of small 'T'-shaped workings. The two other worked areas to the south (10367 and 10368) appeared to have been quarried in a similar manner and all contained the remains of quarryman's huts of drystone construction and were served by long trackways revetted with stone. The quarry recorded at Rotten Park (10153) was slightly different, being formed by a number of extractive pits covering an area 200m by 200m in size and was associated with the remains of a small building (10369) that had previously been recorded on the 1854 Estate Map.

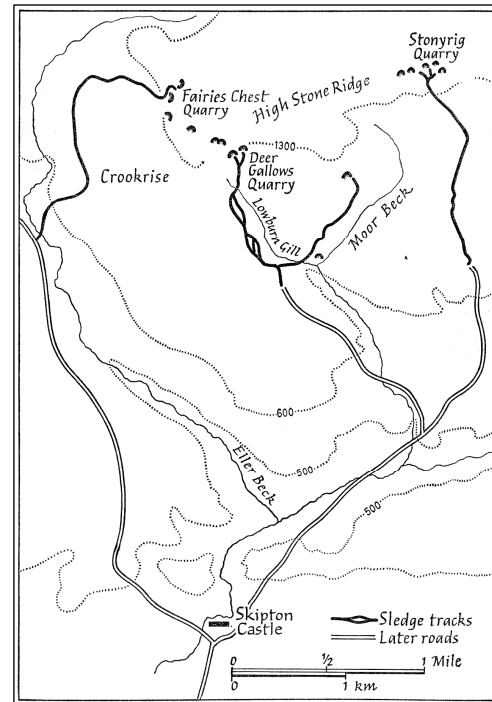


Plate 14: Skipton Castle quarry roads (Raistrick 1973, fig. 7).

- 5.39 Another group of quarries are recorded to the west in the vicinity of Deer Gallows and Fairies Chest which may have also served the needs of Skipton Castle. The single example recorded on Deer Gallows Plain (10219) had most recently provided a source of millstones, a number of which were still present, presumably for use within Whitefield Syke Mill (discussed below) and was therefore being worked during the late 18th and 19th centuries. The quarry included a large worked area associated with loading platforms, storage bunkers and stone structures containing fireplaces. As with the Stone Ridge Plain quarries, it was served by a trackway (10183) revetted by stone (10362). Another probable quarry was recorded centrally upon Deer Gallows where a rocky outcrop appeared to have been exploited. The site also contained a carved earth-fast rock (10373) incised with 'TH SHACKOCK AND CR KNOWLES FEB 1763' possibly indicating extraction at this time.
- 5.40 The quarries recorded in the vicinity of Fairies Chest comprised six distinct worked areas, although the example recorded cut into the escarpment (10348) appeared to be the main area of extraction. This quarry had a cut face 180m long and displayed evidence for plug and feather extraction (10349) indicating it had been worked during the 19th century. The quarry also contained the remains of a rectangular building (10345) that was 9m by 7.5m in size and constructed with faced stone walls and a rubble core. The structure appeared to have entrances within the south and east-facing walls and a possible chimney to the east. Its location was recorded by the 1854 Estate Map. The other quarries in the vicinity included another area of millstone production

(10353) and comprised either smaller worked zones or large areas where extraction had been undertaken within pits and scoops (as at 10351 and 10355) rather than extraction from a standing face.

5.41 The quarries situated in the vicinity of Fairies Chest appeared to have been served by two routes. The first was represented by a complex of braided hollow ways (10183) which provided access across the higher ground to the east. The second was located adjacent to the western enclosure wall and has survived as a modern track from which a carved stone (10364) was identified that probably originated within one of the quarries to the north.

5.42 Other stone quarries were also recorded widely across the moor. The largest of these was identified at Raven Nest Crag which may have served the township of Thorpe. The quarry included two distinct worked areas to the east and west. The easternmost comprised two zones (10012 and 10013) which originally would have formed a single face as depicted on the First Edition Ordnance Survey map. A small quarryman's hut (10295) was identified at the base of the worked face that measured 2.2m by 2.2m with an east-facing entrance and a small fire place built into the northern wall. The second quarry (10202) was located to the west and had a semi-circular face measuring 200m by 70m in size.

5.43 The population of Burnsall probably worked quarries identified in the vicinity of Air Scar (10023 and 10024) and the people of Drebley may have utilised those at Saddle Wham Ridge (10028 and 10029). The large quarry at Halton Heights (10140) was likely worked by Halton East but saw massive extension during later reservoir construction (discussed below). Two small quarries at Heugh Ground Head (10216, 10223) may have been exploited by the township of Eastby and those recorded in the vicinity of Emsay Crag (10151, 10221 and 10222) probably served Emsay. These final quarries were associated with a carving of a face in profile (10372; Plate 15) which may have dated to the 19th century or earlier.

5.44 During field survey six sheepfolds were recorded in the study area. All the folds were of drystone construction and only one, located against the fell wall at Mucky Park (10139), was recorded by the First Edition Ordnance Survey map and was therefore probably constructed within the period of enclosure during the early 19th century. The remainder of the folds were first recorded by the Second Edition map of 1896.



Plate 15: Face carving at Emsay Crag (10372).

- 5.45 Sheepfold 10259 (Plate 16) represented an interesting later 19th century example. This fold was located slightly to the south of Tewit Bogs on Embsay Moor within the bottom of a valley and adjacent to Heugh Gill. It comprised a sub-rectangular cell measuring 11.5m by 7.5m with a smaller cell abutting to the north with the remains of a partition wall and doorway between. The larger of the cells appeared to function as a pen, with the smaller used as a platform from which sheep were washed. A short stretch of wall had been constructed across the course of the stream forming a pool.



Plate 16: Sheepfold 10259, located on the west side of Heugh Gill, facing west.

- 5.46 The entire survey area was contained by an almost continuous wall which defined the higher rough common land upon Barden Moor from the lower enclosed pasture lands. The wall, although extensively repaired and rebuilt in places, is likely to be 14th century in origin and is possibly built on an earlier hedge and bank that is associated with a ditch in some areas (Lunnon 2013). The earlier recognisable parts include those enclosing the moor in the vicinity of Embsay, Halton East and possibly Burnsall along with a length associated with a ditch that defines the western side of the moor to the south-west. These walls are generally constructed from clearance boulders with no upward grading of stone size, projecting through stones or rubble core, as is the case with walls constructed after the 18th century. Occasional orthostats were also recorded at the base. Construction, or reconstruction of Lady Anne's Wall, which surrounds Barden Broad Park and forms the enclosure wall in the vicinity of Standard Flat, is recorded in the 17th century. The Eastby Moor wall was reconstructed during the 18th century. That marking the northern edge of Embsay Reservoir is capped by 'buck and doe' top-stones indicating it was reconstructed during construction of the adjacent reservoir c.1909.

- 5.47 The site of the former settlement of Whitefield Syke Mill is located just beyond the south-western edge of the survey area although some associated remains are extant to the north of that boundary. The settlement comprised a mill, six workers cottages, a warehouse, and a stable and hay loft. The mill was used for the production of cotton from 1795 to 1877 and was described during 1809 as being powered by an 18ft by 3ft waterwheel. During 1821 the structure was described as four storeys high and 1500 square yards in size. It was later used as accommodation for workmen during construction of Embsay Reservoir. The site was cleared prior to filling of the reservoir, which was officially opened on 10th June 1910. Only one of the original structures, the warehouse, survives on site.
- 5.48 The remains identified within the study area associated with the mill complex include a series of reservoirs, two quarries and the remains of mill cottages. The reservoirs were located to the north of the mill and comprised one large example (10358), measuring 100m by 60m and two smaller (10356 and 10375) at approximately 30m by 20m in size and may have been constructed using stone sourced from two small quarries located to the west (10220) and east (10218). The reservoirs would have been constructed in an attempt to gain a consistent water supply to the mill wheel. During field survey at least one of the reservoirs displayed signs of being deliberately breached, and all had become in-filled by material washed down from Stoneycliff Brow during periods of flooding.
- 5.49 The remains of the northern walls of the mill cottages survived, as parts had been retained *in situ* forming the enclosure wall (10357). The remains included two blocked stone windows and patches of surviving wall with areas constructed using re-used ashlar dressed blocks.

Modern (Fig. 7)

- 5.50 The modern period saw the construction of three reservoirs in the vicinity, one of which, Upper Barden Reservoir, was located centrally within the study area. A number of sites were recorded which were associated with reservoir construction including a navy camp and former railway sidings. Other recorded sites related to recreational use of the moor and included shooting butts and lodges, and walkers cairns.
- 5.51 There are three main reservoirs located in the vicinity of Barden Moor, Upper Barden, Lower Barden and Embsay Reservoirs, only the former is situated within the survey area although another small reservoir is situated at Gill Beck Head (10263). Upper Barden Reservoir, or High Dock as it was known locally, was authorised by an Act of Parliament in 1875 to serve the city of Bradford and was opened in 1883 at a cost of £200,000. Large quantities of labour were required during construction of the reservoir, which included an embankment that was considered to be the highest constructed in this country at the time. The remains of the camps used by the work force, or navvies, have been recorded within the south-eastern part of the survey area in the vicinity of Halton Heights. The navy camps (10261; Plate 17) were identified to both

sides of Barden Road and comprised flat terraces which would have supported temporary wooden huts. On the north side of Barden Road the terraces were 10m wide and had been cut into the bank side.



Plate 17: Navy camp building platform (10261), facing west.

- 5.52 Five steam locomotives are recorded as being employed for the transport of navvies and materials on 20 miles of rail network which terminated at the reservoir station named 'Mugby Junction'. The route of part of this rail network, and the quarries it served, were recorded connecting Halton Heights, Pitshaw, Cross Gill Head and Brown Bank to Upper Barden Reservoir.
- 5.53 The longest length of railway was that identified serving the navy camp and a number of stone quarries at Halton Heights. The railway line had its origin at the southern side of the reservoir embankment and continued to the south-east across the flanks of Hut Crag upon embankments and within cuttings (10044). It then crossed a probable bridge (10285) and followed the contour around Hutchen Gill Head (10307) upon an embankment before turning to the east and terminating in the vicinity of Halton Moor. The main area of extraction in the area was Halton Height Quarry (10140) which had been worked from an early date, as it was depicted on an Estate Map of 1854, and was probably exploited by the communities of Halton East and Eastby. Halton Height Quarry was associated with a number of other worked areas to the north-east (10143, 10144, 10146 and 10147) which together formed a quarry face that was in the region of 1km long and had probably been worked into the bank side for a distance of up to 100m. Other quarried areas were recorded to the south of Barden Road (10142 and 10145) and on the north-facing slopes of Halton

Heights (10148, 10217 and 10224) which represented a number of smaller quarried areas in the order of 30m by 30m in size, rather than a single face.

- 5.54 Another significant quarry was recorded at Pitshaw which included four worked areas (10041, 10334, 10335 and 10336) that together represented the extraction of a large quantity of stone. The larger of the quarries (10041) covered an area of 140m by 90m with a face standing to around 3m. These quarries were served by a railway or wagonway (10337) which was identified as a cutting at the foot of the worked areas that would have transported stone to the north-west, on the course of the modern track and to the northern side of the reservoir embankment.



Plate 18: The remains of a substantial bridge (10333) crossing Barden Beck.

- 5.55 Quarrying was also recorded at Cross Gill Head (10042) which represented a cut face c.5m high and covered an area 130m by 20m in size, that was associated with the remains of a substantial bridge (10333; Plate 18). The bridge was c.4m wide and faced with squared sandstone blocks with a rubble core. The central section was missing and it may have been spanned by a timber structure providing access to a wagonway that ascended the bank side to the south of Barden Beck. The quarry was also served to the east by a deep hollow way.
- 5.56 The area of Brown Bank contained the remains of two further stone quarries which were both associated with wagonways. Quarry 10283 covered an area 70m by 50m in size and comprised a number of horse shoe shaped cuttings and stone debris, whilst quarry 10281 was smaller and associated with dressed

stone blocks. The quarries were served by wagonways 10175 and 10282 which provided access to the western side of Upper Barden Reservoir.

- 5.57 A number of other quarries were identified within the survey area which provided material for the construction of Lower Barden and Embsay Reservoirs. These included a large example (10048) situated at Brass Castle upon Barden Moor, measuring 70m by 45m in size which provided materials to the north-western end of Lower Barden Reservoir via trackway 10047, and a quarry at Whitshaw Bank (10252) which probably served construction of Embsay Reservoir. Other quarries associated with construction of Embsay Reservoir were recorded on the south-facing flanks of Stoney Cliff Brow (10254) which comprised a large worked zone associated with smaller individual sites.
- 5.58 Low Resting Stones was also found to contain the remains of a number of quarries (10306 and 10338) which comprised narrow cuttings that had been made into the bank side that were associated with heaps of roughly cut stone. No hollow ways appeared to access this area of the fell and the workings seemed quite fresh suggesting they represented fairly recent activity, possibly associated with reservoir construction.
- 5.59 The moor has been used extensively from the 19th century for shooting with a total of fifteen lines of shooting butts, along with three individual examples, identified widely across the survey area. None of the butts had been mapped until the late 20th century. The lines comprised evenly spaced butts that were either horseshoe (as 10196) or 'H'-shaped (as 10176) in a drystone construction with a turf cap. One of the lines (10165) was constructed from timber and all appeared to represent modern constructions, although it seems likely some replaced earlier butts. The three individual butts (10324, 10331 and 10332) may have represented an early stage of shooting on the moor. They were constructed in a less regular fashion and survived in a ruinous condition. None of the shooting butts have been defined with buffer zones.
- 5.60 The shooting butts were associated with a number of lodges which were recorded in four locations comprising Thorpe and Burnsall Fell, Black Syke Bridge, Brass Castle and Hutchen Gill Head. Of these structures only those previously discussed on Thorpe and Burnsall Fell (10003 and 10002) were recorded by the First Edition Ordnance Survey map, and the others represented modern structures erected within the late 20th century.
- 5.61 A series of small cairns, probably of modern date, were recorded across the survey area which mostly occupied high ground with good views, a number of which are likely to represent walkers cairns. A typical example was recorded at Fairies Chest (10370) where a pyramidal shaped cairn measuring 0.6m by 0.6m by 1m had been raised using stone recovered from the site of a possible structure recorded on the 1854 Estate map as 'shepherd guide'. Another large cairn (10124; Plate 19) was recorded adjacent to a trig point at the top of Halton Height. This cairn, and trig point, occupied the site of a watch tower as recorded by the 1854 Estate map; no remains of this structure survived.

5.62 Two modern memorial stones were identified. The first was a single standing stone located on the north side of Upper Barden Reservoir (10301) measuring 1.2m by 0.4m by 0.3m in size. It was marked 'IN MEMORY OF E. E. HEY 1898-1974'. The second (10080) was located at Airscar Crag, towards the eastern boundary of the survey area with good views over Wharfdale. The site was marked by a stone cairn with a diameter of 2m and a height of 1.2m associated with a metal plaque attached to the bedrock at its base, reading 'In memory of Wing Commander Alec Knowles Fitton MBE. President of Burnsall Sports Committee, 1947-1988'. None of the memorial stones have been defined with buffer zones.

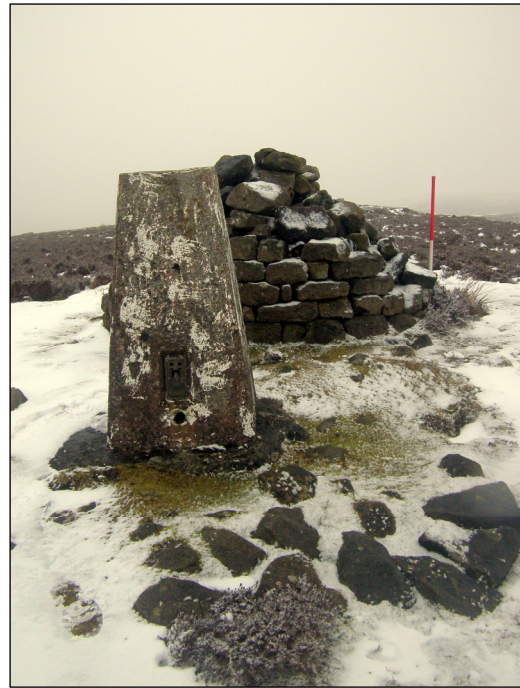


Plate 19: Walkers cairn (10124) and trig point upon Halton Heights.

5.63 The sites of three recent quarries were recorded during field survey that have been used to provide gravel for repairs to the network of 4x4 tracks and stone for construction of modern shooting huts. These comprised examples at Pitshaw (10317), on Burnsall and Thorpe Fell (10316) and at Black Sike Bridge (10169). They were all in the order of 15m by 15m in size and may represent reworking of older quarries. Another slight worked area was recorded at the western side of Embsay Moor (10365) which seemed to represent a source of stone for the construction and maintenance of modern tracks. None of the modern quarries are ascribed buffer zones.

Palaeoenvironmental assessment (Lynne F. Gardiner)

Introduction

5.64 Six eroded sections of peat were selected for examination within this *European Special Area of Conservation* (designation observed on [jncc.defra.gov.uk/protected sites](http://jncc.defra.gov.uk/protected%20sites)). A selection of locations throughout the blanket bog peatland of Barden Moor were considered in order to examine any variations within the peat, as well as assess its condition and suitability for further analysis, in particular, of pollen.

5.65 The sections were cleaned back approximately 30cm at top and perpendicular to the base. Each section measured at least 150cm across. Once a clean surface was achieved a closer visual examination of the section face was undertaken to look for visible Grenz horizons, tephra, or any significant deviation from the expected diplotelmic structure. A small sub-sample was taken from each layer for macroscopic inspection off-site at a later date.

Results

Table 1: A brief description of the results.

Section	Depth (cm)	Diploelmic?	Acrotelm ended c.(cm)	Comments
1	56	Yes	20	Three layers, although horizons not very distinctive. The top two layers are probably the same but just broken further by the heather rhizomes. Abandoned due to health and safety.
2	80	Yes	40	Sticky dark reddish brown peat. The acrotelm very loose. A live common lizard (<i>Zootoca vivipara</i> (Jacquin 1787) was observed.
3	40	Yes	15	At approximately 25cm there were sandy laminations within the peat. Most were <1cm thick and not continuous, suggesting they were several layers of re-deposited sand. There were sub-rounded pebbles in the bottom, along with large fragments of sandstone. Abandoned due to meeting naturally occurring stone.
4	147	Yes	32	At 112cm a sondage was placed to examine the abrupt change from catotelmic peat to very fibrous, pungent and waterlogged yellowish brown organic matter. This did not reach 'natural' and was abandoned for health and safety issues.
5	110	Yes	20	Although distinct acrotelm and catotelm layers there were striations (c. 1cm) of patches of a more yellowish brown peat. It was within this layer, approximately 25cm from 'bottom', where a small fragment of post-medieval pottery was observed.
6	95	Yes	20	Abandoned due to very friable naturally occurring stone.

NB: The living plants observed on this ombrotrophic niche were typical of a blanket bog: heather, *Sphagnum* and Graminoids.

Discussion

- 5.66 There were no visible horizons (i.e. Grenz or tephra), the exception being between acrotelmic and catotelmic layers (Plate 20) and the fibrous layer in Section 4. The likelihood of discovering Grenz or tephra layers was small. Grenz horizons are usually limited to palynological study and emphasise renewed peat growth coincident from Bronze Age to the Iron Age (Allaby 1998). Visible tephra layers are rare, to date only seen in Iceland, New Zealand and Kamchatka (Swindles *et al.* 2010/11, 1) and most have been discovered macroscopically. According to www.tephrabase.org there are only three tephra layers known in England (*Hekla 4*, *Glen Garry Tephra* and *Harthorpe Moss Tephra*). These were seen on three sites: Fenton Cottage, Lancashire and two from the Pennines, Fleet Moss and Harthorpe Moss (Pilcher and Hall 1996).
- 5.67 Section 3 was the only one examined from the southern slope, and the only one next to a fast-flowing stream. The layering of sandier peat within the catotelmic peat and the sub-rounded pebbles at the bottom indicated that this section of peat had been subjected to periodic and rapid fluvial deposition. This area was steeper than any examined on the northern side and this may suggest that this south-western area may be more prone to this fluvial action than the northern area and yield a sandier peat.

Recommendations

5.68 The definition of a hagg is varied (some are presented in Appendix B). If using the definition presented in JNCC (2011, 21) only two properly defined hags were examined: Sections 5 and 6. Section 3 was the result of fluvial erosion. Sections 1, 2 and 4 were probably the result of exposed peat faces drying out and collapsing. Using a more generic definition, all six were hagged; or none of them were. The terminology adopted for future work should be clearly defined.

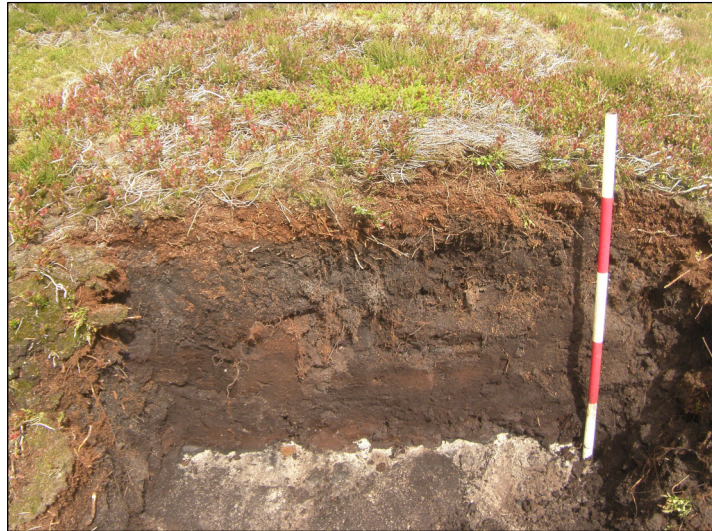


Plate 20: Section 6, showing the acrotelmic and catotelmic layers.

5.69 Peatland environments are 'efficient traps for materials originating from the atmosphere such as dust, pollen and volcanic ash' (Vleeschouwer *et al.*, 2010/11, 2). A core taken for palynological and tephrochronological studies may provide palaeoecological and dating information about Barden Moor. Tephra has been located within the Pennines on two other occasions. The data from pollen cores may provide a regional plant overview (O' Connor and Evans 2005, 190). The plant macrofossils would also have to be examined, as they would provide a more localised picture (Dincauze 2000, 332). Zooarchaeological studies, including molluscan studies, would be limited due to the unlikelihood of survivability of the taphonomic processes within the peat, although animals may have survived via the tanning processes of peat. Human agency may also be visible through flint microliths and the presence of charcoal. All of these materials need good preservation and a decent depth of peat from which the extrapolation of datable material and ecofactual material may be achieved.



Plate 21: Section 3. The diplotelmic section with visible sandy layers.

5.70 There were limiting factors on the selection of an area that would have

been suitable for a core extraction. Using the examined sections as a guide, section 5 was situated near the highest point of the moor and may have provided a regional palynological overview, whilst Section 2 was sited near the top of Rolling Gate Crag and would have been subjected to the prevailing wind from the south-west, thus, the plant macrofossils may be severely contaminated by aeolian deposition. Sections 1, 3 and 4 were heavily waterlogged at the base of the exposed sections, and these would not provide cohesive cores for examination. The depth of the peat would also prohibit any meaningful data from a core. To this end the areas subjected to examination for the purpose of this assessment were deemed unsuitable for works derived from a core.

6.0 RECOMMENDATIONS

- 6.1 Red Zones have been defined within the survey area to protect two nationally significant archaeological sites (Figs. 8b and 8f). These served to create absolute constraint zones around two Bronze Age Ring Cairns (10213 and 10073) located within the north-eastern part of the survey area between Folly Top and Intake Plantation, and to the south-east on Tewit Bogs, respectively. These areas must be avoided during groundworks.
- 6.2 Amber Zones have been defined around significant archaeological sites, or groups of sites, and are as such extensive across the survey area (Figs. 8a to 8f). They should be avoided during the peat restoration and grip blocking works. The most common type of site defined with an Amber Zone are hollow ways and trackways that would have provided access to the moor from at least the medieval period, if not earlier. Other site types protected by Amber Zones include medieval and post medieval boundary stones; large numbers of pits and quarries for the extraction of peat, coal and stone; sheepfolds; and a series of reservoirs associated with a former mill located to the south of the survey area. Some modern sites are also defined within Amber Zones that are predominantly associated with construction of Upper and Lower Barden reservoirs and include a number of rail/wagon ways and the site of a navy camp. If restoration works are required within an Amber Zone, or if contractors need to track vehicles across these areas, then contact should be sought with the YDNPA Archaeologist, as even tracking a vehicle through these Zones could potentially damage archaeological remains.
- 6.3 Green Zones have been put in place that identify potential access routes across Amber Zones and generally adhere to modern tracks. Green Zones are still located within areas of known archaeology therefore the existing tracks should be adhered to. If this becomes impractical the Amber Zone constraints should be observed.

