

# Cowburn Rigg, Northumberland

5th to 9th June 2025



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# 1. Acknowledgments

- 1.1. The Level 1 Landscape Survey on Cowburn Rigg Farm from June 5th to 9th 2025 was organised as part of the Hadrian's Wall Wetlands Landscape Recovery Project's integrated programme of training and fieldwork experience for community volunteers. The survey was led by members of Tynedale North of the Wall Archaeology Group (NOWTAG). Access to the farm was by the kind permission of the landowner/farmer, Philip Ballantyne.
- 1.2. Over the course of the 5 days, 26 community volunteers worked in sub-groups to complete a full walkover survey of the entire farm. The following NOWTAG members provided leadership and on-site training for the sub-groups: Phil Bowyer, Ian Cooper, Andy Curtis, Martin Green, and Mike Powell.
- 1.3. Survey participants were: Pete Bennett, Ray Browning, Shiela Cadge, Nick Corbie, Sam Daghish, Willow Daghish, Charlotte Greenwood, Michael Hall, Ian Millward, Janice Millward, Clare Moon, Nick Pepper, Megs Rogers, Nathen Simm, Juliet Simpson, Elaine Vallack, Ben Whittle, Tom Ricalton, David Young, and Lil Young.
- 1.4. We are very grateful of all those whose engagement and support made the survey possible. The volume and detail of survey findings contained in this report demonstrates the great value of such local community engagement in recording and interpreting the historic environment features in our area. The survey is just one of a number of community engagement activities investigating and recording the local historic environment that are being organised under the auspices of the Hadrian's Wall Wetlands Landscape Recovery Project.

Nick Pepper, Landscape Recovery Engagement Officer, Northumberland National Park Authority.  
Phil Bowyer, Chairman, Tynedale North of the Wall Archaeology Group

# 2. Introduction

- 2.1. The farm of Cowburn Rigg (NY 73694 68287) is an interesting narrow tract of land which extends north some 3km from part of Melkridge Common at the base of Winshield Craggs to a sandstone ridge east of Resting Gap. The farm consists of grassland pasture for the rearing of sheep and cattle, improved in the vicinity of the farm but rough pasture further away, in several places only a single field in width. It is flanked by Longsyke and Wealside on the west, and Saughy Rigg on the east.
- 2.2. The summit of Winshield Craggs at 345m marks the highest point along Hadrian's Wall, protected on its north side by the impressive and unscalable Whin Sill escarpment. North of the Cowburn Rigg farm buildings the land is crossed by the valley of the Caw Burn at around 220m. This stream forms the outflow of Greenlee Lough eventually trending southwards to pass through Hadrian's Wall, west of our survey area at Cawfields, and joining the River Tyne near Haltwhistle as the Haltwhistle Burn. North of the burn is a minor west-east oriented escarpment of Swallow Craggs at around 240m after which the land gradually rises to the ridge east of Resting Gap at an altitude of around 260m.



Figure 1. Survey area on OS 1:25,000



Winshield Crags, narrow bands of bedrock run west to east across our area and comprise sandstone (orange) and limestone (blue) of the Tyne Limestone and Alston Formations of the Carboniferous Period (respectively north and south of the Caw Burn). The ridge east of Resting Gap and Swallow Crags, just N of Caw Burn, are the major bands of sandstone and have been locally exploited for building stone. The Dalla Bank Limestone below Winshield Crags, and the Upper Demesne Limestone near the Caw Burn have also been quarried as a source of lime for agricultural improvement. Several probable sow-kilns are documented in the area and there is a disused limekiln near the Caw Burn in our survey area (HER: [N6516](#)), and another to the east near Saughy Rigg (HER: [N6515](#)). The OS maps record both lime kilns and nearby quarries as 'old' or disused by around 1900.