APPENDIX A:
TABLE OF HERITAGE ASSETS

Key: Red= within Red Zone; Yellow= within Amber Zone; White= no archaeological risk

Survey UID	Mon UID	NMR No.	Name	Eastings	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10001	MYD38445		Burnsall And Thorpe Fell: Building	401920	459722	Building	Post Medieval	Remains of rectangular structure, 9.5m x 8m, flattened to foundations other than southern wall and chimney. Entrance to the east. Substantial chimney would suggest industrial function rather than habitation.	444 - 458, 461, 462 - 464	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10002			Burnsall And Thorpe Fell: Building	401528	459967	Hunting Lodge	Post Medieval	Upstanding roofed shooting lodge, 4.5m x 5.5m x 2m. The structure was terraced into the bank side to the south and appeared to have a complex history of rebuilding. Originally constructed as part of Burnsall Colliery.	443	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10003		558336	Burnsall And Thorpe Fell: Building	401519	459939	Hunting Lodge	Post Medieval	Upstanding roofed shooting lodge. Appeared recently renovated. Probably dates to 18th century and was constructed as part of Burnsall Colliery.	442	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10004	MYD43479	558335	Burnsall, Thorpe And Onion Hill Collieries	401467	459875	Coal Workings	Post Medieval	Group of 53 shafts to south of track, some of which are filled with water. Depicted as 'old' by 3rd Ed OS map. Shafts typically rounded, low spoil collars.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10005			Burnsall And Thorpe Fell: Shooting Butts	401403	459697	Shooting Stand	Modern	Line of at least 12 shooting butts, not on 1st Ed OS map.		N/A	N/A
10006			Burnsall And Thorpe Fell: Shooting Butts	401624	460122	Shooting Stand	Modern	Line of modern shooting butts.		N/A	N/A
10007	MYD43479		Thorpe And Burnsall Collieries	401360	460047	Coal Workings	Post Medieval	Group of approximately 80 shafts to the north of the modern track. Some of the shafts depicted as 'old' on 1899 OS map. Shafts rounded with low spoil collars.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10008	MYD38444		Rolling Gate Crag: Hollow Way Group	400341	460484	Hollow Way	Medieval	Network of deep hollow ways cutting up from Rolling Gate and also others to the NE. Depicted on 1st Ed OS map. Probably relate to coal mining. Some predate enclosure walls.		Medium	Moderate – important in understanding early routeways across the landscape.
10009	MYD38444		Raven Nest Crag: Hollow Way Group	400813	460771	Hollow Way	Medieval	Pronounced series of hollow ways cutting up and south from enclosure wall (no gate, so predate wall). Particularly visible to SW of Raven Nest. They become more dispersed onto moor where they morph into other hollow ways to the E.		Low	Moderate – important in understanding early routeways across the landscape.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10010	MYD38444		Raven Nest Craggs: Hollow Ways	400969	460845	Hollow Way	Medieval	Two deep incised hollow ways cutting up and S from enclosure wall to W of New Close Lathe. They pre-date the enclosure wall and continue N of survey boundary. Appear to turn E once on level ground. Relate to coal mining.		Low	Moderate – important in understanding early routeways across the landscape.
10011	MYD38444		Raven Nest Craggs: Trackway	401013	460937	Trackway	Post Medieval	Trackway cutting E-W from gate adjacent to New Close Lathe, serves quarry (10012) and runs into hollow to N of Raven Nest Craggs. Depicted on 1st Ed OS map.		Medium	Low/Moderate – important in understanding routeways across the landscape.
10012	MYD38443		Raven Nest Quarry	401047	460906	Sandstone Quarry	Post Medieval	Quarry cutting N edge of Raven Nest Craggs with spoil to N and NE sides. Depicted on 1907 OS map, not on 1899. Served by track to N (10011). Contained remains of structure 10295.	192 - 196, 205	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10013	MYD15238	558799	Raven Nest Quarry	401130	460758	Sandstone Quarry	Post Medieval	Series of quarry pits, 1st Ed OS map names as sandstone quarry, shown as old on 1889 OS map. Served by network of tracks to New Close Lathe.	201 - 203	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10014	MYD38444		Burnsall And Thorpe Fell: Hollow Way Group	401120	460441	Hollow Way	Medieval	Mass complex of hollow ways (up to 2m deep) continuing the line of Thorpe Fell Lane southward adjacent to Raven Nest Crag, around Hesker Gill then into two main braids of tracks onto the fell towards coal and peat pits.	165, 166	Medium	Moderate – important in understanding early routeways across the landscape.
10015			Simm Bottom: Coal Workings	404299	459102	Coal Workings	Post Medieval	Group of three shafts and associated spoil heaps.	253, 254	Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10016			Simm Bottom: Trackway	404301	458728	Trackway	Post Medieval	Linear hollow way following line of a path marked on OS mapping.		Low	Low/Moderate – important in understanding routeways across the landscape.
10017			Simm Bottom: Coal Workings	404303	458794	Coal Workings	Post Medieval	Small area of shafts and prospection pits.	245 - 250	Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10018			Simm Bottom: Trackway	404357	458669	Trackway	Post Medieval	Line of path marked on OS mapping, exists as hollow way. Leads to gate within enclosure wall to the south.		Low	Low/Moderate – important in understanding routeways across the landscape.
10019			Simm Bottom: Trackway	404335	458649	Trackway	Post Medieval	Section of hollow way forking from 10027.	241	Medium	Low/Moderate – important in understanding routeways across the landscape.
10020			Simm Bottom: Trackway	404426	458879	Trackway	Medieval	Western spur of hollow way 10030, heading NW towards wall.	251, 252	Medium	Moderate – important in understanding early routeways across the landscape.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10021			Simm Bottom: Trackway	404384	458866	Trackway	Modern	Track leading to area of coal workings 10026. Probable medieval origins.		Medium	Low/Moderate – important in understanding routeways across the landscape.
10022			Folly Top: Hollow Way Group	403361	460077	Hollow Way	Medieval	Large area of braided hollow ways extending up the edge of the hill, marked in HER as medieval, probably extend into post-medieval period.		Medium	Moderate – important in understanding early routeways across the landscape.
10023			Air Scar: Quarry	403311	460091	Quarry	Post Medieval	Quarry, appears to cut trackway.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10024			Air Scar: Quarry	403053	460229	Quarry	Post Medieval	Area of pitting likely quarrying, exposed faces and spoil heaps to N.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10025			Airscar Craggs: Trackway	403234	460350	Trackway	Post Medieval	Trackway leading up onto moor.		Medium	Low/Moderate – important in understanding routeways across the landscape.
10026			Airscar Craggs: Trackway	403131	460273	Trackway	Post Medieval	Trackway, probably relates to quarries located to S.		Medium	Low/Moderate – important in understanding routeways across the landscape.
10027			Folly Top: Hollow way	403553	459838	Hollow Way	Medieval	Hollow ways on east side of enclosure wall, perhaps implying wall post-dates them? Relate to main grouping 10032 to W.	320	Medium	Moderate – important in understanding early routeways across the landscape.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10028			Saddle Ridge Wham: Quarry	403981	459400	Quarry	Post Medieval	Area of pitting and banked spoil probably representing stone quarrying.	305	Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10029			Saddle Ridge Wham: Quarry	403973	459531	Quarry	Post Medieval	Area of pits and banked spoil (c.20m x 5m), probably representing stone quarrying.	306	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10030			The Whams: Peat Pits	399923	458214	Peat Cutting	Medieval	Identified as an area of peat cutting during field survey.		High	Moderate/High – evidence of early land use, important for understanding the development of the moor.
10031	MYD27089		Cracoe And Threapland Peat Pits	399402	458473	Peat Cutting	Medieval	Extensive area of peat cutting with excavations to a depth of c.2m. Individual areas formed by large sub-rectangular cuts (in the order of 30m x 25m) separated by spoil banks. Generally aligned NW to SE.	122 - 125, 161 - 164	High	Moderate/High – evidence of early land use, important for understanding the development of the moor.
10032			Watt Crag: Linear Feature	399633	458451	Linear Feature	Modern	Possible drain or track, visible as a clear linear feature on aerial photographs		Medium	Low/Moderate – important in understanding routeways across the landscape.
10033			Watt Crag: Hollow Way	399207	458539	Hollow Way	Medieval	Aligned SW - NE, accessing area of peat cutting		High	Moderate – important in understanding early routeways across the landscape.
10034			Water Crag: Peat Pits	400204	458688	Peat Cutting	Medieval	Area of peat cutting,		High	Moderate/High – evidence of early land use, important for understanding the development of the moor.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10035			Water Crag: Peat Pits	400001	458534	Peat Cutting	Medieval	Area of peat cutting		High	Moderate/High – evidence of early land use, important for understanding the development of the moor.
10036			The Whams: Peat Pits	400063	458310	Peat Cutting	Medieval	Identified as an area of peat cutting during the walkover, possibly part of 10058		High	Moderate/High – evidence of early land use, important for understanding the development of the moor.
10037			Eastby Peat Pits	401594	458206	Peat Cutting	Medieval	Area of peat cutting		High	Moderate/High – evidence of early land use, important for understanding the development of the moor.
10038			Pitshaw Top: Trackway	402184	457758	Trackway	Post Medieval	Trackway marked on OS map leading to peat cutting to NW. Cut by later modern access tracks.		N/A	N/A
10039			Pitshaw Top: Trackway	401960	457727	Trackway	Post Medieval	Drain or track branching of trackway leading W from 10063 towards reservoir		N/A	N/A
10040			Pitshaw Top: Trackway	402129	457898	Trackway	Post Medieval	Short northward spur of track from S.		N/A	N/A
10041	MYD41030		Cross Gill Head: Quarries	402301	457804	Quarry	Post Medieval	Area of quarrying comprising three individual faces and associated trackways	496 - 498	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10042	MYD41029		Cross Gill Head: Quarry	401982	457648	Quarry	Modern	Area of quarrying and hollow ways associated with reservoir construction. Includes the remains of a bridge 10333.	484 - 485	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10043			Cross Gill Head: Trackways	401706	457448	Trackways	Medieval	Area of trackways.		Medium	Moderate – important in understanding early routeways across the landscape.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10044	MYD41029		Cross Gill Head: Trackway	401529	457174	Trackway	Modern	Area of quarrying and associated trackways, all related to the construction of the reservoir. Probably also includes pipelines and other water works, from small reservoir.		Low	Low/Moderate – important in understanding routeways across the landscape.
10045			Cross Gill Head: Trackway	402774	457419	Trackway	Post Medieval	Trackway marked as a path on OS map, possible early origin. Cut by later access roads.		N/A	N/A
10046			Long Band Flat: Trackway	402967	457143	Trackway	Post Medieval	Drain or track.		N/A	N/A
10047			Long Band Flat: Trackway	402975	456986	Trackway	Post Medieval	Probable trackway.		Medium	Low/Moderate – important in understanding routeways across the landscape.
10048			Long Band Flat: Quarry	402912	456997	Quarry	Post Medieval	Quarry, marked on OS map.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10049			Long Band Flat: Mine Shaft	402351	457473	Mine Shaft	Post Medieval	Probable shaft, 5m diameter with spoil collar. Entrance break within spoil to the NW.	488, 489	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10050			Long Gill Head: Trackway	402911	456654	Trackway	Post Medieval	Probable trackway connecting to 10075.		N/A	N/A
10051			Hazelshaw Green: Trackway	402853	456743	Trackway	Post Medieval	Probable modern trackway, may have earlier origins.		N/A	N/A
10052			Hazelshaw Green: Drain	402657	456696	Drain	Modern	Drain or track.		N/A	N/A
10053			Hazelshaw Green	402643	456723	Drain	Modern	Drain or track.		N/A	N/A

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10054			Hazelshaw Green	402623	456751	Drain	Modern	Drain or track.		N/A	N/A
10055			Brass Castle: Hollow Way	403272	457403	Hollow Way	Post Medieval	Modern trackway post-dating a hollow way.	271, 272	N/A	N/A
10056			Long Band Flat: Hollow Way	403124	457593	Hollow Way	Post Medieval	Hollow way recorded during survey.	271, 272	N/A	N/A
10057			Long Band Flat: Linear Feature	403061	457548	Linear Feature	Modern	Drain or track.		N/A	N/A
10058			The Whams: Boundary Stone	400243	459643	Boundary Stone	Post Medieval	Boundary stone, 1.6m x 0.4m x 0.3m. Marked C:RT (east), D:D (west).	153, 154	Low	Moderate – important in understanding land ownership and the development of the landscape.
10059			Turnmer Hill: Trackway	402453	456825	Trackway	Post Medieval	Probable trackway visible on aerial photographs.		N/A	N/A
10060			Turnmer Hill: Hollow Way	402552	456579	Hollow Way	Post Medieval	Probable hollow way seen on aerial photographs.		N/A	N/A
10061			Turnmer Hill: Hollow Way	402519	456860	Hollow Way	Post Medieval	Hollow way.		N/A	N/A
10062			Turnmer Hill: Hollow Way	402292	457116	Hollow Way	Post Medieval	Hollow way.		N/A	N/A
10063			Turnmer Hill: Hollow Way	402132	457057	Hollow Way	Post Medieval	Section of probable hollow way connecting to 10120.		N/A	N/A
10064			Turnmer Hill: Trackway	402052	457168	Trackway	Post Medieval	Probable trackway connecting to 10127.		N/A	N/A
10065			Turnmer Hill: Trackway	402422	457066	Trackway	Post Medieval	Trackway.		N/A	N/A
10066			Cross Gill Head: Hollow Way	402581	457341	Hollow Way	Post Medieval	Hollow way cutting up from Gill Crossing, may continue N of modern track.		N/A	N/A
10067			Airscar Crags: Hollow Way	402894	460434	Hollow Way	Medieval	Hollow way connects to 10144.		Medium	Moderate – important in understanding early routeways across the landscape.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10068			Airscar Craggs: Hollow Way	402882	460456	Hollow Way	Medieval	Hollow way connects to 10143.		Medium	Moderate – important in understanding early routeways across the landscape.
10069			The Whams: Linear Feature	400672	458456	Linear Feature	Unknown	Drain or track, could be a pipeline?		Medium	Low/Moderate – important in understanding routeways across the landscape.
10070			Simm Bottom: Hollow Way	404252	459147	Hollow Way	Medieval	Continues through area of coal workings 10024.		Medium	Moderate – important in understanding early routeways across the landscape.
10071			Simm Bottom: Hollow Way	404338	459118	Hollow Way	Medieval	Drain or track.		Low	Moderate – important in understanding early routeways across the landscape.
10072			Airscar Craggs: Hollow Way	403028	460262	Hollow Way	Medieval	Hollow way leading to Air Scar Craggs quarry.		Medium	Moderate – important in understanding early routeways across the landscape.
10073	MYD36475		Tewit Bogs: Ring Cairn	401605	455823	Ring Cairn	Bronze Age	Bronze Age Ring Cairn. Located by HER further to the NE. Cairn has a 21m diameter with slightly raised embanked circle on S side and stone kerb. Sloping into hillside to the N. Abutted on W side by a probable stone alignment of 3 recumbent stones.	805-816	High	High – rare survival of a nationally important monument.
10074			Deer Gallows: Well	399822	455604	Well	Medieval	Deer gallows well (Site of). Spring identified during survey.		N/A	N/A
10075			Thorpe Fell Top: Boundary Stone	400275	459445	Boundary Stone	Post Medieval	Boundary stone, 1.6m x 0.4m x 0.3m. Marked C:R.T. (east), D:D (west)	151, 152	Low	Moderate – important in understanding land ownership and the development of the landscape.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10076			Thorpe Fell Top: Boundary Stone	400306	459278	Boundary Stone	Post Medieval	Boundary Stone 1.6m x 0.4m x 0.3m. Marked C:R.T. (east), D:D (west)	148 - 150	Low	Moderate – important in understanding land ownership and the development of the landscape.
10077			The Whams: Boundary Stone	400361	458947	Boundary Stone	Post Medieval	Boundary stone, 1.6m x 0.4m x 0.3m. Marked C:R.T. (east), D:D (west)	146, 147	Low	Moderate – important in understanding land ownership and the development of the landscape.
10078			Bartle Crag: Boundary Stone	400213	459822	Boundary Stone	Post Medieval	Boundary stone, 1.6m x 0.4m x 0.3m. Marked C:R.T. (east), D:D (west)	155, 156	Low	Moderate – important in understanding land ownership and the development of the landscape.
10079			Airscar Crag: Bench Mark	403341	460157	Marker Stone	Modern	Position of bench mark, not identified during survey.		N/A	N/A
10080			Airscar Crag: Memorial Stone	403254	460090	Marker Stone	Modern	Memorial cairn, 2m x 1.2m with plaque reading 'In memory of Wing Commander Alec Knowles Fitton MBE. President of Burnsall Sports Committee, 1947 - 1988'.	413 - 415	N/A	N/A
10081			Airscar Crag: Bench Mark	403322	460071	Marker Stone	Modern	Position of bench mark, not identified during survey.		N/A	N/A
10082			Cross Gill Head: Bench Mark	403026	457187	Marker Stone	Modern	Position of bench mark, not identified during survey.		N/A	N/A
10083			Airscar Crag: Bench Mark	403384	460193	Marker Stone	Modern	Position of bench mark, not identified during survey.		N/A	N/A
10084			Airscar Crag: Bench Mark	403203	460059	Marker Stone	Modern	Position of bench mark, not identified during survey.		N/A	N/A

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10085			Halton Moor: Bench Mark	403623	455291	Marker Stone	Modern	Position of bench mark, not identified during survey.		N/A	N/A
10086			Halton Height: Boundary Stone	402750	455655	Boundary Stone	Medieval	Position depicted on 1st Ed OS map, not identified during survey.		N/A	N/A
10087			Airscar Crag: Bench Mark	403108	460007	Marker Stone	Modern	Position of bench mark, not identified during survey.		N/A	N/A
10088			Rylstone Fell: Coal Mining Site	399403	457384	Coal Mining Site	Post Medieval	Probable coal shaft.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10089			Broad Stone: Monastic Boundary Stone	403237	455529	Boundary Stone	Medieval	Position of 'Broad Stone' boundary stone. On 1854 Estate map as earth fast boundary stone with 'one x'. No longer extant.		N/A	N/A
10090			Folly Top: Boundary Stone	402898	459573	Boundary Stone	Post Medieval	Boundary stone, 1.6m x 0.4m x 0.3m. Marker D:D (E), C:R.T. (W).	339 - 341	Low	Moderate – important in understanding land ownership and the development of the landscape.
10091			Folly Top: Boundary Stone	402917	459602	Boundary Stone	Post Medieval	Boundary stone, 1.6m x 0.4m x 0.3m. Marker D:D (E), C:R.T. (W).	337, 338	Low	Moderate – important in understanding land ownership and the development of the landscape.
10092			Numberstones End: Walkers Cairn	402172	460067	Marker Stone	Modern	Marker cairn, c.1.5m diameter at base x 1m tall.	410 - 411	Low	Low – feature quite common.
10093			Rolling Gate Crag: Bench Mark	400587	460311	Marker Stone	Modern	Position of bench mark, not identified during survey.		N/A	N/A

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10094			Rolling Gate Crag: Bench Mark	400569	460587	Marker Stone	Modern	Position of bench mark, not identified during survey.		N/A	N/A
10095	MYD44010		Rolling Gate Nook: Coal Workings	400603	459942	Coal Workings	Post Medieval	Area of shafts with spoil collars and average diameters of 6m. One of which was associated with the remains of a structure (10296).	218, 219, 220 - 224	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10096			Rolling Gate Nook: Coal Workings	400633	459956	Coal Workings	Post Medieval	Included in shaft group.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10097			Rolling Gate Nook: Coal Workings	400657	459967	Coal Workings	Post Medieval	Included in shaft group.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10098			Rolling Gate Nook: Coal Workings	400826	459824	Coal Workings	Post Medieval	Included in shaft group.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10099			Rolling Gate Nook: Coal Pit	400735	459863	Pit	Post Medieval	Included in shaft group.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10100	MYD43479		Burnsall And Thorpe Fell: Coal Pit	401686	459988	Pit	Post Medieval	Disturbed area may contain shafts and pits recorded by 1st Ed OS map.		Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10101			Long Ridge: Pile of Stones	403196	459740	Boundary Cairn	Modern	Boundary marker - Pile of stones.		Low	Low – feature quite common.
10102			Long Ridge: Pile of Stones	403069	459741	Boundary Cairn	Modern	Boundary marker - Pile of stones.	328, 329	Low	Low – feature quite common.
10103			Standard Flat: Coal Workings	403376	458713	Coal Workings	Post Medieval	Old coal pit on OS map. Correlates with workings between this point and track.		Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10104			Standard Flat: Gill Beck Well	402508	458911	Well	Medieval	Site of Gill Beck Well, represented by a spring.		N/A	N/A
10105			Burnsall And Thorpe Fell: Coal Workings	401851	459727	Coal Workings	Post Medieval	Coal pit.		Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10106			High Resting Stones: Bench Mark	401384	459049	Marker Stone	Modern	Position of bench mark, not identified during survey.		N/A	N/A
10107			Burnsall And Thorpe Fell: Coal Workings	401484	459739	Coal Workings	Post Medieval	Coal pit, depicted on OS mapping.		Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10108			Burnsall And Thorpe Fell: Coal Workings	401697	459624	Coal Workings	Post Medieval	Coal pit, depicted on OS mapping.		Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10109			Thorpe Fell Top: Trig Point	400851	459689	Boundary Marker	Modern	Triangulation point		N/A	N/A
10110			Pitshaw Top: Bench Mark	401931	458449	Marker Stone	Modern	Position of bench mark, not identified during survey.		N/A	N/A

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10111			Pitshaw Top: Well	402248	458110	Well	Medieval	Site of well, represented by a spring.		N/A	N/A
10112			Standard Flat: Well	403038	458281	Well	Medieval	Site of well, represented by a spring.		N/A	N/A
10113			Long Band Flat: Bench Mark	403388	457476	Marker Stone	Modern	Bench mark upon gate post.	273	N/A	N/A
10114			Cross Gill Head: Bench Mark	402215	457622	Boundary Marker	Modern	Position of bench mark, not identified during survey.		N/A	N/A
10115			Cross Gill Head: Bench Mark	402401	457184	Marker Stone	Modern	Position of bench mark, not identified during survey.		N/A	N/A
10116			Cross Gill Head: Bench Mark	402673	457291	Marker Stone	Modern	Position of bench mark, not identified during survey.		N/A	N/A
10117			Brown Bank Brow: Pile of Stones	400242	457732	Boundary Cairn	Modern	Site of pile of stones, recorded by OS, no longer extant.		N/A	N/A
10118			Embsay Moor: Trig Point	400833	456748	Marker Stone	Modern	Site of trig point, no longer extant.		N/A	N/A
10119			Stone Ridge: Bench Mark	400388	456427	Marker Stone	Modern	Position of bench mark, not identified during survey.		N/A	N/A
10120			Rylstone Fell: Well	398823	457141	Well	Medieval	Site of well, represented by a spring.		N/A	N/A
10121			Rylstone Fell: Boundary Stone	399550	457222	Boundary Stone	Modern	Boundary Stone. No longer extant.		N/A	N/A
10122			Embsay Moor: Watkinson Well	399261	456521	Well	Medieval	Site of Watkinson Well as recorded by 1854 Estate Map, represented by a spring.		N/A	N/A
10123			Hutchen Gill Head: Gate	403401	455780	Gate	Post Medieval	Hutchen Gill Gate.		N/A	N/A

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10124			Halton Height: Walkers Cairn and Trig Point	403087	455261	Marker Stone	Modern	Cairn (circular at base, 3m diameter by 1.1m tall) and triangulation point. Marking the top of Halton Height. On 1854 estate map as 'watch tower'.	359 - 361	Low	Low – feature quite common.
10125			Halton Height: Monastic Boundary Stone	403156	455565	Boundary Stone	Medieval	Site of boundary stone recorded by 1854 Estate Map as earth fast with one 'x'. Not identified during survey.		N/A	N/A
10126			Brown Bank Brow: Monastic Boundary Stone	400977	457243	Boundary Stone	Medieval	Monastic boundary marker, collapsed. 1.8m x 0.4m in size and marked with a cross. On 1854 Estate Map as Peggy West Well marked with one x.	69, 70	Medium	Moderate – important in understanding land ownership and the development of the landscape.
10127			Lumb Gill Head: Monastic Boundary Stone	401191	457002	Boundary Stone	Medieval	Collapsed, 0.7m x 0.2m in size.	74, 75	Medium	Moderate – important in understanding land ownership and the development of the landscape.
10128			Lumb Gill Head: Monastic Boundary Stone	401231	456945	Boundary Stone	Medieval	Moved out of place, 0.7m x 0.3m. Some wear marks visible suggesting it had been dragged by rope.	78, 79	Medium	Moderate – important in understanding land ownership and the development of the landscape.
10129			Lumb Gill Head: Monastic Boundary Stone	401367	456919	Boundary Marker	Medieval	Monastic boundary marker. Standing, 0.6m x 0.6m x 0.4m. Marked with a small cross and a crucifix set within a recessed panel. On 1854 Estate Map	80-82	Low	Moderate – important in understanding land ownership and the development of the landscape.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10130			Hut Crag: Monastic Boundary Stone	401576	456713	Boundary Stone	Medieval	Site of Monastic boundary stone. On 1854 Estate Map as having 'xx' on side. No longer extant.		N/A	N/A
10131			Hut Crag: Monastic Boundary Stone	401795	456517	Boundary Stone	Medieval	Site of boundary stone on 1854 estate map as having 'xx' on side. No longer extant.		N/A	N/A
10132			Hutchen Gill Head: Monastic Boundary Stone	402277	455932	Boundary Stone	Medieval	Monastic boundary stone. Standing.	83-85	Low	Moderate – important in understanding land ownership and the development of the landscape.
10133			Hutchen Gill Head: Monastic Boundary Stone	402115	456195	Boundary Stone	Medieval	Monastic boundary stone. Standing and leaning forward. 0.6m x 0.4m. Marked with two crosses. On 1854 estate map.	91, 92, 799-801	Low	Moderate – important in understanding land ownership and the development of the landscape.
10134			Halton Height: Monastic Boundary Stone	402898	455644	Boundary Stone	Medieval	Monastic boundary stone, 0.7m x 0.5m x 0.4m. Marked by two crosses facing sw. On 1854 Estate Map.	86, 87	Low	Moderate – important in understanding land ownership and the development of the landscape.
10135			Halton Height: Monastic Boundary Stone	402659	455655	Boundary Stone	Medieval	Site of boundary stone. On 1854 Estate Map as earth fast with 'x and b'. Not identified during survey.		N/A	N/A
10136			Halton Height: Monastic Boundary Stone	402464	455819	Boundary Stone	Medieval	Standing, 1m x 0.25m x 0.25m. Marked with two small crosses.		Low	Moderate – important in understanding land ownership and the development of the landscape.
10137			Burnsall Peat Pits	402178	458877	Peat Cutting	Medieval	Area of peat cutting, Burnsall Peat Pits.	283 - 285	High	Moderate/High – evidence of early land use, important for understanding the development of the moor.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10138			White Stones Hill: Sheepfold	400890	455189	Sheep Fold	Post Medieval	Standing post-medieval sheep fold abutting N side of enclosure wall.		Low	Low/Moderate – evidence of agricultural management but fairly common across the moors.
10139			Mucky Park: Sheepfold	403790	458340	Sheep Fold	Post Medieval	Extant sheep fold in corner of a small enclosure against W side of enclosure wall.		Low	Low/Moderate – evidence of agricultural management but fairly common across the moors.
10140	MYD42921		Halton Heights: Quarry	403421	455230	Quarry	Post Medieval	Halton Heights quarry as depicted on 1st Ed OS map and 1854 Estate Map. Used extensively later for reservoir construction.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10141			Halton Moor: Trackways	403736	455562	Trackway	Post Medieval	'V'-shaped arrangement of tracks leading onto moor from Sand Gate.		Medium	Low/Moderate – important in understanding routeways across the landscape.
10142			Halton Green Gate: Quarry	403761	455106	Quarry	Post Medieval	Quarry measuring 30m x 15m x 3m.	403	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10143			Halton Moor: Quarry	403714	455453	Quarry	Post Medieval	Group of quarries on roadside. Depicted on 1st Ed OS map and 1854 Estate Map.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10144			Halton Moor: Quarry	403731	455554	Quarry	Post Medieval	A series of roadside quarries depicted on 1st Ed OS map.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10145			Howgill Nook: Quarry	403829	455368	Quarry	Post Medieval	Quarries to SE of main road, depicted on 1st Ed OS map.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10146			Halton Moor: Quarry	403654	455344	Quarry	Post Medieval	Quarries depicted on 25" OS mapping.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10147			Halton Moor: Quarry	403522	455328	Quarry	Post Medieval	Quarries depicted on 25" OS mapping.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10148			Halton Moor: Quarry	403664	455543	Quarry	Post Medieval	Quarries depicted on 25" OS mapping.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10149			Halton Height: Quarry	403162	455568	Quarry	Post Medieval	Quarries depicted on 25" OS mapping.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10150			White Stones Hill: Trackway	401601	455531	Trackway	Post Medieval	Trackway depicted on 25" OS mapping.		Low	Low/Moderate – important in understanding routeways across the landscape.
10151			White Stones Hill: Quarry	400955	455325	Quarry	Post Medieval	Quarries depicted on 25" OS mapping.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10152	MYD41032		Stone Ridge: Quarry (Staynrig)	400551	456381	Quarry	Post Medieval	Large quarry, lots of hollows and stone retaining walls to side of track. Workings broadly T-shaped. Quarryman's hut on S side that is infilled with stone, with fireplace on E side.	780-787	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10153			Rotten Park: Pits	400939	456618	Extractive Pit	Post Medieval	Area of possible pits located towards the end of an area of trackways. Possible small shallow quarries, associated with small building.		Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10154			Embsay Moor: Pits	401264	456216	Pit Cluster	Unknown	Small group of shafts identified on Embsay Moor, not extensively worked.		Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10155			Heugh Ground Head: Trackway	401829	455552	Trackway	Post Medieval	Area of trackways cutting up from Beck Edge.		Medium	Low/Moderate – important in understanding routeways across the landscape.
10156			Heugh Ground Head: Pits	401629	455263	Extractive Pit	Post Medieval	Possible line of pits.		Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10157			Tewit Bogs: Shooting Butts	401722	456012	Rifle Butt	Modern	Line of modern shooting butts.		N/A	N/A
10158			Low Stone Ridge: Trackway	400619	456616	Trackway	Post Medieval	Modern trackway following alignment of earlier post medieval route.		N/A	N/A
10159			High Stone Ridge: Trackway	399996	456564	Trackway	Post Medieval	Course of trackway probably following post medieval route.		N/A	N/A

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10160			Hellifield Crag: Trackway	398668	456158	Trackway	Post Medieval	Course of trackway probably following post medieval alignment.	560	Low	Low/Moderate – important in understanding routeways across the landscape.
10161			Hellifield Crag: Trackway	398475	456372	Trackway	Post Medieval	Course of trackway probably following post medieval alignment.		Low	Low/Moderate – important in understanding routeways across the landscape.
10162			Fairies Chest: Trackway	398703	456188	Trackway	Post Medieval	Trackway with stone revetment wall on NW side. Track runs up edge of slope towards workings on Fairies Chest. Includes stones with quarry drill marks on face along SE edge. On 1854 Estate Map.	558, 559, 571-577	Low	Low/Moderate – important in understanding routeways across the landscape.
10163			Hut Crag: Hollow Way Group	402237	456301	Hollow Way	Medieval	Extensive group of hollow ways running northward from Hutchen Gill Head to Lumb Gill. Braided earthworks of varying widths and depths.	792-8, 802-4	Medium	Moderate – important in understanding early routeways across the landscape.
10164			Standard Hill: Trackway	402583	458323	Trackway	Post Medieval	Course of trackway still used but post medieval origins.		N/A	N/A
10165			The Whams: Shooting Butts	401087	458799	Rifle Butt	Modern	Line of modern shooting butts.		N/A	N/A
10166			The Whams: Peat Pits	400163	458539	Peat Cutting	Medieval	Area of peat cutting - same as 10058? Although different signature on Lidar.		High	Moderate/High – evidence of early land use, important for understanding the development of the moor.
10167			Peter's Crag: Shooting Butts	399888	459506	Rifle Butt	Modern	Modern shooting butts.		N/A	N/A
10168			The Whams: Trackway	401402	458178	Trackway	Post Medieval	Probable modern trackway but could be following an earlier path, heads towards shooting butts.		Low	Low/Moderate – important in understanding routeways across the landscape.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10169			Black Sike Bridge: Quarry	399700	456983	Quarry	Modern	Location of a modern quarry pit, seems to have been excavated recently, perhaps for stone to build nearby shooting lodge.		N/A	N/A
10170			Black Sike Bridge: Trackway	398896	456755	Trackway	Post Medieval	Trackway seems to be a small hollow way cutting into edge of beck. Relates to tracks opposite and coal workings in the area.		Medium	Low/Moderate – important in understanding routeways across the landscape.
10171			Hellifield Crag: Trackway	399295	456698	Trackway	Post Medieval	Small trackway related to coal mining in this area.		Medium	Low/Moderate – important in understanding routeways across the landscape.
10172			Black Sike Bridge: Shooting Butts	399167	456944	Rifle Butt	Modern	Line of modern shooting butts.		N/A	N/A
10173			Black Sike Bridge: Trackway	399554	457017	Trackway	Post Medieval	Line of trackway now used for access to shooting butts. May have earlier origins as runs towards a line of coal workings.		N/A	N/A
10174			Brown Bank Brow: Hollow Way	400987	457283	Hollow Way	Medieval	Medieval route associated with monastic boundary marked by stones. Cuts east off track and uphill past quarries, before following edge of slope east and rejoining modern track.		Medium	Moderate – important in understanding early routeways across the landscape.
10175			Brown Bank Brow: Trackway	400693	457633	Trackway	Post Medieval	Probable trackway, spurs off and may connect to end of hollow way, possibly a bit later in date.		Medium	Low/Moderate – important in understanding routeways across the landscape.
10176			Brown Bank Brow: Shooting Butts	401081	457432	Rifle Butt	Modern	Line of modern shooting butts.		N/A	N/A