- 2.4. Superficial deposits are chiefly glacial till (diamicton) of the Quaternary Period but there are two areas of peat deposition to the SE of the ridge at Resting Gap, and below Winshield Crags. There is evidence from the latter of its exploitation as a source of fuel ([N32785](#) & [N32788](#)) probably before land-sale coal became readily available in the area.
- 2.5. The 1st Edition Ordnance Survey (OS) map (c.1860) shows the original name of the farm as **Cawburn Rigg**, along with many place-names in the immediate area clearly derived from the name of the burn. The OS documents the change of name to **Cowburn Rigg** to around 1970.
- 2.6. A close comparison of the 1<sup>st</sup> edition 6" scale OS map (published 1860) with the 2<sup>nd</sup> edition (pub. 1898) suggest that the farm was originally located slightly further north with a central part of the building on its north side lying very close to the water course. The buildings are also apparently of different shape. This observation conflicts with the HER record of the farmhouse ([N14822](#)) and farm-buildings ([N14823](#)) of being built c.1850.



Figure 4. Overlay of OS 1st & 2nd Ed maps (NLS map viewer)

- 2.7. The Northumberland Name Book completed at the time of the first survey provides further evidence for the original building, describing [Cawburn Rigg](#) as *'an old farmhouse with outhouses and gardens attached'*. It appears to have been in the occupation of a Mr Hudspith.
- 2.8. The water channel, *'of uncertain function'* on the north side of Cawburn Rigg is recorded on the Northumberland HER from aerial photos as [N32782](#). We have no evidence of any relationship between the building shown on the 1<sup>st</sup> edition map and the water channel at that time although a water-mill operating in this location may have been a possibility if the water flow was ever sufficient. The channel itself is shown as having been led largely underground to the east of the farm on the map of 1898, perhaps an indication that its original purpose was no longer required.
- 2.9. The farmhouse and buildings at Saughy Rigg to the east shows no similar changes in location or building shape between the two dates, and an early 19<sup>th</sup> century origin recorded in the HER seems likely ([N14826](#) & [N14827](#)). It should also be noted that the buildings there are described as incorporating much Roman stone borrowed from Hadrian's Wall. The [Northumberland Name Book](#) entry shows it to have been in the occupation of a Mr Fiddler. Well House is also described as a small farmhouse at that time, occupied by Mr Hepple.
- 2.10. Access to the area is via a minor road which crosses the Whin Sill ridge via Peel Gap which joins another minor road to the west which passes through Caw Gap. The road runs south of Cawburn Rigg and Saughy Rigg farms and appears to have remained partly unenclosed until relatively recent times.
- 2.11. Resting Gap is described in the [Northumberland Name Book](#) as *'a hollow on the township road leading from the Military Road to the Parish of Wark so called from being a good resting place for any conveyance going into Wark parish'*.
- 2.12. The close vicinity of Hadrian's Wall implies that there would have been considerable Roman influence within the area during the Roman military period. Indeed, with an extent lying wholly north of the Wall itself, a Roman aqueduct traces a complex course crossing the survey area from a source near Saughy Washpool towards the Hadrian's Wall Fort of Aesica (Great Chesters). Saughy Washpool is described in the Northumberland Name Books, citing Bruce's Roman Wall, as: *"a place on the Caw Burn over which is thrown a dam used by the farmers to wash their sheep in. The name is worthy of being written [on the OS map] on account of this being the place where the Roman aqueduct begins."* Previous surveys have, however, failed to find remains of a Roman dam in that location. Quarrying of sandstone and limestone by the Romans remains a distinct possibility but any remaining traces are likely to have been erased by quarrying in later periods.
- 2.13. Previous work in the area includes Tynedale Archaeology Groups landscape surveys on Edges Green and Cleughfoot farms, published in 2017, and survey of Greenlee & Stonefolds in 2022. The reports are available here: <https://www.tynedalearchaeology.org.uk/reports.html>