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10177			Yethersgill Head: Hollow Way Group	399592	457435	Hollow Way	Medieval	Series of braided hollow ways cutting NE and N up the hill side towards peat pits.		Medium	Moderate – important in understanding early routeways across the landscape.
10178			Rylstone Fell: Hollow Way Group	399471	457835	Hollow Way	Medieval	Very large area of braided hollow ways cutting N and NE up Rylstone Fell, probably heading towards peat pits.		Medium	Moderate – important in understanding early routeways across the landscape.
10179			West Harts Hill: Hollow Way Group	399286	456257	Hollow Way	Medieval	Series of braided hollow ways cutting S to quarries from main track to N up side of West Harts Hill.	599-601	Medium	Moderate – important in understanding early routeways across the landscape.
10180			Deer Gallows: Shooting Butts	399788	455936	Rifle Butt	Modern	Line of modern shooting butts.		N/A	N/A
10181			High Edge: Coal Mining Site	399347	455292	Coal Mining Site	Post Medieval	Probable line of small coal mining shafts, to E of beck at Brass Castle; may relate to a level to the south. On 1854 Estate Map as 'coal shaft'.		Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10182			High Edge: Coal Mining Site	399374	455349	Coal Mining Site	Post Medieval	Single shaft, relates to other shafts and a level to the south. On 1854 Estate Map.		Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10183	MYD27084		High Edge: Hollow Way Group	399294	455801	Hollow Way	Post Medieval	A braided network of well-defined hollow ways and trackways leading directly up to sandstone quarries from Tattersall Green to the S. Post medieval, could be medieval.	679-681, 687-697, 707-710, 712-3	Low	Low/Moderate – important in understanding routeways across the landscape.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10184			Deer Gallows: Hollow Way Group	399625	455564	Hollow Way	Medieval	A braided network of well-defined hollow ways and trackways leading directly from Tattersall Green to the S. Becomes a modern track at N end	673-8	Low	Moderate – important in understanding early routeways across the landscape.
10185			Deer Gallows: Hollow Way Group	400235	455293	Hollow Way	Post Medieval	A braided network of well-defined hollow ways and trackways. A modern track follows centre line, broadly NE-SW along edge of Moor Beck.		Low	Low/Moderate – important in understanding routeways across the landscape.
10186			Embsay Moor: Hollow Way	400731	455300	Trackway	Post Medieval	A later spur off the main complex of hollow ways to S. Seems well-used now so probably modern but could have post-med origins.		Low	Low/Moderate – important in understanding routeways across the landscape.
10187			Halton Height: Hollow Way	402642	455598	Hollow Way	Medieval	Area of hollow ways, one of which was overlain by an embankment constructed for tramway MYD41029.	374 - 376	Low	Moderate – important in understanding early routeways across the landscape.
10188			Halton Height: Hollow Way Group	403287	455544	Hollow Way	Medieval	Continuation of hollow ways further to west, bisected by MYD41029. Survey identified as 'aligned east to west parallel and to the south of the modern track'	88	Low	Moderate – important in understanding early routeways across the landscape.
10189			Long Gill Head: Hollow Way Group	402957	455980	Hollow Way	Medieval	Area of hollow ways. All heading to a gate in the NE enclosure wall.		Medium	Moderate – important in understanding early routeways across the landscape.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10190			Halton Green: Trackway	403470	454988	Trackway	Post Medieval	Trackway leading through area of quarries.	400	Medium	Low/Moderate – important in understanding routeways across the landscape.
10191			Halton Green: Trackway	403471	455049	Trackway	Post Medieval	Trackways leading through area of quarries.		Medium	Low/Moderate – important in understanding routeways across the landscape.
10192			Halton Green: Trackway	403653	455287	Trackway	Post Medieval	Large area of braided trackways and hollows leading NW up from quarry to road.	403	Medium	Low/Moderate – important in understanding routeways across the landscape.
10193			Halton Green: Trackway Group	403943	455274	Trackway	Post Medieval	Braided trackways at corner of a modern track, leading to a quarry.		Medium	Low/Moderate – important in understanding routeways across the landscape.
10194			Brass Castle: Sheepfold	402880	457136	Sheep Fold	Post Medieval	Rectangular 2 celled structure marked as "sheep fold" on OS mapping.	491 - 495	Low	Low/Moderate – evidence of agricultural management but fairly common across the moors.
10195			Long Band Flat: Shooting Butts	402939	457895	Rifle Butt	Modern	Line of modern shooting butts.		N/A	N/A
10196			Long Band Flat: Shooting Butts	403452	457786	Rifle Butt	Modern	Line of modern shooting butts.		N/A	N/A
10197			Standard Flat: Shooting Butts	403528	458572	Rifle Butt	Modern	Line of modern shooting butts.		N/A	N/A
10198			Folly Top: Trackway	403125	459210	Trackway	Modern	Track leading to shooting butts, cuts through a line of earlier hollow ways.		Low	Low/Moderate – important in understanding routeways across the landscape.
10199			Standard Flat: Trackway	403544	458521	Trackway	Post Medieval	Line of a trackway depicted on OS mapping, now cut through by an S-bend in the modern track.		N/A	N/A
10200	MYD49847		Simm Bottom: Hollow Way	404121	458808	Hollow Way	Medieval	A network of hollow ways and faint trackways running N along edges of modern trackways, recorded by 1st Ed OS map.		Medium	Moderate – important in understanding early routeways across the landscape.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10201			Standard Hill: Hollow Way Group	403030	458708	Trackway	Post Medieval	Continuation of network of braided hollow ways recorded to the E.		Medium	Low/Moderate – important in understanding routeways across the landscape.
10202			Raven Nest Craggs: Quarry	400952	460851	Quarry	Post Medieval	Large quarry at Raven Nest Craggs, probably 19th century date. Lots of hollow ways lead to this.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10203			Raven Nest Craggs: Hollow Way	401293	460798	Hollow Way	Medieval	Short length of hollow way leading SW uphill to a larger network of tracks.		Medium	Moderate – important in understanding early routeways across the landscape.
10204			Burnsall And Thorpe Fell: Trackway Group	401654	460048	Trackway	Post Medieval	Mostly tracks, may become drains in some places.		Medium	Low/Moderate – important in understanding routeways across the landscape.
10205	MYD49846		Burnsall And Thorpe Fell: Hollow Way	401635	459123	Hollow Way	Medieval	Hollow way serving Burnsall Peat Pits.		Medium	Moderate – important in understanding early routeways across the landscape.
10206	MYD27087		Black Sike Bridge: Coal Workings	399149	457025	Coal Workings	Post Medieval	Line of shafts and coal workings, marked on 1st Ed as 'old coal pits'. On 1854 Estate Map as 'coal shaft'.	21, 22	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10207			Numberstones End: Trackway	402280	460023	Trackway	Post Medieval	Faint trackway, probably modern.		Medium	Low/Moderate – important in understanding routeways across the landscape.
10208			Numberstones End: Trackway	402083	460019	Trackway	Post Medieval	Faint trackway, probably modern.		Medium	Low/Moderate – important in understanding routeways across the landscape.
10209			Numberstones End: Trackway	402310	460060	Trackway	Post Medieval	Faint trackway, probably modern.		Medium	Low/Moderate – important in understanding routeways across the landscape.
10210	MYD49847		Saddle Ridge: Trackway Group	403806	459409	Trackway	Post Medieval	Extensive braided system of hollow ways leading onto moor.		Medium	Low/Moderate – important in understanding routeways across the landscape.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10211			Folly Top: Hollow Way Group	403380	459613	Hollow Way	Medieval	Network of trackways/ hollow ways adjacent to enclosure wall.		Medium	Moderate – important in understanding early routeways across the landscape.
10212			Folly Top: Hollow Way Group	402749	459555	Trackways	Medieval	Extensive area of faint hollow ways extending down from NE.	329, 336	Medium	Moderate – important in understanding early routeways across the landscape.
10213	MYD41026	1046057	Folly Top: Ring Cairn	403547	459764	Ring Cairn	Bronze Age	Bronze Age Ring Cairn. Sub-circular with a diameter of c.14m. Formed by upstanding banks 3m wide at the base standing to 0.8m formed by rounded boulders. The cairn was cut by a modern drain to the NE and NW. Another break in the circuit of the bank was identified to the N.	307 - 317, 324	High	High – rare survival of a nationally important monument.
10214			Airscar Craggs: Hollow Way Group	402837	460130	Hollow Way	Medieval	Extensive network of hollow ways and trackways at Air Scar Craggs.	416, 417	Medium	Moderate – important in understanding early routeways across the landscape.
10215	MYD14778	558337	Folly Top: Quarry	402902	459402	Sandstone Quarry	Post Medieval	Location of a sandstone quarry marked in HER/NMR possibly lies below modern track.	344	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10216	MYD14790	558351	White Stones Hill: Quarry	401654	455491	Sandstone Quarry	Post Medieval	Recorded by HER/NMR as sandstone quarry, joined by a trackway from the N. Further quarries to the west.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10217			Halton Moor: Quarry	403512	455580	Sandstone Quarry	Post Medieval	Post-medieval sandstone quarry.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10218	MYD15763	558324	Deer Gallows: Gravel Pit	400114	455128	Gravel Pit	Post Medieval	Small sandstone quarry just below Deer Gallows Plain.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10219	MYD27084	593426	Harts Hill: Quarry	399274	455785	Sandstone Quarry	Post Medieval	Extensive quarry group connected by a series of hollow ways running S to N. Included a number of stone structures comprising huts with fireplaces, loading platforms, millstones, bunkers etc. Well preserved. Recorded by 1854 Estate Map.	714-736 (MAIN) 737-745 (SOUTH)	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10220	MYD27083	593425	Brass Castle: Quarry	399298	454985	Sandstone Quarry	Post Medieval	Small quarry and associated spoil tips.		Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10221			Embsay Moor: Quarry	400758	455406	Sandstone Quarry	Post Medieval	Sandstone quarry depicted on 1st Ed OS map and extant as large oval earthwork.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10222	MYD14764	558325	Embsay Moor: Quarry	400805	455253	Sandstone Quarry	Post Medieval	Sandstone quarry depicted on 1st Ed OS map and extant as large oval earthwork (HER places this too far north).		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10223	MYD14790	558351	Heugh Ground Head: Quarry	401534	455481	Sandstone Quarry	Post Medieval	Sandstone quarry depicted on 1st Ed OS map and extant as large oval earthwork. Now position of a fording point (W) and bridge (E) both with assoc earth bank causeways. May also be a dam.	820-829	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10224	MYD14789	558350	Halton Moor: Quarry	403407	455472	Quarry	Post Medieval	Extensive area of quarrying, clearly visible on mapping and on ground. Aligned broadly ENE-WSW. On 1854 Estate Map.	89	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common
10225			Simm Bottom: Trackway	404418	459040	Trackway	Post Medieval	Small hollow way leading up from Top Lathe and connected to other tracks/quarries in area.		Medium	Low/Moderate – important in understanding routeways across the landscape.
10226	MYD49847	558343	Simm Bottom: Trackway	403286	458662	Trackway	Post Medieval	Small branch from main group of E-W aligned hollow ways.		N/A	N/A
10227			Burnsall And Thorpe Fell: Trackway	401299	459510	Trackway	Medieval	Trackway associated with Thorpe peat pits.		Medium	Moderate – important in understanding early routeways across the landscape.
10228			Burnsall And Thorpe Fell: Trackway	401311	459830	Trackway	Medieval	Trackway associated with Thorpe peat pits.		Medium	Moderate – important in understanding early routeways across the landscape.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10229			Burnsall And Thorpe Fell: Trackway	401182	459637	Trackway	Medieval	Trackway associated with Thorpe peat pits.		Medium	Moderate – important in understanding early routeways across the landscape.
10230			Burnsall And Thorpe Fell: Trackway	401259	459551	Trackway	Medieval	Trackway associated with Thorpe peat pits.		Medium	Moderate – important in understanding early routeways across the landscape.
10231			Burnsall And Thorpe Fell: Trackway	401208	459599	Trackway	Medieval	Trackway associated with Thorpe peat pits.		Medium	Moderate – important in understanding early routeways across the landscape.
10232			Burnsall And Thorpe Fell: Trackway	401410	459591	Trackway	Medieval	Trackway associated with Thorpe peat pits.		Medium	Moderate – important in understanding early routeways across the landscape.
10233			Burnsall And Thorpe Fell: Wagon Way	401268	460432	Wagonway	Post Medieval	Possible tramway located within a deep cutting (c.2m) and situated within an area of hollow ways. The tram cut the hollow ways. Accessed Thorpe Colliery from Thorpe Fell Lane.	175 - 182	Low	Low/Moderate – important in understanding the nature of reservoir construction.
10234			Burnsall And Thorpe Fell: Trackway	401005	459685	Trackway	Medieval	Trackway associated with Thorpe peat pits.		Medium	Moderate – important in understanding early routeways across the landscape.
10235			Burnsall And Thorpe Fell: Trackway	400596	459864	Trackway	Medieval	Trackway which continues mass of hollow ways 10014 southward into area of peat pits 10057.		Medium	Moderate – important in understanding early routeways across the landscape.
10236			The Whams: Trackway	400203	459755	Trackway	Medieval	Area of trackways providing access to W area of peat pits (10057).		Medium	Moderate – important in understanding early routeways across the landscape.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10237			Burnsall And Thorpe Fell: Trackway	400211	459792	Trackway	Medieval	Included in 10236.		Medium	Moderate – important in understanding early routeways across the landscape.
10238			Burnsall And Thorpe Fell: Trackway	400127	459755	Trackway	Medieval	Included in 10236.		Medium	Moderate – important in understanding early routeways across the landscape.
10239			Burnsall And Thorpe Fell: Trackway	400045	459772	Trackway	Medieval	Included in 10236.		Medium	Moderate – important in understanding early routeways across the landscape.
10240			Peter's Crag: Trackway Group	400051	459471	Trackway	Medieval	Area of trackways providing access to W area of peat pits (10057).		Medium	Moderate – important in understanding early routeways across the landscape.
10241			Peter's Crag: Trackway	400016	459365	Trackway	Medieval	Included in 10240.		Medium	Moderate – important in understanding early routeways across the landscape.
10242			Peter's Crag: Trackway	399891	459212	Trackway	Medieval	Hollow way leading up to Cracoe Peat Pits.		Medium	Moderate – important in understanding early routeways across the landscape.
10243			Peter's Crag: Trackway	399854	459263	Trackway	Medieval	Hollow way leading to area of peat peats. GPS point locates southern extent.	117-121	Medium	Moderate – important in understanding early routeways across the landscape.
10244	MYD49847		Standard Flat: Trackway	402931	458527	Trackway	Post Medieval	Trackway.		N/A	N/A
10245			Pitshaw Top: Trackway	401499	458086	Trackway	Medieval	Track associated with Eastby Peat Pits.		Medium	Moderate – important in understanding early routeways across the landscape.
10246			Pitshaw Top: Trackway	401437	458115	Trackway	Medieval	Track associated with Eastby Peat Pits.		Medium	Moderate – important in understanding early routeways across the landscape.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10247			Long Band Flat: Hollow Way	403142	457518	Hollow Way	Post Medieval	Possible trackway leading W across moor from gate.	271, 272	N/A	N/A
10248			Cross Gill Head: Trackway	401770	457250	Trackway	Medieval	Trackway.		Medium	Moderate – important in understanding early routeways across the landscape.
10249			Lumb Gill: Wagon Way	401341	457326	Wagonway	Post Medieval	Possible wagon way related to reservoir construction to SE, broadly level and flat aligned NW-SE.		Low	Low/Moderate – important in understanding the nature of reservoir construction.
10250	MYD14765	558326	Deer Gallows: Coal Workings	400214	455697	Coal Workings	Post Medieval	Group of coal shafts depicted on 1st Ed OS map; survey identified these as probably coal in view spoil heaps. On 1854 Estate Map as 'old coal pit shafts'.	749-751	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10251	MYD14785	558346	Pitshaw Peat Pits:	402032	458067	Peat Cutting	Medieval	Pitshaw Peat Pits.		High	Moderate/High – evidence of early land use, important for understanding the development of the moor.
10252	MYD44172	558523	Witshaw Bank: Quarry	400181	454775	Quarry	Post Medieval	Large and fairly recent quarry, probably relates to reservoir construction.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10253			Embsay Moor: Trackway Group	400454	455066	Trackway	Post Medieval	Large group of hollow ways faintly discernible in the bracken and heading up hillside to the NE on flanks of Embsay Crag. Connects to 10255.		Medium	Low/Moderate – important in understanding routeways across the landscape.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10254			Stoneycliff Brow: Reservoir	399626	454866	Reservoir	Post Medieval	Large area of workings related to reservoir. Some smaller individual sites are also located in this area.		Low	Low/Moderate – important for understanding water management serving Whitefield Syke Mill.
10255			Wayshaw Bogs: Trackway Group	400890	455318	Trackway	Medieval	Another complex of braided hollow ways pushing E on Wayshaw Bogs and W passed Deer Gallows. North spur near Deer Gallows= 661-6; 842-5 shows resurfaced section. 846-8 is N spur. Medieval origins.	661-666, 830-845, 846	Low	Moderate – important in understanding early routeways across the landscape.
10256			White Stones Hill: Hollow Way Group	401041	455432	Hollow Way	Medieval	Large but fairly nucleated area of hollow ways in Grey Field. Running up S side of White Stones Hill.		Low	Moderate – important in understanding early routeways across the landscape.
10257			Heugh Ground Head: Shooting Butts	401981	455381	Rifle Butt	Modern	Line of modern shooting butts.		N/A	N/A
10258			Tewit Bogs: Trackway Group	402140	455576	Trackway	Medieval	Large but nucleated area of hollow ways pushing north from Eastby Gate. They become increasingly clear to N (separate entry).		Low	Moderate – important in understanding early routeways across the landscape.
10259			Tewit Bogs: Sheep Fold	401839	455351	Sheep Fold	Post Medieval	Sub-circular sheep fold, c.20m by 15m by 1.5m, of drystone construction. Entrances to the S and E. The E facing entrance opened to a stream and contained a small sheep dip platform. Post dates 1st Ed OS map.	363 - 70, 817-9	Low	Low/Moderate – evidence of agricultural management but fairly common across the moors.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10260			Halton Moor: Trackway Group	403577	455382	Trackway	Post Medieval	Large area of hollow ways associated with quarrying.		Low	Low/Moderate – important in understanding routeways across the landscape.
10261	MYD49845		Halton Moor: Navy Camp	403627	455348	Workers Temporary Settlement	Modern	Navy camp. Settlement to house quarry workers during reservoir construction comprising a series of levelled platforms, c.10m wide, adjacent to the existing road.	405 - 409	Medium	Low/Moderate – important in understanding the nature of reservoir construction.
10262			Halton Moor: Trackway	403306	455232	Trackway	Post Medieval	Trackway leading through quarries, predates modern road.	396 - 399	Low	Low/Moderate – important in understanding routeways across the landscape.
10263			Gill Beck Head Reservoir	402408	459470	Reservoir	Modern	Small modern reservoir.	421, 422	Low	Low – feature quite common.
10264	MYD14771		Thorpe Peat Pits	401090	459485	Peat Cutting	Medieval	Thorpe Peat Pits. Extensive area of peat cutting separated by banked spoil. Recorded by 1st Ed OS map.	226 - 228	High	Moderate/High – evidence of early land use, important for understanding the development of the moor.
10265	MYD38444		Burnsall And Thorpe Fell: Hollow Way Group	400782	460409	Hollow Way	Medieval	Large group of braided hollow ways associated with coal workings and peat pits.		Low	Moderate – important in understanding early routeways across the landscape.
10266			Eastby Peat Pits	401469	458258	Peat Cutting	Medieval	Eastby Peat Pits. Recorded by 1st Ed OS map.		High	Moderate/High – evidence of early land use, important for understanding the development of the moor.
10267			West Harts Hill: Shooting Butts	399257	456249	Rifle Butts	Modern	Modern shooting butts.		N/A	N/A
10268	MYD14792		Cracoe And Threapland Peat Pits	400506	459673	Peat Cutting	Medieval	Cracoe and Threapland Peat Pits. Massive area of peat cutting for two townships.	225	High	Moderate/High – evidence of early land use, important for understanding the development of the moor.
10269	MYD14770	558331	Burnsall Peat Pits	401550	458991	Peat Cutting	Medieval	Burnsall Peat Pits. Depicted on 1st Ed OS map associated with extensive trackways.		High	Moderate/High – evidence of early land use, important for understanding the development of the moor.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10270			Standard Flat: Coal Mining Site	403383	458741	Coal Mining Site	Post Medieval	Single shaft.		Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10271			Standard Flat: Coal Mining Site	403390	458756	Coal Mining Site	Post-Medieval	Single shaft.		Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10272			Lumb Gill Head: Boundary Stone	401329	456958	Boundary Stone	Medieval	Position of boundary stone. Not seen during survey, may be same as 10129 to the SE. On 1854 Estate Map.		Low	Moderate – important in understanding land ownership and the development of the landscape although not identified during field survey.
10273			Heugh Ground Head: Coal Mining Shaft	401827	455480	Shaft Mound	Post Medieval	Single shaft to W of a large network of hollow ways (10155). Probably coal.		Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10274			Rylstone Fell, Gate Posts	399579	457186	Gate Pier	Modern	Pair of gate posts including iron gate supports, c.3m spacing. Not associated with fence or wall line.	1,2	Low	Low – feature quite common.
10275			Out Fell: Coal Shafts	398711	456929	Shaft	Post Medieval	Series of coal shafts aligned north to south. Comprised of approx 5 examples associated with a hollow way located adjacent.	11-13	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10276			Black Sike Bridge: Coal Shaft	398907	456854	Shaft	Post Medieval	Shaft. Single example, c.3m diameter (coal).	15	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10277			Black Sike Bridge: Hollow Ways	398787	456779	Hollow Way	Medieval	Two hollow ways aligned near east to west, marked as footpath on OS map.	16-20	Low	Moderate – important in understanding early routeways across the landscape.
10278			Black Sike Bridge: Hollow Way	399362	457117	Hollow Way	Medieval	Hollow way or possible coal prospection cutting. Aligned east to west.	26	Low	Moderate – important in understanding early routeways across the landscape.
10279			Rylstone Fell: Boundary Stone	399128	458382	Boundary Stone	Post Medieval	Boundary Stone, 1.3m by 0.4m by 0.3m. Marked 'R' to the W and 'C' to the East.	33-35	Low	Moderate – important in understanding land ownership and the development of the landscape.
10280			Watt Crag: Cairn	399258	458605	Cairn	Modern	Small disturbed stone cairn, c.2.2m diameter.	42	Medium	Low – feature quite common.
10281			Brown Bank Brow: Quarry	400615	457183	Quarry	Post Medieval	Stone quarry, c.10m by 10m included dressed stone blocks.	46-49	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10282			Brown Bank Brow: Wagon Way	400354	457643	Wagonway	Post Medieval	Likely wagon way although eroded by water with evidence of a continuation recorded at the foot of the hill. Continued from the site of a stone quarry (10283) toward the reservoir.	54-57	Low	Low/Moderate – important in understanding the nature of reservoir construction.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10283			Brown Bank Brow: Quarry	400440	457460	Stone Quarry	Post Medieval	Quarry with stone debris located to the NW. Some horseshoe shaped cuttings were also recorded to the NW. Appeared to feed reservoir construction along possible wagon way 10282.	58-62	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10284			Brown Bank Brow: Monastic Boundary Stone	401029	457221	Boundary Stone	Medieval	Monastic boundary stone, standing.	72, 73,	Low	Moderate – important in understanding land ownership and the development of the landscape.
10285	MYD41029		Hutchen Gill Head: Tramway Embankment	402154	456157	Tramway Embankment	Modern	Tramway embankment and bridge (across Hutchen Gill) carrying stone from Halton Moor to Upper Barden Reservoir. The tramway was visible as a deep cutting to the SE leading to the embankment.	93 - 107	Low	Low/Moderate – important in understanding the nature of reservoir construction.
10286			Hutchen Gill Head: Structure	402142	456181	Structure	Modern	Sub-surface stone lined structure, c.3m x 1.5m, located to the north-west of the tramway bridge and within a probable quarry cutting excavated to construct embankment.	108 - 111	Low	Low/Moderate – important in understanding the nature of reservoir construction.
10287			Watt Crag: Boundary Stone	399667	458573	Boundary Stone	Post Medieval	Boundary stone. Leaning, 1.8m x 0.4m x 0.3m. Marked C (NW facing), R (SE facing). The boundary defined by this stone was also defined by a series of timber posts.	126 - 128	Low	Moderate – important in understanding land ownership and the development of the landscape.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10288			The Whams: Boundary Wall	399895	458655	Wall	Post Medieval	Drystone boundary wall bridging natural watercourse. 7m L by 0.5m W by 0.6m H.	130 - 132	Low	Moderate – important in understanding land ownership and the development of the landscape.
10289			The Whams: Boundary Stone	399946	458675	Boundary Stone	Post Medieval	Boundary stone. Standing, 1.3m by 0.5m by 0.4m. Marked C (N facing), R (S facing).	133 - 135	Low	Moderate – important in understanding land ownership and the development of the landscape.
10290			The Whams: Boundary Wall	400178	458755	Wall	Post Medieval	Drystone boundary wall bridging natural watercourse. 4m L by 0.75m W by 0.5m H.	137 - 138	Low	Moderate – important in understanding land ownership and the development of the landscape.
10291			The Whams: Peat Pits	400004	458218	Peat Cutting	Medieval	Extensive area of peat cutting which comprised enclosure 10044, pit cluster 10060.		High	Moderate/High – evidence of early land use, important for understanding the development of the moor.
10292			The Whams: Boundary Stone	400576	458837	Boundary Stone	Post Medieval	Boundary stone, 1.6m x 0.4m x 0.3m. Marked C:R.T. (north), D:D (south).	141 - 145	Low	Moderate – important in understanding land ownership and the development of the landscape.
10293			The Whams: Boundary Stone	400971	458828	Boundary Stone	Post Medieval	Boundary stone, 1.6m x 0.4m x 0.3m. Marked C:R.T. (north), D:D (south).	157, 158	Low	Moderate – important in understanding land ownership and the development of the landscape.
10294			The Whams: Boundary Stone	401341	458820	Boundary Stone	Post Medieval	Boundary stone, 1.6m x 0.4m x 0.3m. Marked C:R.T. (north), D:D (south).	159, 160	Low	Moderate – important in understanding land ownership and the development of the landscape.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10295			Raven Nest Craggs: Structure	401037	460902	Structure	Post Medieval	Small building situated at the base of quarry. 2.2m by 2.2m, height of 1.5m. Entrance facing E (0.5m wide) with a small fire place built into the northern wall. Other structure to the east although rebuilt to form a sheep fold (5 x 3m).	183 - 191	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10296	MYD44010		Burnsall And Thorpe Fell: Coal Shaft and Structure	400663	459839	Shaft	Post Medieval	Example of shaft and associated structure forming part of an area of shafts (10184). Structure was dry stone construction and square measuring 3m by 3m by 1m height. Located to the east of shaft.	210 - 216	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10297	MYD44010		Burnsall And Thorpe Fell: Coal Shaft	400777	459808	Shaft	Post Medieval	Included in shaft group 10184.	218, 219	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10298			Burnsall And Thorpe Fell: Level	401448	460081	Drift Mine	Post Medieval	Drainage level. Forming part of Thorpe pits, group MYD43479. Aligned N-S located in the north-western part of the shaft coal working group.	231	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10299			Burnsall And Thorpe Fell: Level	401185	460063	Adit	Post Medieval	Drainage level (partially open) located below and N of a shaft with hollow way running between.	232 - 239	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10300			Simm Bottom: Quarry	404345	458663	Quarry	Post Medieval	Small scale stone quarrying, 15m by 8m.	242, 243	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10301			The Whams: Memorial Stone	401203	458181	Marker Stone	Modern	Memorial stone. 1.2m by 0.4m by 0.3m. Reading 'IN MEMORY OF E. E. HEY 1898 - 1974'.	274 - 276	N/A	N/A
10302			The Whams: Boundary Stone	401505	458817	Boundary Stone	Post Medieval	Boundary stone, 1.6m by 0.4m by 0.3m. Marked C:R.T. (north), D:D (south).	277, 278	Low	Moderate – important in understanding land ownership and the development of the landscape.
10303			The Whams: Boundary Stone	401721	458812	Boundary Stone	Post Medieval	Boundary stone, 1.6m by 0.4m by 0.3m. Marked C:R.T. (north), D:D (south).	279, 280	Low	Moderate – important in understanding land ownership and the development of the landscape.
10304			Gill Beck Head: Boundary Stone	402137	458984	Boundary Stone	Post Medieval	Boundary stone, 1.6m by 0.4m by 0.3m. Marked C:R.T. (north), D:D (south).	281, 282	Low	Moderate – important in understanding land ownership and the development of the landscape.
10305			Gill Beck Head: Boundary Stone	402386	459176	Boundary Stone	Post Medieval	Boundary stone, 1.6m by 0.4m by 0.3m. Marked C:R.T. (north), D:D (south).	286, 287	Low	Moderate – important in understanding land ownership and the development of the landscape.
10306			Standard Hill: Quarry	401968	458371	Quarry	Post Medieval	Numerous small scale stone quarries formed as cuttings into the bank side. Surrounded by heaps of quarried stone. Other quarries located to the N.	295, 296	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10307	MYD41029		Halton Height: Tramway	402410	455410	Tramway	Modern	Extensive tramway located within both cuttings and upon embankments which continues from Upper Barden Reservoir southward to a series of stone quarries on Halton Moor/ Heights. Associated with bridge.	373, 480 - 483, 499 - 502	Low	Low/Moderate – important in understanding the nature of reservoir construction.
10308		558343	Simm Bottom Coal Pit: Coal Shaft	403466	458713	Shaft	Post Medieval	Large shaft measuring c.10m in diameter, marked as 'Old Coal Pits' on 1st Ed OS map.	297 - 300	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10309			Saddle Ridge Wham: Pile of Stones	403871	459182	Cairn	Modern	Pile of stones situated around earth fast boulder, 1.5m by 1.5m.	303	N/A	N/A
10310			Saddle Ridge Wham: Cairn	403866	459188	Cairn	Modern	Cairn or remains of dry stone wall, 1m x 0.7m. Situated beside earth fast boulder.	304	N/A	N/A
10311			Long Ridge: Coal Shaft	403314	459641	Shaft	Post Medieval	Coal shaft, 4m diameter.	325	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10312			Long Ridge: Boundary Stone	403053	459749	Boundary Stone	Post Medieval	Boundary stone, 1.6m by 0.4m by 0.3m. Marked D:D (SE), C:R.T. (NW).	328, 330, 332	Low	Moderate – important in understanding land ownership and the development of the landscape.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10313			Long Ridge: Quarry	403044	459763	Quarry	Post Medieval	Sandstone quarry, 10m by 10m.	333 - 335	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10314			Folly Top: Boundary Stone	402736	459447	Boundary Stone	Post Medieval	Boundary stone, 1.6m by 0.4m by 0.3m. Marked D:D (W), C:R.T. (E).	342, 343	Low	Moderate – important in understanding land ownership and the development of the landscape.
10315			Long Ridge: Coal Shaft	402967	459557	Shaft	Post Medieval	Shaft with 10m diam.	345, 346	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10316			Burnsall And Thorpe Fell: Quarry	401873	459838	Quarry	Modern	Quarry with 15m diameter. Located in area of shafts.	347 - 349	N/A	N/A
10317			Pitshaw Top: Quarry Pit	402059	458012	Pit	Modern	Possible quarry cut. 15m by 15m by 2.5m. Only a small amount of associated spoil was visible to the N.	350 - 352	N/A	N/A
10318			Halton Height: Quarry	403179	455280	Quarry	Post Medieval	Sandstone quarry located at periphery of quarry group MYD14789. 20m by 10m in size.	356 - 358	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10319			Halton Height: Coal Shaft	403086	455362	Shaft	Post Medieval	Quarry 5m diam. Located at the edge of quarry group MYD 14789.	377	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10320			The Whams: Peat Drying House	401556	458179	Structure	Post Medieval	Peat drying house within Eastby Peat Pits. Measured 3m x 3m x 1.5m of drystone construction. It was partially terraced into the bank side and included a flue within the northern wall and below ground level that did not represent a fire place.	382 - 388	Low	Moderate/High – evidence of early land use, important for understanding the development of the moor.
10321			The Whams: Sheep Fold	401567	458150	Sheep Fold	Post Medieval	Sheep fold, 6m x 3m x 1m, sub-circular, entrance to the SW.	378 - 381	Low	Low/Moderate – evidence of agricultural management but fairly common across the moors.
10322			The Whams: Sheep Fold	401623	458141	Sheep Fold	Post Medieval	Sheep fold, 6m x 3m x 1m. Sub-circular with entrance to the S. This fold was situated within an area that had previously been quarried for peat therefore it was later.	390	Low	Low/Moderate – evidence of agricultural management but fairly common across the moors.
10323			Out Fell: Boundary Bank	399777	458611	Boundary Bank	Post Medieval	Boundary bank, c.10m L by 0.5m W by 0.3m H. Continued 'C' and 'R' boundary.	129	Medium	Moderate – important in understanding land ownership and the development of the landscape.
10324			Numberstones End: Shooting Butts	402470	460022	Rifle Butt	Post Medieval	Isolated and disused shooting butt.	418 - 20	N/A	N/A
10325			Burnsall And Thorpe Fell: Marked Earth Fast Stone	401128	459652	Marker Stone	Post Medieval	Located at the northern side of Thorpe Peat Pits. Marked '1849' (upside down) 'H.Hird, Aged 25, Thorpe'	432 - 436	Low	Moderate – evidence for the population that once exploited the moor.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10326			Burnsall And Thorpe Fell: Coal Shafts	401938	459723	Shaft	Post Medieval	Two shafts located immediately adjacent to the east of structure 10001.	459, 460	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10327			Gill Beck Head: Level	401984	459493	Adit	Post Medieval	Level entrance, mostly infilled, leading to tip 10329.	474 - 477	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10328			Gill Beck Head: Structure	402028	459483	Structure	Post Medieval	Mining building, 5m by 3m by 1m. Remains of structure located adjacent to level entrance 10327 and spoil tip 10329.	465 - 472, 475, 476	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10329			Gill Beck Head: Spoil Tip	402056	459487	Spoil Heap	Post Medieval	Linear spoil tip (30m long) possibly forming short wagon way. Lined up with level entrance 10327.	472, 473, 475, 476	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10330			Gill Beck Head: Shooting Butts	402284	459401	Rifle Butt	Modern	Line of 9 shooting butts.		N/A	N/A
10331			Cross Gill Head: Shooting Butts	402320	457498	Rifle Butt	Post Medieval	Remains of disused shooting butt, 'H'-shaped, 3m by 2.5m.	486 - 487	N/A	N/A
10332			Turnmer Hill: Shooting Butts	402486	457143	Rifle Butt	Post Medieval	Remains of disused shooting butt, 4m by 3m by 1m.	503 - 505	N/A	N/A

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10333			Cross Gill Head: Bridge	401860	457631	Bridge	Post Medieval	Remains of substantial bridge crossing Barden Beck, central section missing. Originally c.4m wide, faced with squared sandstone blocks filled by rubble core. Associated with a trackway (10079) and beside a quarry (part of 10069).	479, 506 - 514	Low	Low/Moderate – important in understanding routeways across the landscape.
10334			Pitshaw Top: Quarry	402280	457831	Quarry	Post Medieval	Quarry, 30m by 15m. Forming part of group MYD41030.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10335			Pitshaw Top: Quarry	402297	457796	Quarry	Post Medieval	Quarry, 25m by 15m. Forming part of group MYD41030.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10336			Pitshaw Top: Quarry	402281	457938	Quarry	Post Medieval	Quarry, 35m by 20m. Forming part of group MYD41030.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10337			Pitshaw Top: Tramway Cutting	402367	457921	Tramway	Post Medieval	Tramway cutting (MYD41029) through spoil tip in vicinity of terminal.	520 - 522	Low	Low/Moderate – important in understanding the nature of reservoir construction.
10338			Pitshaw Top: Quarry	401872	458480	Quarry	Post Medieval	Area of quarrying formed by linear cuttings into the bank side with associated spoil and quarried stone heaps.	290 - 294	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10339			Simm Bottom: Coal Shaft	404158	458999	Shaft	Post Medieval	Group of shafts and associated spoil heaps. Adjacent to 10024.	255 - 257	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10340			Simm Bottom: Coal Shaft	404149	458954	Shaft	Post Medieval	A series of workings located adjacent to the road including cut channels leading to two shafts. Forms largest group of 10024.	258 - 265	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10341			Stirton Pits	399041	456383	Coal Workings	Post Medieval	Large group of 20+ shafts clustered around location of a cairn. Diameters 2m-7m, depths vary. Appears to be coal as further shafts lie to north. Two large stones associated with one possible base for a jackroller?	539-542	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10342			Fairies Chest: Coal Bunker	399006	456360	Coal Bunker	Post Medieval	Curvilinear stone retaining wall associated with coal workings, perhaps a storage bin for coal? Encloses two large hollows, possibly representing shafts.	529, 536-8	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10343			Fairies Chest: Structure	399019	456374	Building	Post Medieval	Small broadly oval building reused as a shooting butt. Earth fast stone foundations with rebuilt modern upper section.	531-4	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10344			Fairies Chest: Hollow Way	398859	456412	Hollow Way	Medieval	A short section of hollow way cutting into hill side, probably as a result of traffic up to coal workings to E.	543-545	Medium	Moderate – important in understanding early routeways across the landscape.
10345			Fairies Chest: Structure	398664	456138	Building	Post Medieval	Rectangular building (remains of) 7.5m (E-W) by 9m (N-S) built in rough courses with faced stone and rubble core. Some lime mortar remains in core. Obscured by bracken, possible entrances S and E, possible chimney on E side. On 1854 Estate Map.	563, 567, 568, 569, 570	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10346			Fairies Chest: Coal Shaft	398666	456148	Shaft	Post Medieval	Possible location of a shaft, heavily obscured by bracken.		Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10347			Fairies Chest: Coal Shaft	398661	456159	Shaft	Post Medieval	Possible location of a shaft heavily obscured by bracken.		Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10348			Fairies Chest: Quarry	398687	456148	Quarry	Post Medieval	Very large stone with a series of drill marks (plug and feather) around upper edge of vertical face where split - 19th century techniques.	561, 562, 564, 565, 566	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common..

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10349			Fairies Chest: Quarried Stone	398735	456214	Stone	Post Medieval	Stone with a series of drill marks (plug and feather) around upper edge of vertical face where split.	578-580	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10350			Fairies Chest: Wall	398778	456213	Wall	Post Medieval	Section of wall associated with workings to S.	581-2	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10351			Fairies Chest: Quarry Pits	398871	456102	Quarry	Post Medieval	Large area of small pits, some larger, possible water-filled shafts, all very ephemeral diggings; not solution hollows. Probably small-scale extraction of some kind, possibly stone?		Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10352			Fairies Chest: Quarryman's Hut	398938	455920	Building	Post Medieval	Quarryman's hut, small drystone structure, sub-rectangular with fire place, but no chimney. Very roughly coursed, two rows of facing stones, with no core and occasional bridging stones, internal sub-division abutting outer wall.	586-8	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10353			Fairies Chest: Quarry	398930	455937	Quarry	Post Medieval	Quarry scoop c.25m by 8m, spoil tongue to SW of building, with retaining wall at quarry entrance. Roughed out millstone adjacent building 1m diameter.	583-5, 589,590	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10354			West Harts Hill: Quarry	398999	455896	Quarry	Post Medieval	Another large quarry with evidence of retaining walls etc, and numerous smaller scoops in vicinity.	591-3	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10355			West Harts Hill: Quarry	399051	455990	Quarry	Post Medieval	Large quarry forming focus of an even larger area of very small scoops and pits. Photos show main quarry.	594-8	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10356			Washfold Hill: Whitefield Syke Mill Reservoir	399692	454843	Reservoir	Post Medieval	Small reservoir, broadly oval, spoil bank on S edge, with deliberate breaches on E side. Presumably predates construction of later reservoir and associated with mill to the south. On 1854 Estate Map.	607-610, 651-3	Low	Low/Moderate – important for understanding water management serving Whitefield Syke Mill.
10357			Washfold Hill: Whitefield Syke Mill Cottages	399757	454812	Wall	Post Medieval	Field wall re-using northern walls of mill cottages now demolished. Two blocked stone windows, re-used ashlar, mortared walls, and various patches of former buildings. Slight evidence of earthworks in vicinity.	611-614	Low	Moderate – important surviving remains of cottages forming part of Whitefield Syke Mill.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10358			Washfold Hill: Whitefield Syke Mill Reservoir	399786	454878	Reservoir	Post Medieval	Large reservoir, steep banks to south side (5m+) with N edge quarried into slope. East side is now almost completely infilled from spoil - supposedly debris deposited after 1977 floods. Deliberate breach on W side, now nearly dry. On 1854 Estate Map.	615,616, 651-3	Low	Low/Moderate – important for understanding water management serving Whitefield Syke Mill.
10359			Stonycliff Bottom: Coal Mining Site	399857	454888	Mine	Post Medieval	Collapsed level on N end and a large flattened wagon way along N side of the beck on spoil embankment including reused timber sleepers visible in edge of wagon way. This leads to a large tongue of spoil to S, revetted on E side with stone wall.	617-628,632-637, 651-3	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10360			Stonycliff Bottom: Causeway Bridge	399882	454848	Causeway Bridge	Post Medieval	A long thin causeway across beck, probably for foot traffic.	629-631	Low	Low/Moderate – important in understanding routeways across the landscape.
10361			Deer Gallows: Coal Shaft	400001	455582	Shaft Mound	Post Medieval	A small shaft with low spoil collar, not very substantial. Probably short-lived coal extraction. A level is shown to SW on 1854 Estate Map, but not seen; may relate to this shaft.	667-669	Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10362			Stoneycliff Brow: Stone Revetment Wall	399273	455321	Wall	Post Medieval	A section of stone retaining wall (drystone construction, uneven courses) along N edge of large group of hollow ways, presumably to retain against collapses into beck.	682-686	Low	Low/Moderate – important in understanding routeways across the landscape.
10363			Stoneycliff Brow: Level Entrance	399393	455204	Adit	Post Medieval	Deep down in ravine of beck, a finger of spoil probably leading from a collapsed level associated with a rudimentary bridge across the beck to the S. Probably relates to shafts to north (10181,2). On 1854 Estate Map as 'level'.	698-704	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10364			Brass Castle: Carved Stone	399237	455117	Carved Stone	Post Medieval	A rectangular carved stone with a pecked and square recessed top, perhaps a column base? Clearly dropped during transportation from quarries to N. c.0.6m by 0.5m by 0.2m.	705-6	Medium	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10365			Brass Castle: Quarry	399273	455225	Quarry	Modern	Small teardrop-shaped quarry on W side of hollow ways, perhaps localised stone extraction for track repair.		N/A	N/A
10366			Deer Gallows: Coal Shaft	399396	455551	Shaft Mound	Post Medieval	Small shaft, probably coal extraction, c.3m diameter by 2m deep. Spoil collar mainly to S.	746-8	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10367			Embsay Moor: Quarry (Staynrig)	400385	456018	Quarry	Post Medieval	Quarrying and small structure. Structure has single face of uncoursed stones with no mortar. Two walls survive, utilises natural rock face. Large group of delves and scoops/pits focus on this point. Abandoned posts, rock with drill mark imply c.19th century working.	752-767	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10368			Embsay Moor: Quarry (Staynrig)	400551	456150	Quarry	Post Medieval	N-S aligned access track to worked faces within a large mushroom shaped working area. Retaining walls to track, quarryman's hut (ruined) on W side, with a doorway pivot stone. Massive piles of quarry waste to S. Possible shaft in centre.	768-779	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10369			Embsay Moor: Structure	400820	456757	Structure	Post Medieval	Remains of a stone structure with only a T-shaped arrangement of walls surviving. Outlines of other walls in the area suggest it was more substantial. Roughly built, perhaps a small shelter for workers on adjacent pits? On 1854 Estate Map.	788-790	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10370			Fairies Chest: Walkers Cairn	399022	456366	Cairn	Modern	Modern walkers cairn, reusing some of the stone from earlier buildings to N. On 1854 Estate Map as 'Shepherd Guide'.	535	Low	Low – feature quite common.
10371			West Harts Hill: Quarry	399284	456063	Quarry	Post Medieval	Small quarry accessed by a short track running E from 10179. Comprises low water-filled pit c.2m diameter and 1m deep, surrounded by low banks of spoil.	602-6	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.
10372			Embsay Moor: Carved Stone	400459	455063	Carved Stone	Modern	Carvings of a face in profile on rocks at Embsay Crag; similar carvings were also seen on rocks at Brass Castle. There are lots of early carvings on rocks also including names and dates from the c.19th century or earlier.	657-660	Low	Moderate – evidence for the population that once exploited the moor.
10373			Deer Gallows: Carved Stone	399864	455620	Carved Stone	Post Medieval	Carved names on surface of rock at Deer Gallows reading 'TH SHACKOCK AND CR KNOWLES FEB 1763'.	670-672	Low	Moderate – evidence for the population that once exploited the moor.
10374			Three Brothers: Quarry	399172	455293	Quarry	Post Medieval	Possible low level quarrying activity at Three Brothers, some piles of worked stone and sharp rock faces.	711	Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10375			Washfold Hill: Whitefield Syke Mill Reservoir	399747	454929	Reservoir	Post Medieval	Small reservoir above larger example 10358 - depicted on 1854 Estate Map. Associated with Whitefield Syke Mill.		Low	Low/Moderate – important for understanding water management serving Whitefield Syke Mill.
10376			Stirton Pit Head	399426	456176	Mine Building	Post Medieval	Approximate position of three rectangular buildings shown on 1854 Estate Map. Labelled as Stirton Pit Head - suggest coal mine buildings. One-L-shaped and two rectangular. No longer extant.		N/A	N/A
10377	MYD3938	46411	Hellfield Crag: Cliffords Tower/ New Hall	398411	456542	Hunting Lodge	Medieval	Hunting lodge. On 1854 Estate Map as 'Cliffords Tower' and shown as a rectangle aligned NE-SW. Recorded by the 1st Ed OS map associated with the name 'New Hall'. Constructed c.1600. No trace during survey.		Low	Low/Moderate – feature may have been completely removed although sub-surface remains may still exist.
10378			Brown Bank Brow: Monastic Boundary Stone	400715	457561	Boundary Stone	Medieval	Site of boundary stone on 1854 Estate Map and OS mapping. Not seen in survey. Marked as earth fast boundary stone with three x's.		N/A	N/A
10379			Brown Bank Brow: Monastic Boundary Stone	400434	457746	Boundary Stone	Medieval	Site of boundary stone on 1854 Estate Map and OS mapping. Not seen in survey. Marked as 'grey mare', and visible on aerial photographs.		N/A	N/A

Survey UID	Mon UID	NMR No.	Name	Easting	Northing	Monument Type	Period	Site description	Digital Photo	Vulnerability	Significance
10380			Lumb Gill Head: Monastic Boundary Stone	401162	457108	Boundary Stone	Medieval	Site of boundary stone recorded on 1854 Estate Map. Not identified during survey. Depicted as having a cross on the top and an x on the side.		N/A	N/A
10381			Deer Gallows: Level Entrance	400127	455608	Adit	Post Medieval	Position of a level on 1854 Estate Map, and visible as a low earthwork. Probable drainage level, for 10250.		Low	Moderate – evidence of resource exploitation therefore important for understanding the development of the moor although fairly common.

**APPENDIX B:
DEFINITIONS OF HAGG**

Joint Nature Conservation Committee (2011) *Towards an assessment of the state of UK peatlands*, JNCC rep. 445, 21

'...the pattern by which a degraded or bare peatland erodes. Gullies are fluvial erosion channels which cut into a peat mass, resulting in loss of peat and significant dehydration of adjacent in situ peat. They are naturally occurring features of peatlands, and occur where blanket peat spreads to the heads of valleys. However, they also occur where artificial drainage features become eroded, and where other pressures such as wildlife, overgrazing or pollution reduce vegetation cover and exacerbate erosion. As gullies erode and branch, adjoining gullies can meet. This does result in isolated 'islands' of peat called '**haggs**.'

www.snh.org.uk/publications/on-line/heritagemanagement/uplandpathwork/gloss_terms.shtml
accessed 09/10/13

'Hags-small islands or banks of peat: formed by the surrounding ground eroding away by water, feet or grazing.'

www.mindat.org/glossary/peat_hag accessed 09/10/13

'A pit or quag formed by digging out peat.'

Stevenson A and Waite M (Eds) (2011) *Concise Oxford English Dictionary (Luxury Version)* (12th Ed.), OUP, Oxford

'Hag: A soft place on a moor or a firm place in a bog.'

Natural England (2013) *The Impacts on the Integrity and Hydrological Function of Blanket Peat* (NEER002)

'Hagg-natural gully in a bog.'

REFERENCES

- Dincauze, D. F. (2000) *Environmental Archaeology: Principles and Practice*, CUP, Cambridge.
- English Heritage (2007) *Understanding the Archaeology of Landscapes*.
- English Heritage (2008) *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*.
- Institute of Geological Sciences (1977) *Geological Survey Ten-Mile Map, South Sheet, Quaternary*.
- Institute of Geological Sciences (1979) *Geological Survey Ten-Mile Map, South Sheet, Solid*.
- Jarvis, R. A., Bendelow, V. C., Bradley, R. I., Carroll, D. M., Furness, R. R., Kilgour, I. N. L. and King, S. J. (1984) *Soils and Their Use in Northern England Soil Survey of England and Wales Bulletin No. 10*.
- Joint Nature Conservation Committee (2011) *Towards an assessment of the state of UK peatlands*, JNCC rep. **445**.
- Lunnon, C. (2013) Brief produced by the Upper Wharfedale Heritage Group (UWHG) for Matthew Town, Northern Archaeological Associates Ltd. in response to request of 19th February 2013 regarding peatland restoration work on Barden Moor. Unpublished report.
- Natural England (2013) *The Impacts on the Integrity and Hydrological Function of Blanket Peat* (NEER002).
- Northern Archaeological Associates (NAA) (2012) *Barden Moor, North Yorkshire, Peatland Restoration Works, Rapid Archaeological Survey and Assessment of Palaeoenvironmental Potential: Project Design and Fee proposal*, unpublished client report.
- O' Connor, T. and Evans, J. G. (2005) *Environmental Archaeology: Principles and Methods* (2nd Ed.), Sutton, Stroud.
- Pilcher, J. R. and Hall, V. A. (1996) *Tephrochronological Studies in northern England, The Holocene*, **6(1)**: 100-105.
- Raistrick, A. (1973) *Industrial Archaeology: An Historical Survey*. Paladin, St Albans.

Sheard, J. M. (2007) *Bolton Abbey: The Yorkshire Estate of the Dukes of Devonshire*. Amadeus Press: Cleckheaton.

Soil Survey of England and Wales (1983) *Soils of England and Wales Sheet 1: Northern England*.

Stevenson, A. and Waite, M. (Eds) (2011) *Concise Oxford English Dictionary* (Luxury Version) (12th Ed.), OUP, Oxford.

Swindles, G. T., Vleeschouwer F. and Plunkett G. (2010/11) Dating peat profiles using tephra: stratigraphy, geochemistry and chronology, *Mires and Peat*, **7:05**, 1-9 accessed via <http://www.mires-and-peat.net/>

Vleeschouwer, F., Cambers, F. M. and Swindles, G. T. (2010/11) Coring and sub-sampling of peatlands for palaeoenvironmental research, *Mires and Peat*, **7:01**, 1-10 accessed via <http://www.mires-and-peat.net/>.

Whitaker, T. D. (1878) *The History and Antiquities of the Deanery of Craven in the County of York*. 3rd Edition. Leeds and London.

Yorkshire Dales National Parks Authority (YDNPA) (2012) *Bolton Abbey Estate, Barden Moor, North Yorkshire, Peat Restoration and Grip Blocking Works: Brief for Historic Environment Survey and Palaeoenvironmental Assessment*. Ref. EYD7759.

Cartographic References

Beatty, J. (1843) Sketch of Burnsall and Barden Moors showing the settlement of the disputed boundary between those townships, 19th July 1843.

M. W. Wrighton (1854) Estate Map 'Plan of Embsay, Eastby, Halton of Barden Moor in the Parish of Skipton in the County of York'.

Ordnance Survey (1853) First Edition 6-inch Map, Sheet 151.

Ordnance Survey (1896) Second Edition 6-inch Map, Sheet 151.

Ordnance Survey (1909-10) Third Edition 6-inch Map, Sheet 151.

Internet References

Allaby M (1998) 'Sub-atlantic' A Dictionary of Plant Sciences, Encyclopedia.com (encyclopedia.com) accessed 08/10/13.

archaeologydataservice.ac.uk/ accessed on 04/10/13.

www.domesdaybook.co.uk/ accessed on the 04/10/13.

jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0030033 accessed on 08/10/13.

jncc.defra.gov.uk/protectedsites accessed on 08/10/13.

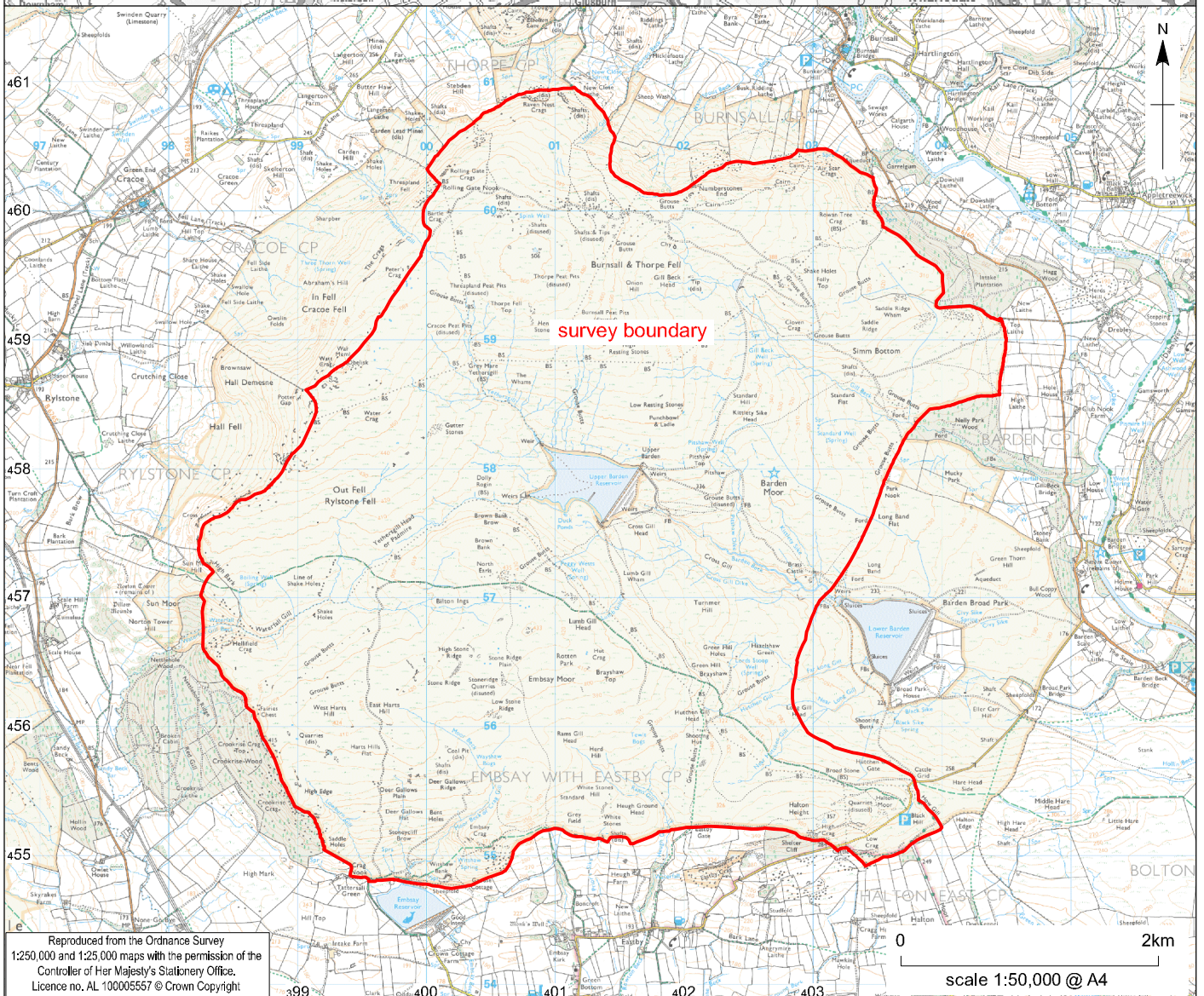
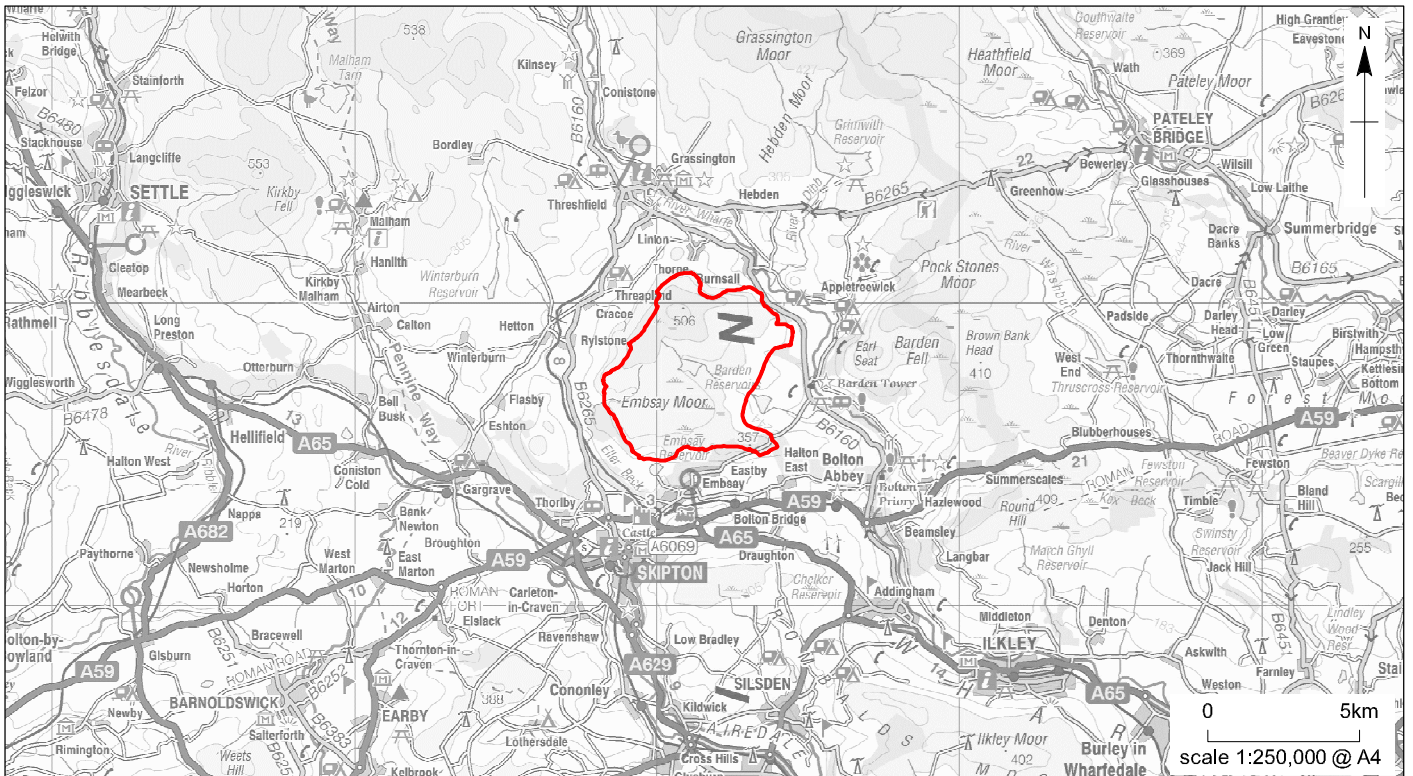
www.eng-h.gov.uk/mpp/mcd/rc.htm - English Heritage Monument Class Description accessed on 04/10/13.

www.mindat.org/glossary/peat_hag accessed 09/10/13.

www.mires-and-peat.net/ accessed on 08/10/13.

www.snh.org.uk/publications/on-line/heritagemanagement/uplandpathwork/gloss/terms.shtml accessed 09/10/13.

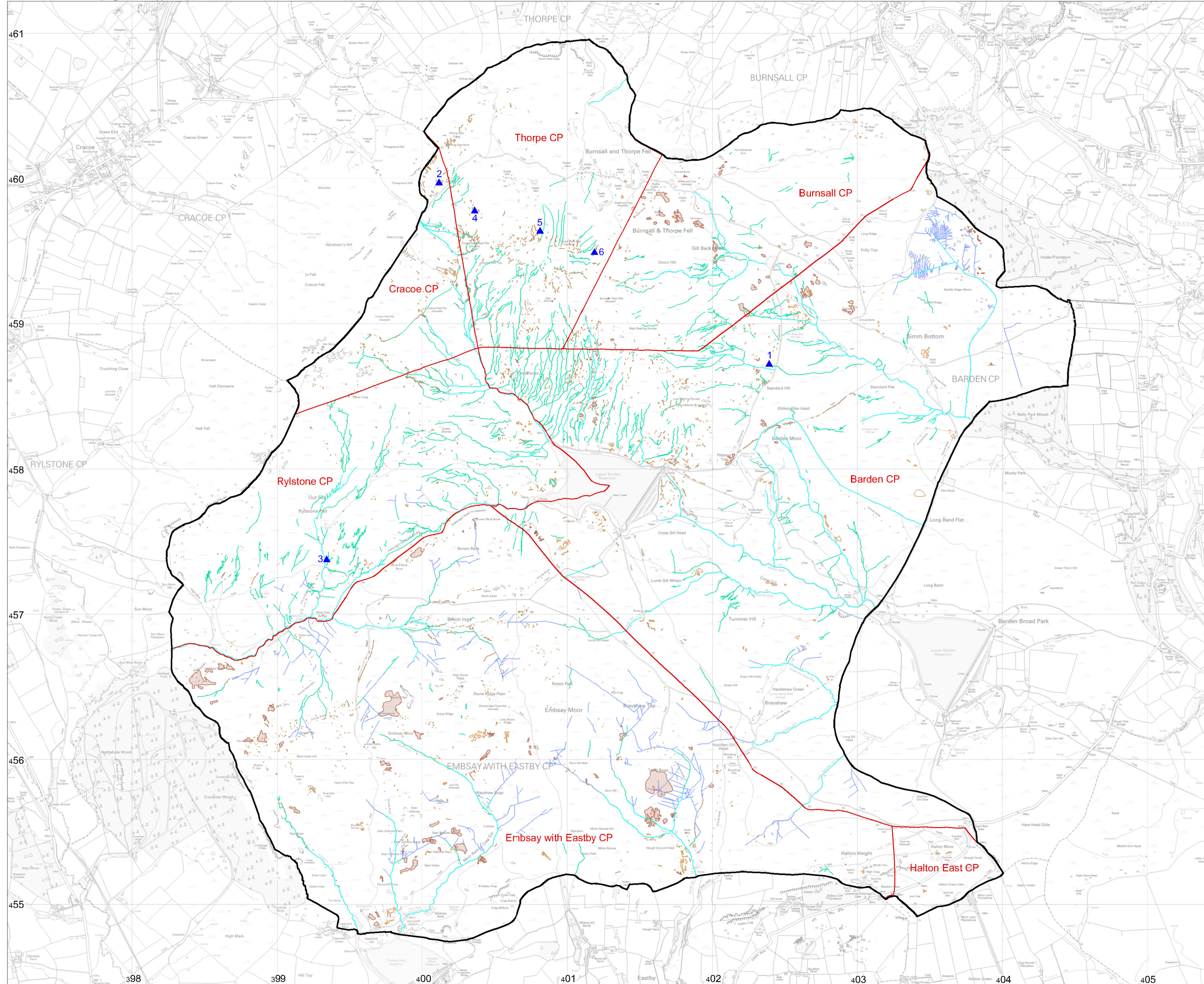
www.tephrabase.org/ accessed on 08/10/13.