### 3. Survey details

- 3.1. LIDAR (DSM, 1m) was obtained from the Environment Agency (EA; copyright and/or database right 2022. All rights reserved). Enhancement of the LIDAR was carried out using tools made available in the QGIS plugin, Relief Visualization Toolbox (Kokalj, Žiga & Hesse, Ralf, 2017). Airborne laser scanning raster data visualization: A Guide to Good Practice). A blend combination referred to as Prismatic Openness, incorporating negative and positive openness along with multiple directional hill-shade, produced full-colour images avoiding the many pitfalls of single direction hillshade and grey-scale imagery. DSM was chosen rather than DTM where it was not necessary to see below a tree canopy. The retention of single trees and upstanding field boundaries is also of considerable benefit in the field. Trials found that this enhanced LIDAR revealed a good variety of archaeological features often at the limit of observation in the field over a wide range of different terrain relief types.
- 3.2. Where it is not necessary to see under tree cover, experience has shown that the DSM (rather than

DTM) often results in better quality LIDAR images for use in the field. In addition, it retains field boundaries, single trees, and buildings, erased for the DTM, which can provide useful landmarks for field survey. The extent and height of the growth of reeds, particularly on the Resting Gap field, did however produce some noise adequately removed in the DTM.

- 3.3. [Historic England \(HE\) Aerial Photo Explorer](#) has a number of aerial photos flown in 2011 recording features in the survey area close to the Caw Burn around NY 735 687.
- 3.4. [HE Aerial Archaeology Mapping Explorer](#) mapped a large number of features from vertical and oblique aerial photographs in a corridor along Hadrian's Wall, completed in 2008. Recent removal of clickable links from features shown in the mapping ('to avoid duplication of data') necessitates using advanced grid reference searches in [Heritage Gateway](#), then using the link from the records though to the Northumberland Historic Environment Record (HER) via [Keys to the Past](#) which would itself perhaps benefit from a suitable map search.

## 4. Survey results

- 4.1. The northern part of the large field at Resting Gap is listed in the Northumberland Historic Environment Record ([N6549](#)) as a 'Later Prehistoric' unenclosed settlement and field system on the basis of Tim Gates's air photographic survey of the Hadrian's Wall Landscape from Chesters to Greenhead ([1999](#) & [2003](#)). Gates identified up to five possible roundhouse sites, with areas of cord rig comprising up to four fields covering about 3 hectares, plus four clearance cairns. A further aerial interpretation presented on the Historic England '[Aerial Archaeology Mapping Explorer](#)' shows 10 possible roundhouse sites and maps areas of cord rig, although shows no cairns. We have found no reference to any previous field survey.

Over two full days, working in up to three sub-groups, our community volunteers led by experienced NOWTAG members carried out a detailed and systematic ground survey. We identified and recorded eight possible round-house sites (but have reasons to question interpretations of CR20 and CR34 as round-houses), 24 cairns, and four areas where cord rig was visible. These are mapped below.