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Barden Moor: site location

Figure 1



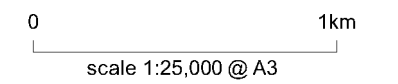
YORKSHIRE DALES NATIONAL PARK PEAT RESTORATION PROJECT

SITE Barden Moor

TITLE
Figure 2: parish boundaries, peat deposits and peat sample locations

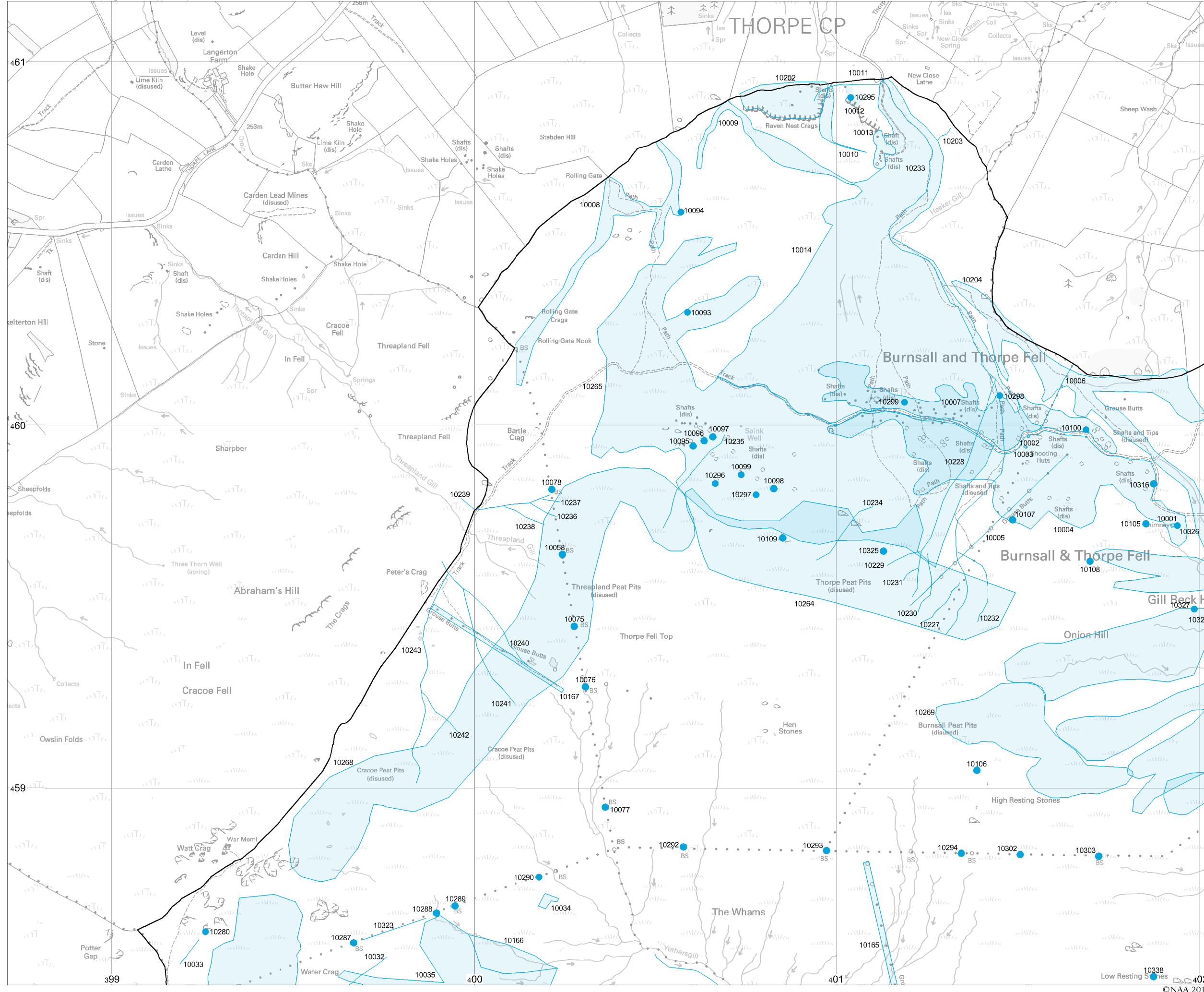


SCALE



KEY

- survey boundary
- parish boundary
- bare peat
- grips
- gullies
- hags
- micro erosion
- water courses
- peat sample location

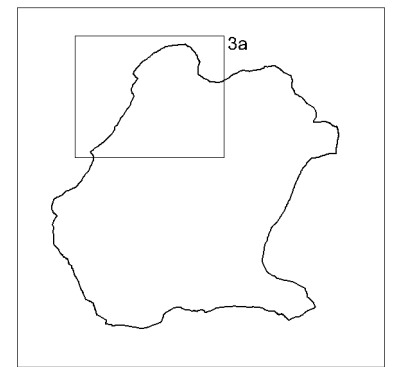


YORKSHIRE DALES NATIONAL PARK PEAT RESTORATION PROJECT

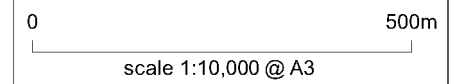
SITE Barden Moor

TITLE
Figure 3a: surveyed sites

LAYOUTS



SCALE



KEY

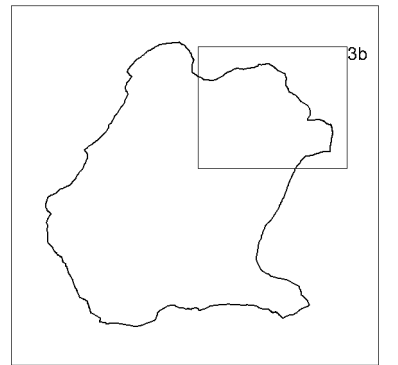
- survey boundary
- surveyed sites

YORKSHIRE DALES NATIONAL PARK PEAT RESTORATION PROJECT

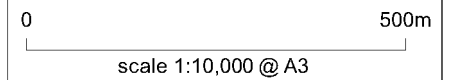
SITE Barden Moor

TITLE
Figure 3b: surveyed sites

LAYOUTS

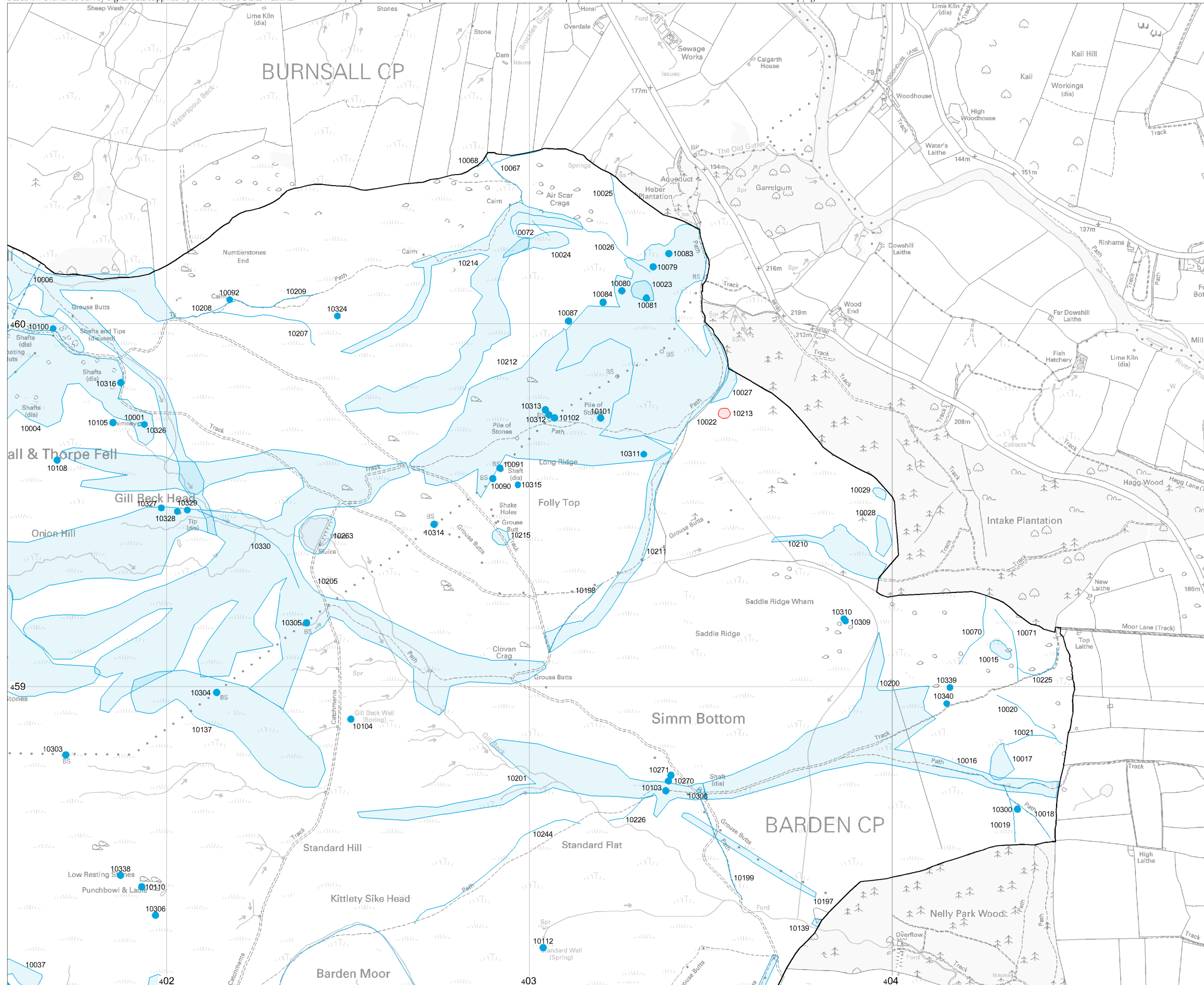


SCALE



KEY

- survey boundary
- surveyed sites
- site within red buffer zone

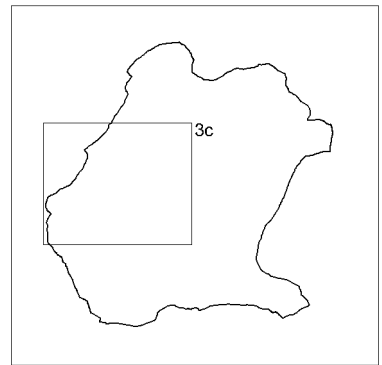


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NATIONAL PARK
PEAT RESTORATION PROJECT**