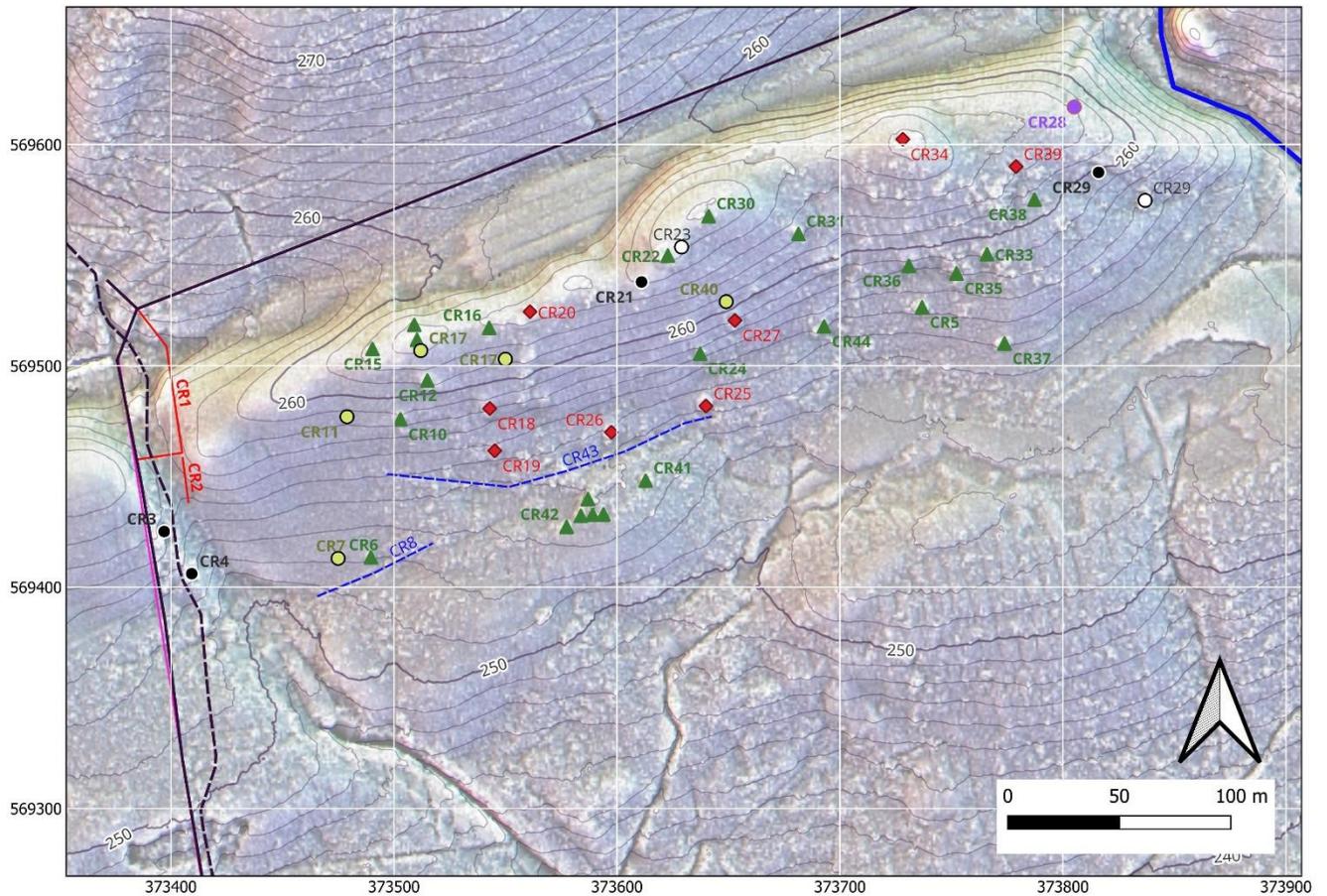


Figure 5. Sites recorded at Resting Gap

- 4.2. It would be reasonable to interpret the overall site as being a Bronze Age landscape. All the potential settlement features represent single, unenclosed hut circles. Although the number of cairns identified suggest quite extensive clearance activity, we found no evidence for remains of field boundaries usually associated with Iron Age or Romano-British field systems. It is also reasonable to expect systematic ground survey to identify additional features not recorded from the air, and to query some interpretations based solely upon aerial survey. Given the difficult nature of much of the terrain it is a credit to the quality of the previous aerial surveys that our findings are mainly in accord. However, as will become clear, our survey does offer enhancements to the existing understanding of this area and raises some questions that invite further investigation. Of the five possible settlement sites identified by Gates we are confident that we located four. The location of his fifth site at NY 7357 6942, “*part of possibly another, defined by a ditch*”, corresponds closely to our Cairn 4 of CR42, interpreted by us as a small turf-covered clearance cairn. Sites CR25, 26 and 27 match the locations he gives and exhibit similar and appropriate structural features.
- 4.3. CR25, at NY 73636 69483, measured 8.7m E-W x 8.5m N-S, with a bank up to 0.4m high. There were indications of a possible entrance gap on the south side. All three very similar sites, which may have been levelled, lie on the shallow south-facing slope to the north of a long slightly curving cross-slope ditch [CR43] which has no apparent connection with the extensive natural drainage features further to the south. In the absence of any visible banks or field walls this ditch may have served as a boundary.



*Figure 6. Ring Bank/Roundhouse [CR25] looking NE*

- 4.4. CR34, at NY 73731 69601, matches a location given by Gates. A 0.2m high stoney bank measures 9m E-W x 8m N-S. There is a 1m deep 2m x 1.5m robber trench near its centre. Historic England's aerial mapping also lists this site as a round-house. Although the size and shape of the ring bank would be compatible with it being a settlement site its position on the crest of a prominent ridge is quite exposed. Given that there are other areas further downslope that could have been used for habitation we think it reasonable to at least query whether the site was actually a burial monument rather than being used for habitation.



*Figure 7. Ring Bank [CR34] - looking north*



*Figure 8. Ring Bank [CR34] - central robber trench looking SW*

- 4.5. In this context it is perhaps relevant to consider a site further west along the crest of the ridge, identified by Historic England, but not Gates, as another roundhouse. CR20, at NY 73562 69528, is a 7m diameter turf-covered stoney bank with a collapsed cist at its centre with a further small low mound in its interior. These features are strongly suggestive of a burial monument. There are many locations where burial cairns have been identified on the crest of ridges and CR20 is a likely example. Whoever felt inclined to dig into the centre of CR34 some 150m to the east may have had a plausible reason for doing so.



*Figure 9. Collapsed cist at centre of Ring Bank [CR20]*

We identified three further ring bank structures which may also be round-house remains. Their locations potentially match additional 'round-house' sites shown on the Historic England aerial mapping. CR18 at NY 73543 69482 measures 6.4m N-S x 6m E-W. It has a level interior scooped into the slope with its upslope bank 0.4m high.



*Figure 10. Ring Bank [CR18] looking E*

Just 20m to the north CR19, at NY 73546 69462, measures 6.5m N-S x 6.4m E-W with a shallow ditch inside its 0.3m high bank. It has a possible entrance gap to the SE.



*Figure 11. Ring Bank [CR19] looking NW*

CR39 at NY 73779 69590 is a 7m diameter 0.3m high turf-covered stony ring bank. Its interior is overgrown with reeds. Its location matches another Historic England aerial mapping site, some 55m SE from CR34.

- 4.6. Indications of cord rig, usually first identified from aerial photographs, can often be very difficult to see on the ground. The five locations (CR7, 11, 17 twice, and 40) where we were able to discern and record cord rig matched the areas shown on the Historic England aerial mapping. Although these areas have been described as 'fields' we found no indications of any boundary banks. Although we were able to record 23 cairns we found no indications of linear clearance, which at other locations we have surveyed over the years quite often are present in cairn-fields as 'proto-field system' features, or precursors of linear banks. Given the number of possible settlement sites, the extensive cord rig and numerous cairns, the lack of boundary banks or linear clearance features it a noteworthy aspect of the Resting Gap site, particularly bearing in mind

that the extent of these surviving features indicates that any subsequent land use here has not been heavily destructive of earlier features.

- 4.7. The majority of the 24 cairns recorded were turf-covered, less than 5m diameter, lacking in deliberate structure and therefore probably clearance features. Almost all were located on the northern slope running up to the E-W ridge and were close to areas of cord rig.



*Figure 12. Cairn [CR24]*

- 4.8. There was one grouping of cairns that differed from the majority. Located in an area of reeds to the south of the slope containing all the features described above, was a close grouping of five cairns [CR42], centred at NY 73588 69439. Although of similar size to the cairns on the slope they appeared to have a more defined shape. Cairn 1 (NY 73588 69439) was turf-covered, 5m diameter x 0.4m high with a 1m square robber-trench towards its S side. Cairn 2 (NY 73590 69432) was 2.5m N-S x 3.5m E-W x 0.3m high. Previously covering reeds had died back and its exposed stones had probably been disturbed by cattle. Cairn 3 (NY 73585 69431) measured 5m diameter x 0.3m high. Similar to Cairn 2, its stones, exposed by the dying back of reeds, and its stones appeared disturbed. Cairn 4 (NY 73578 69427) was turf-covered, measuring 4m N-S x 5m E-W x 0.4 high. Cairn 5 (NY 73593 69434) was also turf-covered, measuring 4m diameter x 0.3m high. Although this close group may have been clearance features it is difficult to understand why so much clearance stone would be brought, presumably quite a distance to this location. Apart from one other well-defined turf-covered cairn just 25m to the east there were no further cairns or signs of clearance across the extensive, boggy area further south.