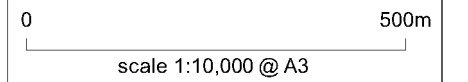
SITE Barden Moor

TITLE
Figure 3c: surveyed sites

LAYOUTS

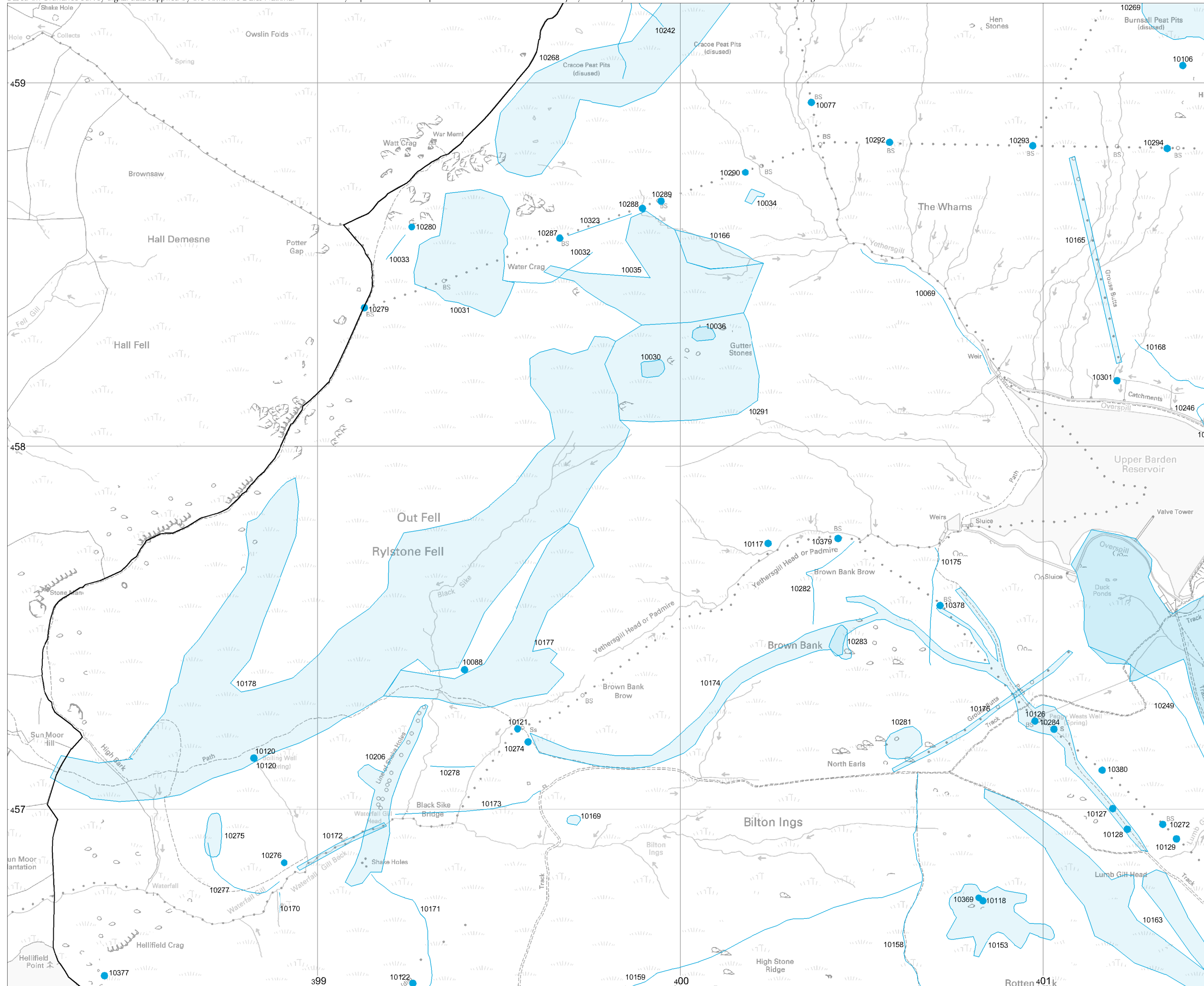


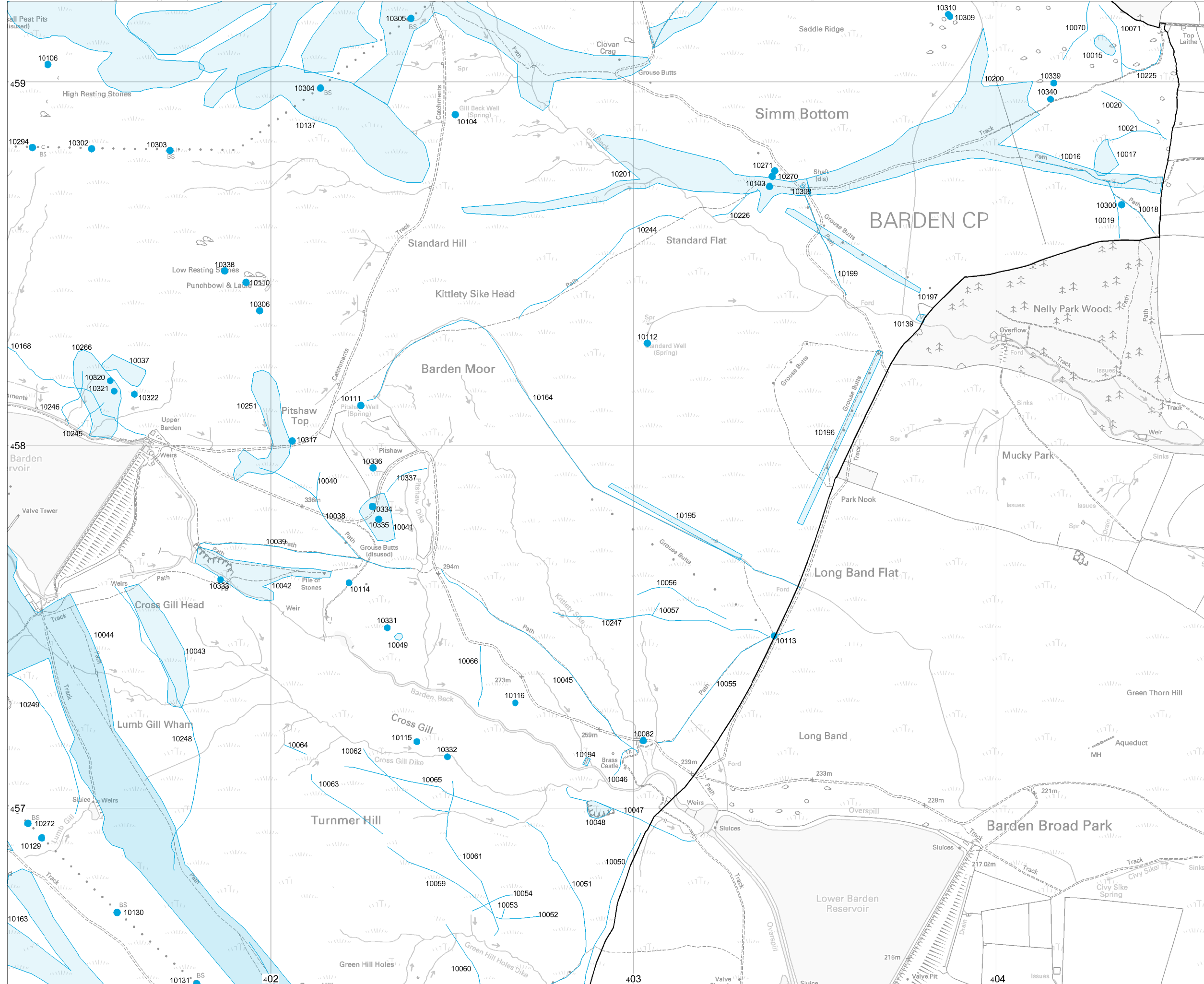
SCALE



KEY

- survey boundary
- surveyed sites



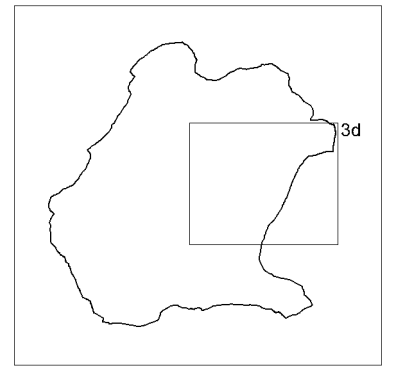


YORKSHIRE DALES NATIONAL PARK PEAT RESTORATION PROJECT

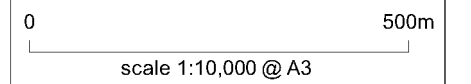
SITE Barden Moor

TITLE
Figure 3d: surveyed sites



LAYOUTS

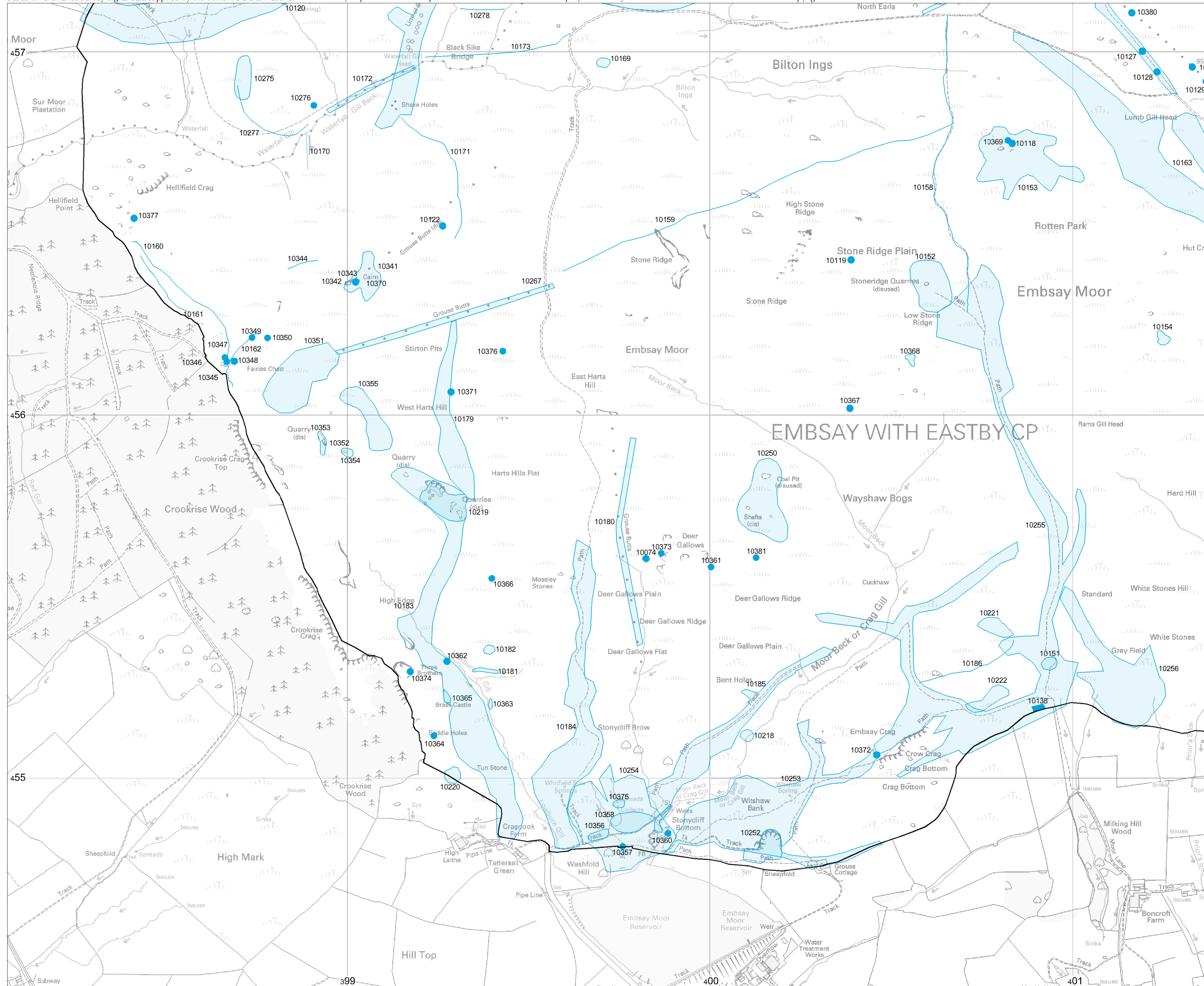


SCALE



KEY

-  survey boundary
-  surveyed sites

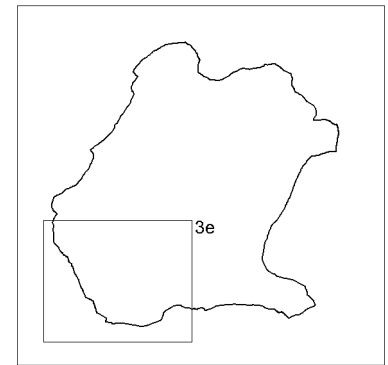


YORKSHIRE DALES NATIONAL PARK PEAT RESTORATION PROJECT

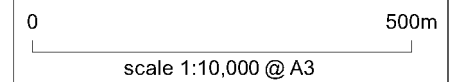
SITE Barden Moor

TITLE
Figure 3e: surveyed sites

LAYOUTS

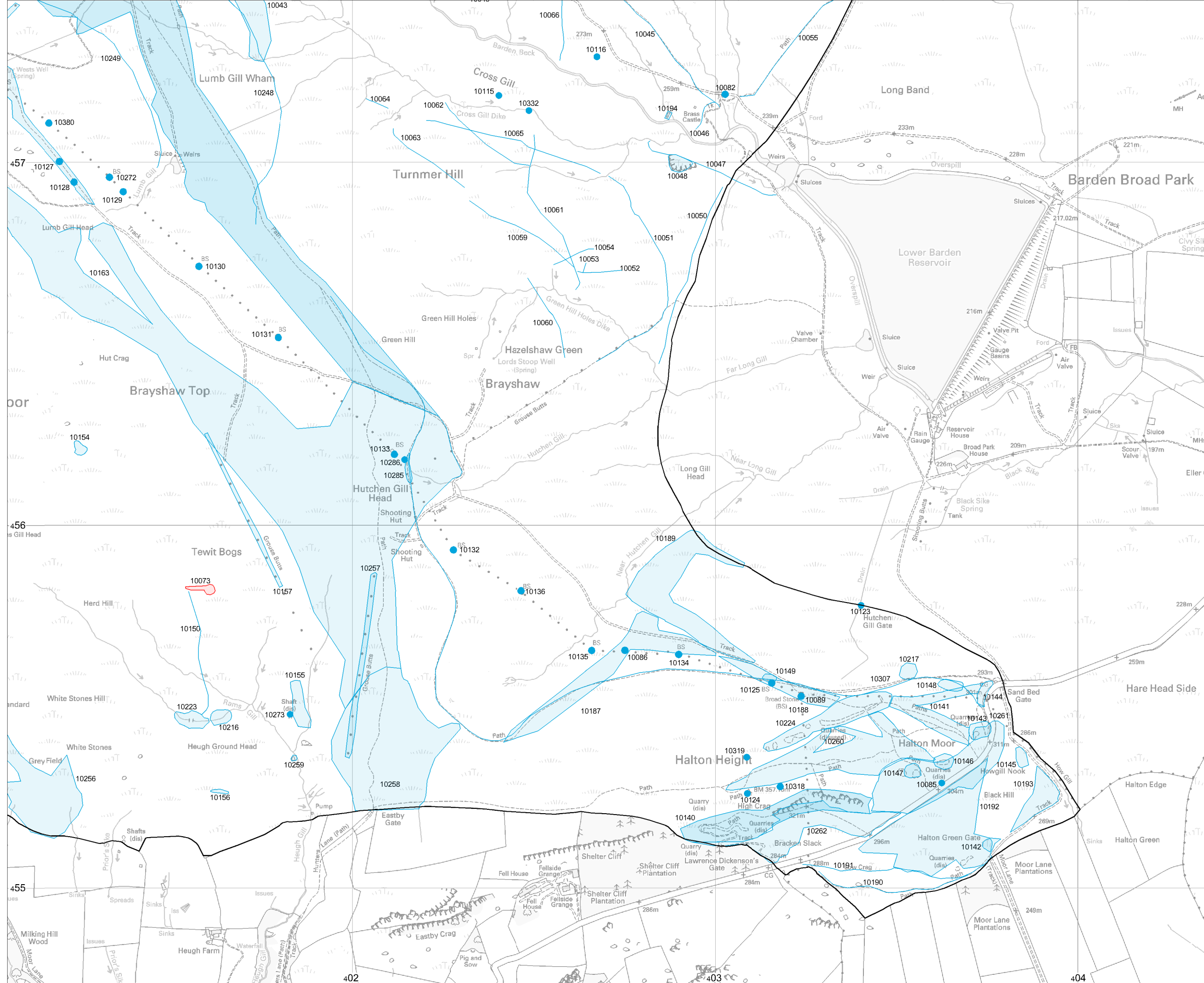


SCALE



KEY

- survey boundary
- surveyed sites

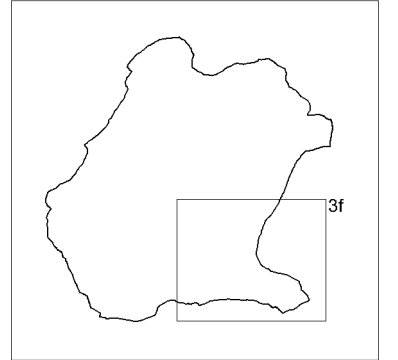


YORKSHIRE DALES NATIONAL PARK PEAT RESTORATION PROJECT

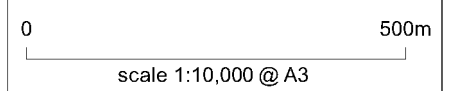
SITE Barden Moor

TITLE
Figure 3f: surveyed sites

LAYOUTS

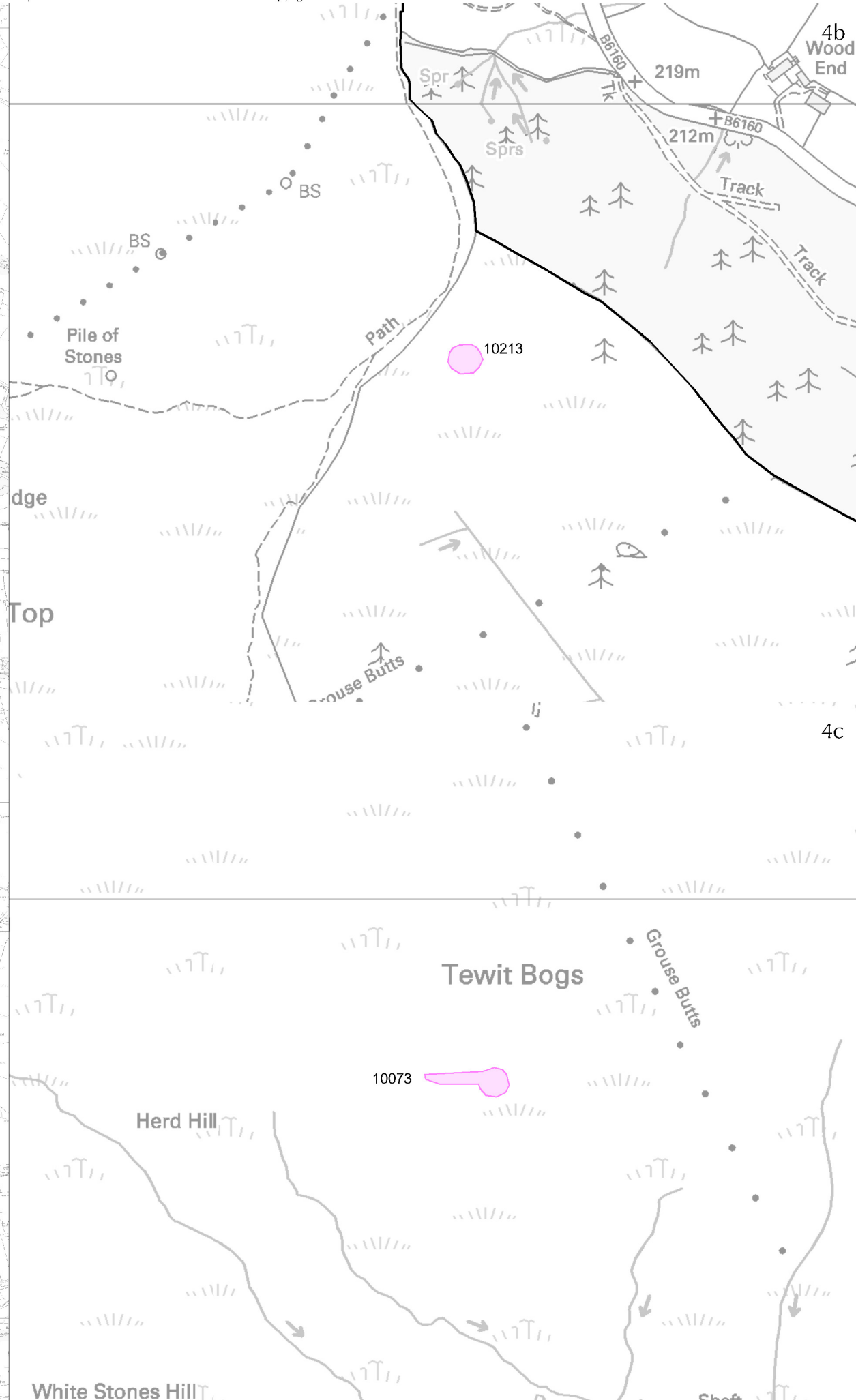
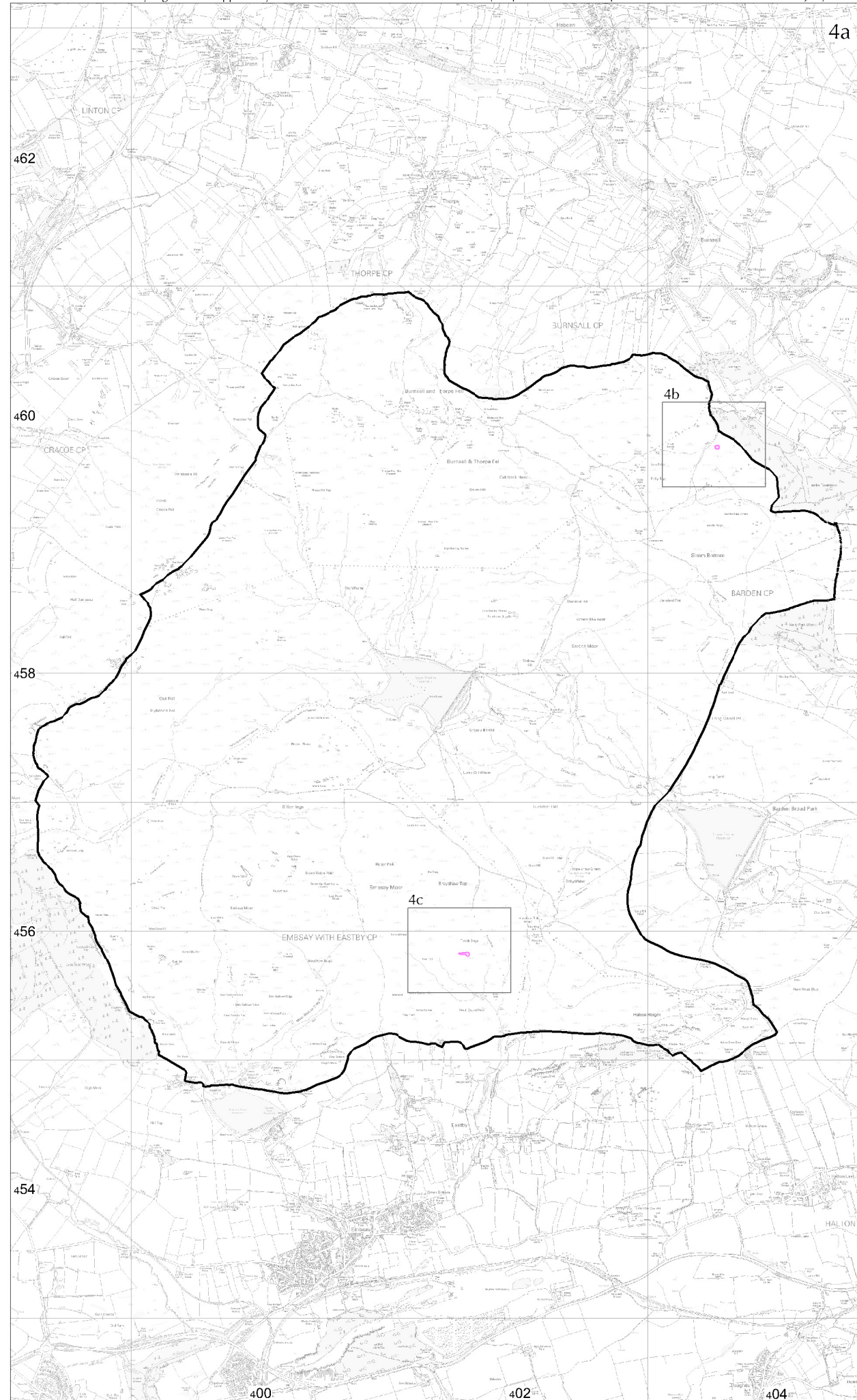


SCALE



KEY

- survey boundary
- surveyed sites
- site within red buffer zone



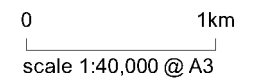
YORKSHIRE DALES NATIONAL PARK PEAT RESTORATION PROJECT

SITE Barden Moor

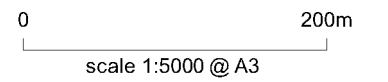
TITLE
Figure 4: prehistoric sites



SCALE (4a)



SCALE (4b and 4c)



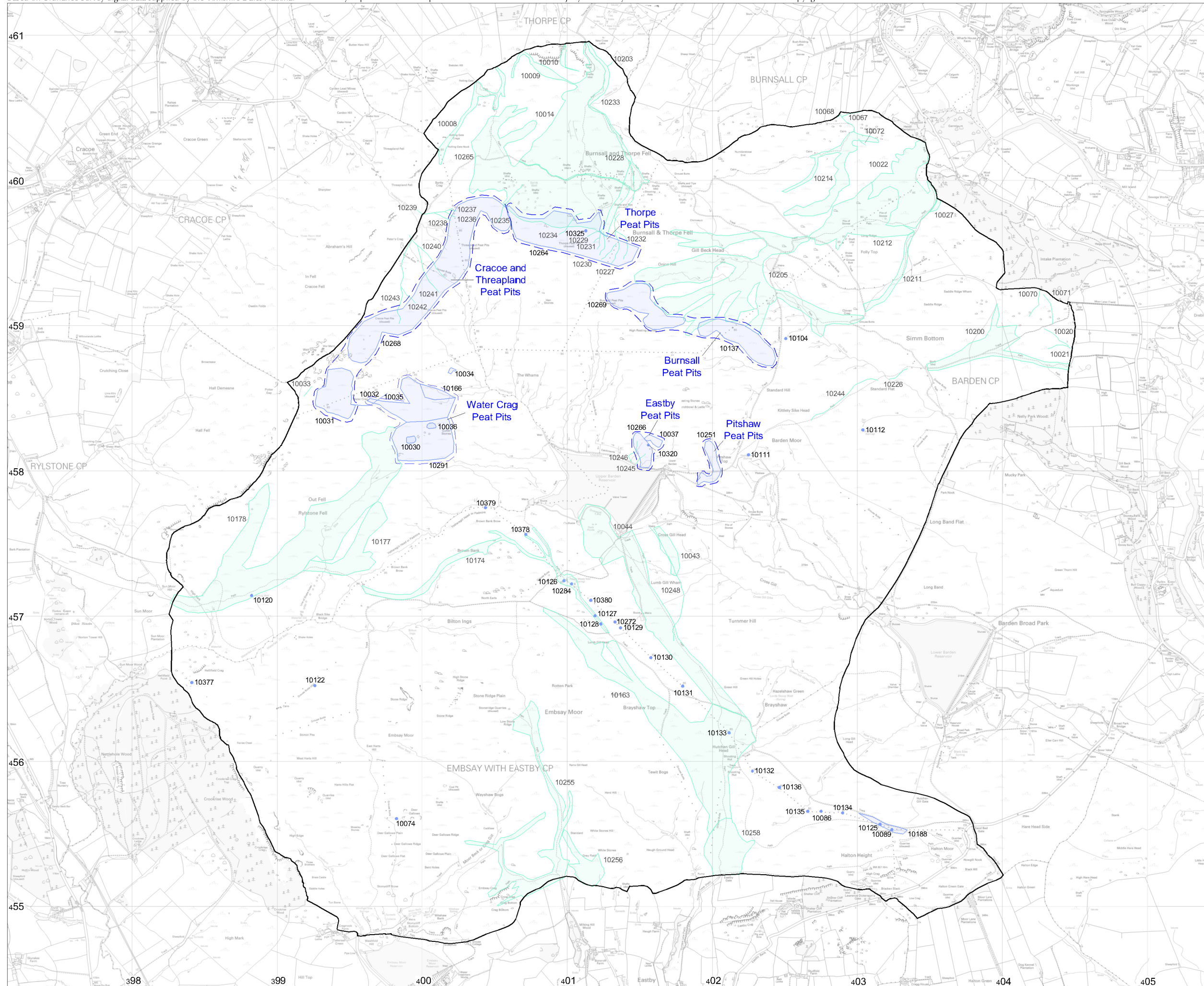
KEY

- survey boundary
- surveyed sites: prehistoric

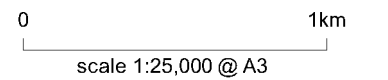
YORKSHIRE DALES NATIONAL PARK PEAT RESTORATION PROJECT

SITE Barden Moor

TITLE
Figure 5: medieval sites



SCALE



KEY

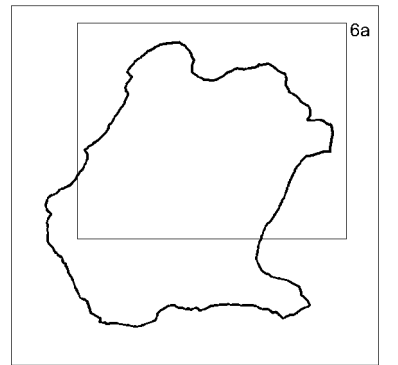
- survey boundary
- surveyed sites: medieval
- hollow ways and trackways

YORKSHIRE DALES NATIONAL PARK PEAT RESTORATION PROJECT

SITE Barden Moor

TITLE
Figure 6a: post-medieval

LAYOUTS



6a

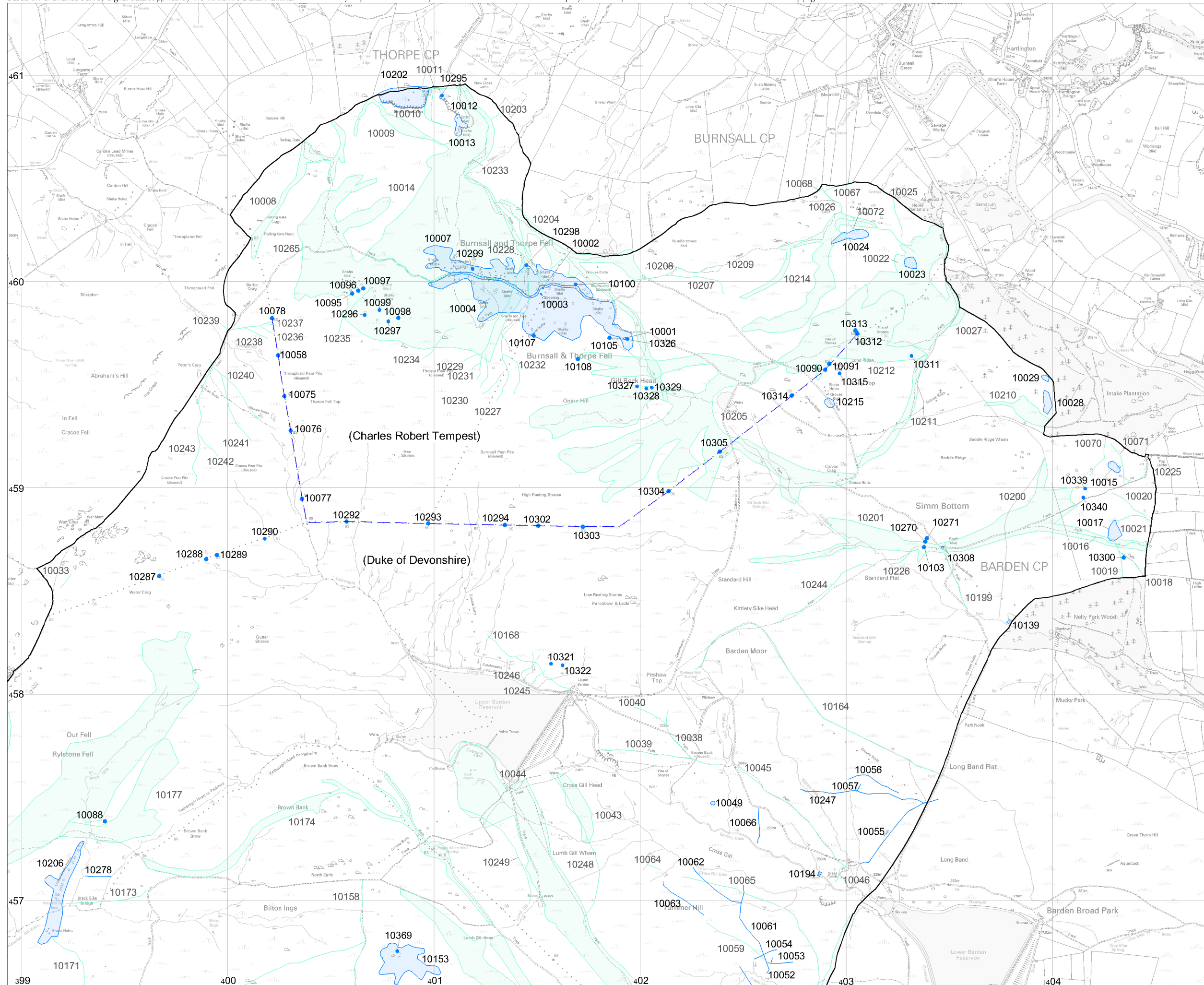


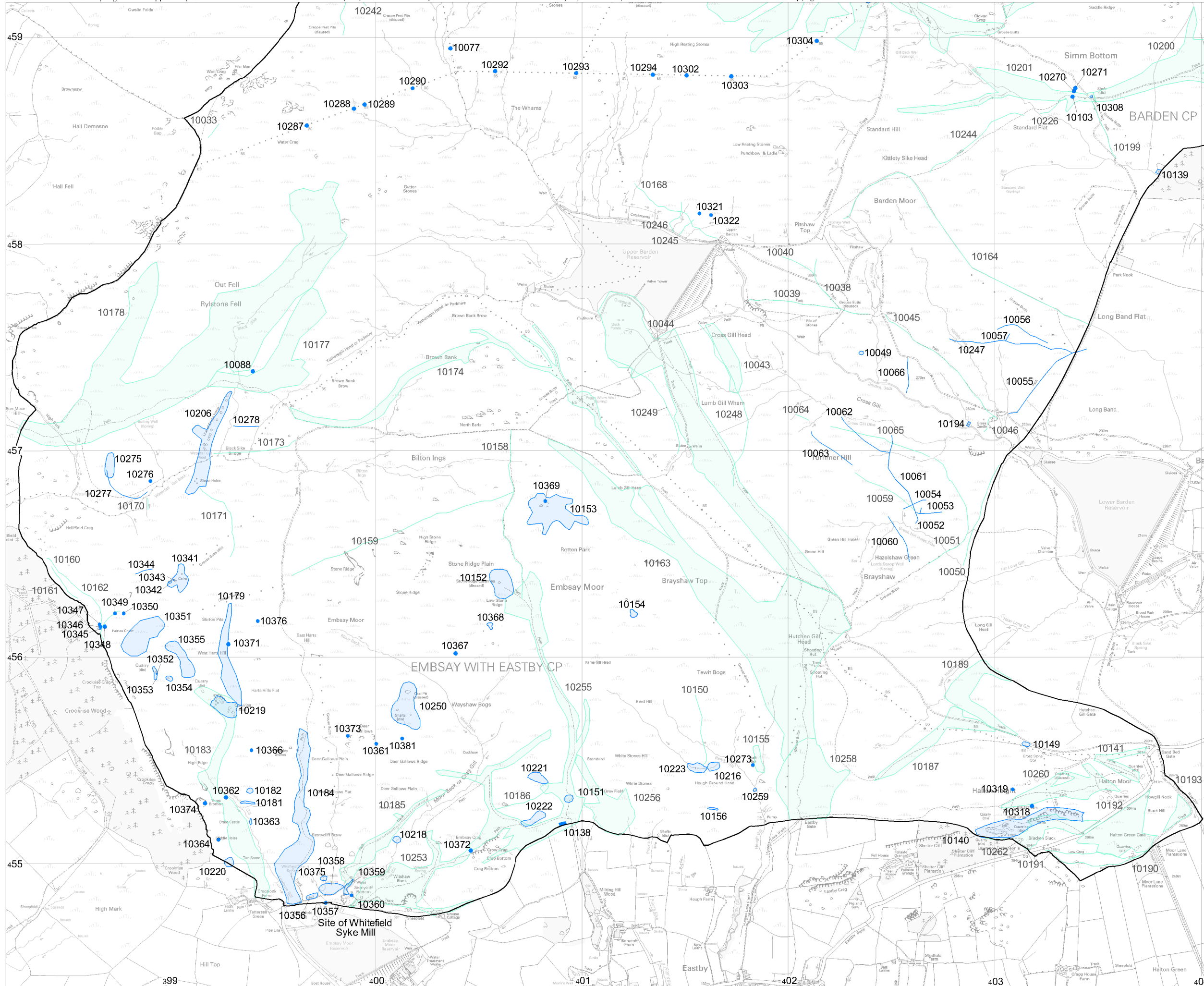
SCALE



KEY

- survey boundary
- surveyed sites: post-medieval
- ▭ hollow ways and trackways



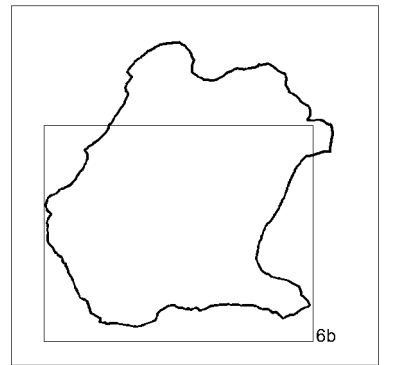


YORKSHIRE DALES NATIONAL PARK PEAT RESTORATION PROJECT

SITE Barden Moor

TITLE
Figure 6b: post-medieval

LAYOUTS



SCALE



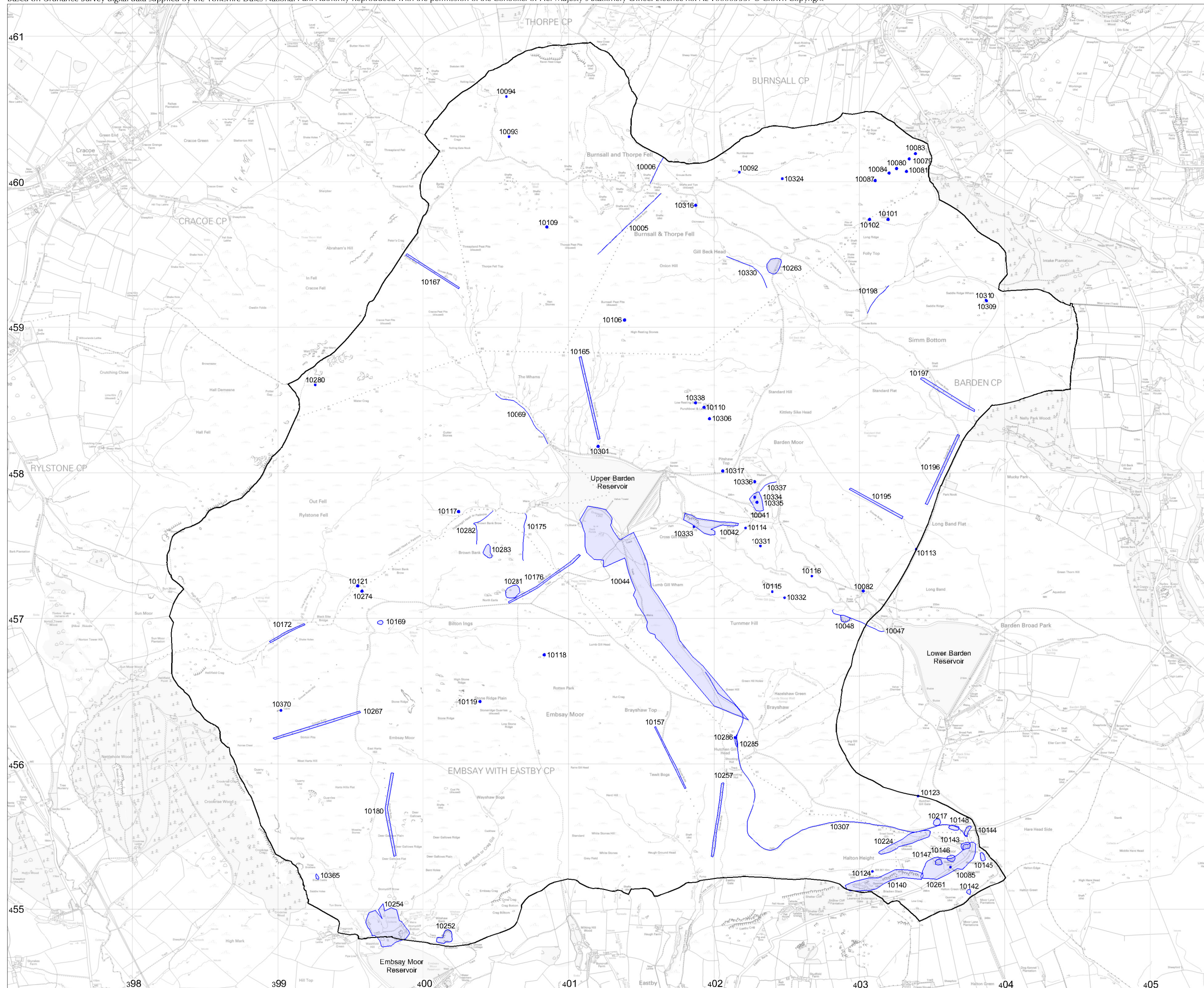
KEY

- survey boundary
- surveyed sites: post-medieval
- hollow ways and trackways

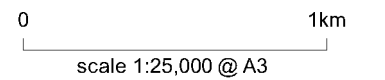
YORKSHIRE DALES NATIONAL PARK PEAT RESTORATION PROJECT

SITE Barden Moor

TITLE
Figure 7: modern sites

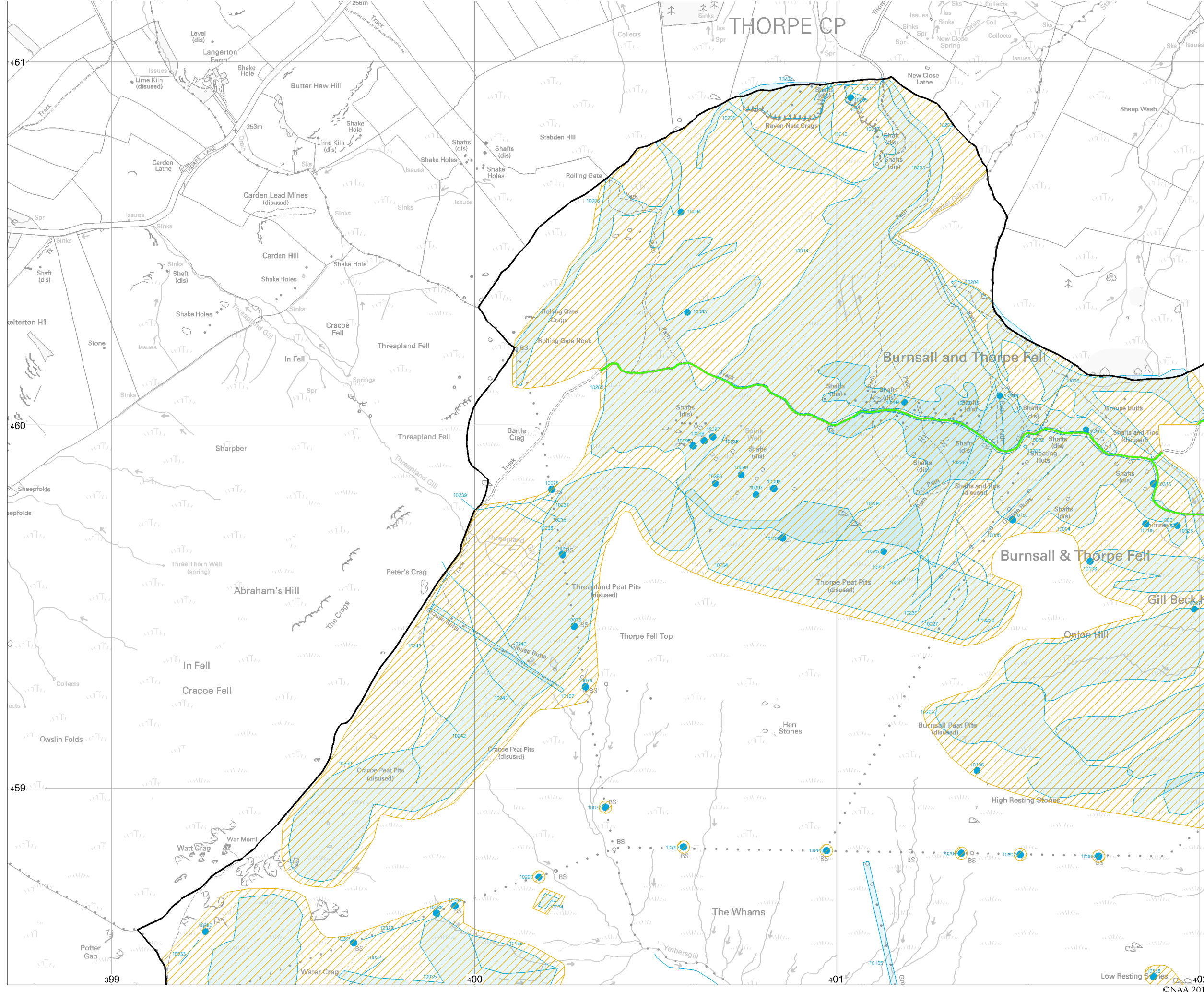


SCALE



KEY

- survey boundary
- surveyed sites: modern

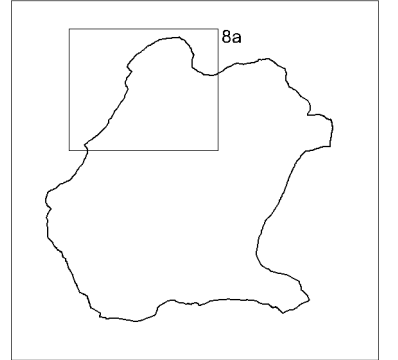


YORKSHIRE DALES NATIONAL PARK PEAT RESTORATION PROJECT

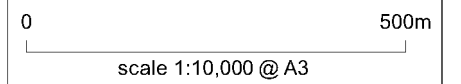
SITE Barden Moor

TITLE
Figure 8a: archaeologically sensitive zones

LAYOUTS



SCALE



KEY

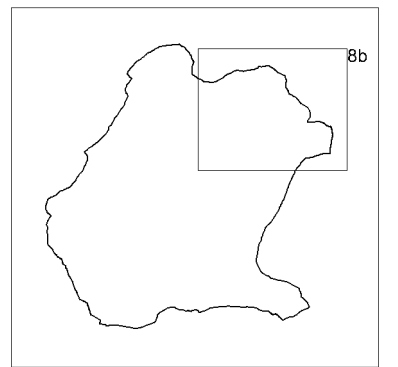
- survey boundary
- surveyed sites
- moderate: avoid
- safe crossing point

YORKSHIRE DALES NATIONAL PARK PEAT RESTORATION PROJECT

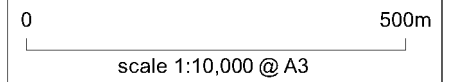
SITE Barden Moor

TITLE
Figure 8b: archaeologically sensitive zones

LAYOUTS

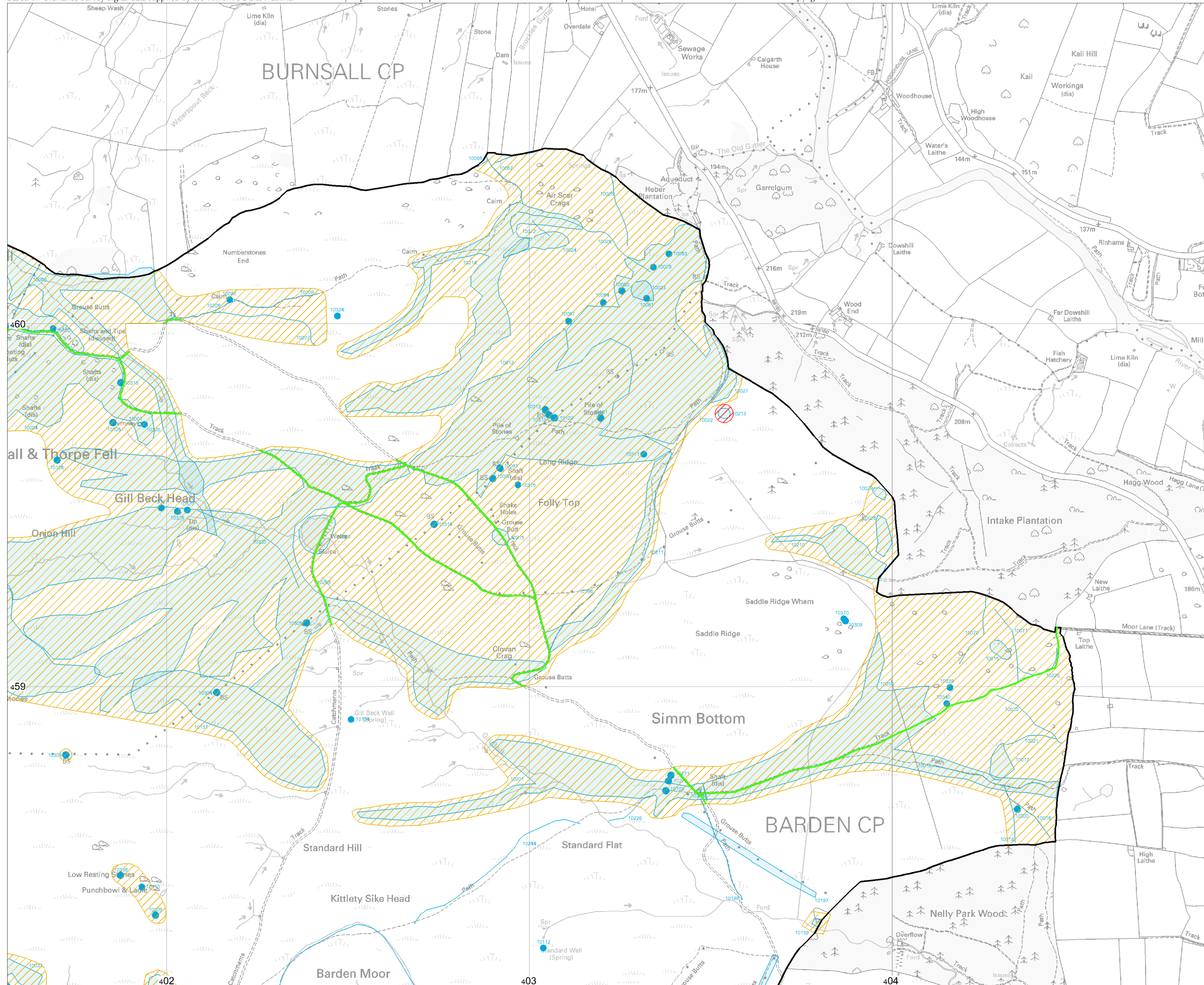


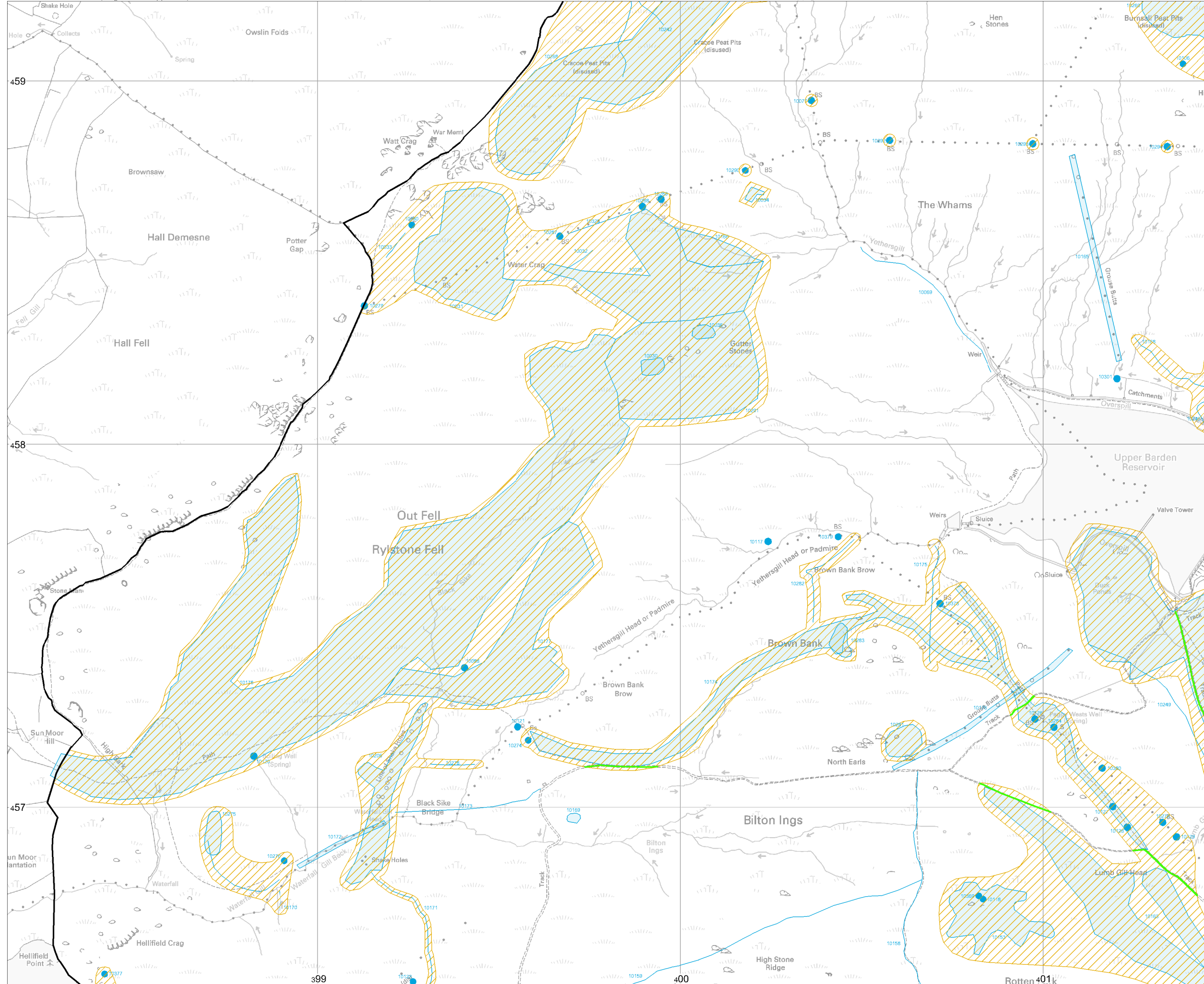
SCALE



KEY

- survey boundary
- surveyed sites
- high: do not cross
- moderate: avoid
- safe crossing point



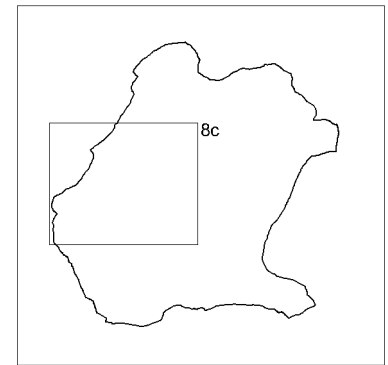


YORKSHIRE DALES NATIONAL PARK PEAT RESTORATION PROJECT

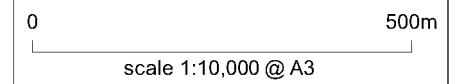
SITE Barden Moor

TITLE
Figure 8c: archaeologically sensitive zones

LAYOUTS

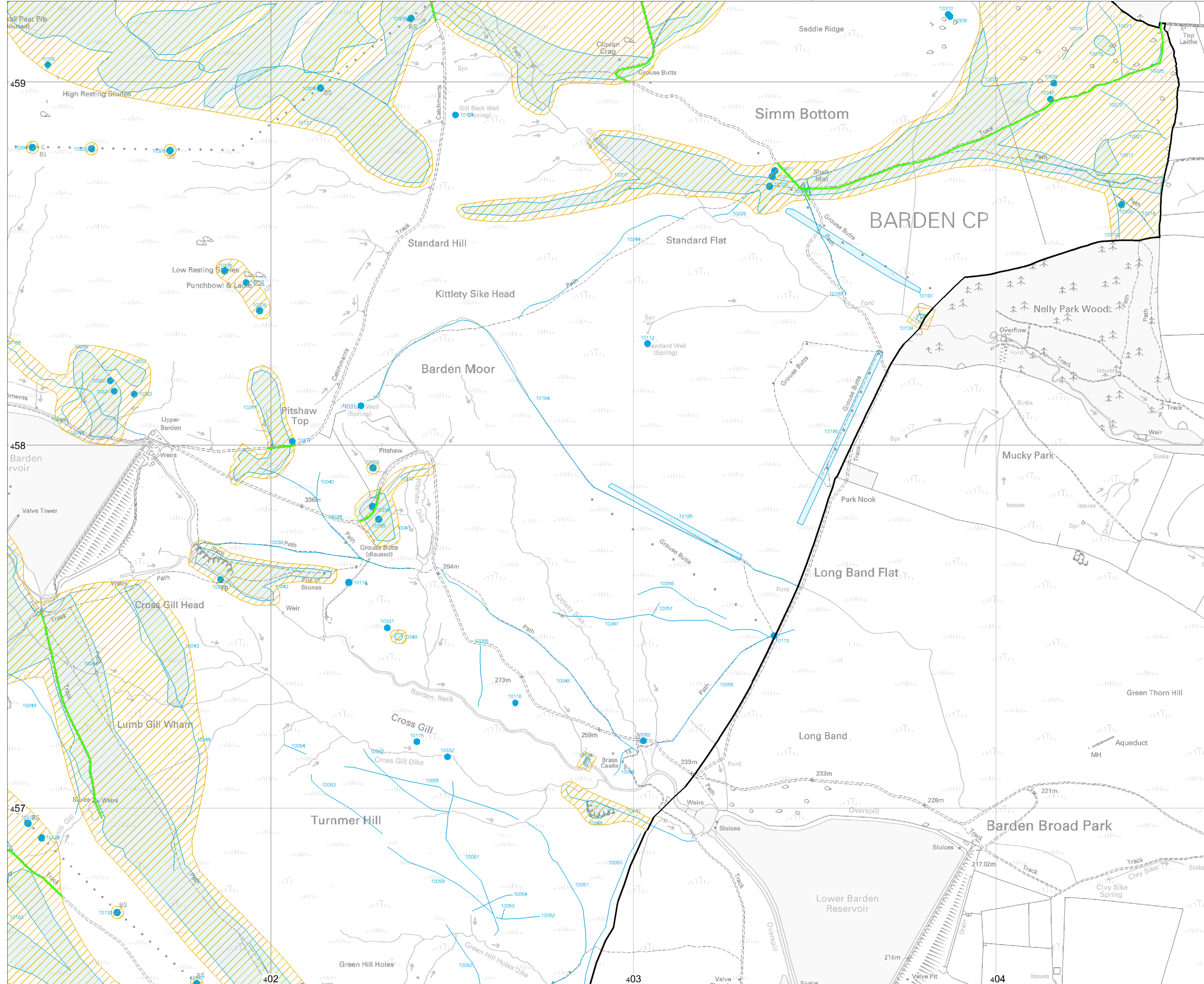


SCALE



KEY

- survey boundary
- surveyed sites
- moderate: avoid
- safe crossing point

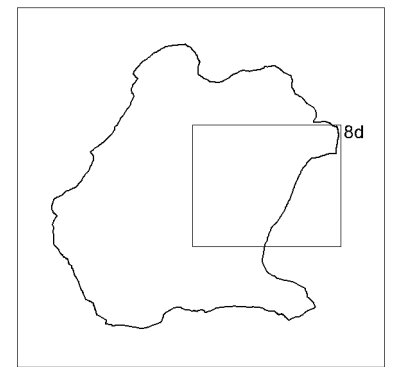


YORKSHIRE DALES NATIONAL PARK PEAT RESTORATION PROJECT

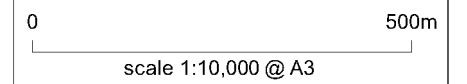
SITE Barden Moor

TITLE
Figure 8d: archaeologically sensitive zones

LAYOUTS

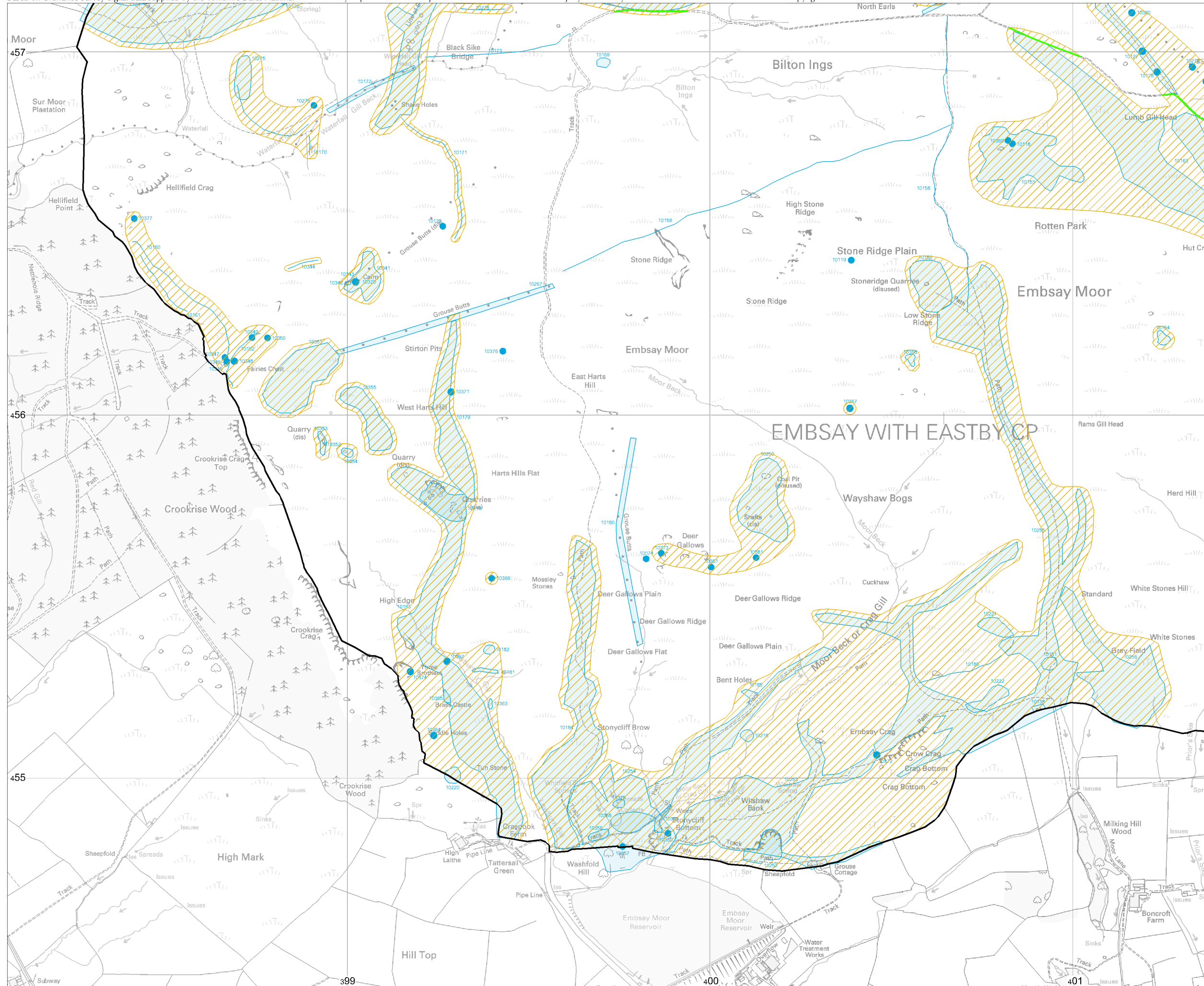


SCALE



KEY

- survey boundary
- surveyed sites
- moderate: avoid
- safe crossing point

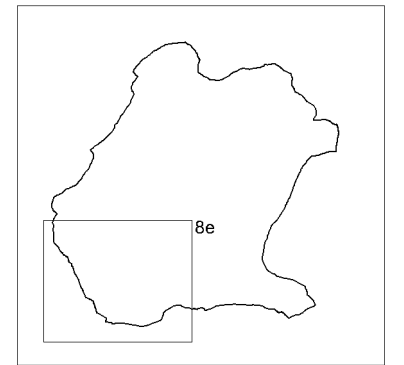


YORKSHIRE DALES NATIONAL PARK PEAT RESTORATION PROJECT

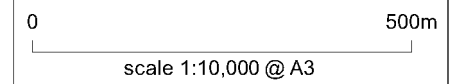
SITE Barden Moor

TITLE
Figure 8e: archaeologically sensitive zones

LAYOUTS



SCALE



KEY

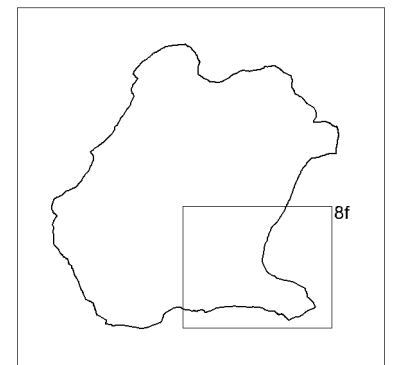
- survey boundary
- surveyed sites
- moderate: avoid
- safe crossing point

YORKSHIRE DALES NATIONAL PARK PEAT RESTORATION PROJECT

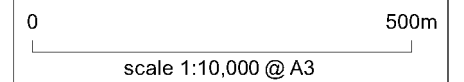
SITE Barden Moor

TITLE
Figure 8f: archaeologically sensitive zones

LAYOUTS



SCALE



KEY

- survey boundary
- surveyed sites
- high: do not cross
- moderate: avoid
- safe crossing point