*Figure 13. Cairn 4 of the CR42 group looking NW*



*Figure 14. Cairns 2 and 3 of the CR42 group looking W*

- 4.9. Just to the north of cairn group CR42, a long ditch [CR43] runs cross-slope for over 150m from NY 73497 69449 to NY 73642 69473. 0.5m wide x 0.2m deep, it is slightly curving and bending. It appears to have no connection to natural drainage features. Just to its north lie four possible round-house sites (CR 26, 25, 19, and 18).



*Figure 15. Long ditch [CR43] looking W*

- 4.10. Given that the long ditch [CR43] appears to have no drainage function there is a question regarding its purpose. It is recognised that ditches have served as boundaries in prehistoric contexts. Its current width and depth would not represent any significant physical barrier to movement. We did record just one other ditch, CR8, further west running from NY 73514 69425 to NY 73466 69396. Measuring 0.8m wide x 0.25m deep with a 1m wide bank on its upslope side this ditch was straight and aligned towards a natural drainage feature.
- 4.11. The extensive southern part of the Resting Gap field is very boggy and mostly covered with reeds and coarse grasses apart from a narrow strip of better grazing land close to the southern wall where a small area of cord rig has been previously recorded. There is no sign on LIDAR of any medieval or post-medieval rig & furrow within the Resting Gap field, but there is some limited evidence of reed cutting or shallow N-S drainage channels at an interval of about 8m centred on NY 7377 69400.
- 4.12. We did extend our walkover survey into the southern part of the field and found no likely archaeological features, except when investigating a potential cairn prominent on the enhanced LIDAR imagery. At NY 73621 69189 we identified a turf-covered 'kidney-shaped' double-topped mound of 11m diameter, 1m high on its southern side. Its eastern mound measured 5m N-S x 4m E-W, its western mound measured 4.5m N-S x 3m E-W. There were narrow channels running between the two mounds. The mound is located in a boggy area close to natural drainage and not far north of a small area or cord rig observed on aerial photographs close to the southern wall of the Resting Gap field which is duplicated in two HER entries: [N25717](#) & [N24639](#).



Figure 16. Burnt Mound [CR45] looking NE

4.13. An animal burrow enabled us to retrieve a few small stones from beneath the turf. These were initially covered with black soil consistent with the presence of a charcoal deposit. After washing, two stones showed clear indications of burning having become discoloured and fragile. The features strongly suggest the possibility of CR45 being a 'burnt mound'. Its location, distant from habitation sites, is compatible with the context of known burnt mounds elsewhere. Figure 16 (above) shows the adjoining mounds of CR45 outlined with yellow flags and their tops indicated by ranging poles.



Figure 17. Small stones retrieved from mound

- 4.14. A search of the Northumberland HER (using Keys to the Past) for the archaeological site type, 'burnt mound', finds 16 records. Close to the area of our survey such features have been described at Ravensheugh Craggs ([N28111](#) & [N28113](#)), and King Wanless Green ([N22626](#)). There are undoubtedly many more remaining to be found. An easily readable summary of these monuments is provided by Alex Loktionov published in [The Post Hole](#) in 2013. Excavation of such mounds has confirmed that their function was probably to heat stones in a hearth and then using the hot stones to heat water in a large central trough. However, what the purpose of this was has remains contentious, the main theories being some form of large-scale centralised cookery, industrial processing, site of a sauna or ritualistic sweat-house.
- 4.15. An unexpected find within the Resting Gap field, on the northern slope of the sandstone ridge not far south of the Allery Burn, was that of a large, roughly-circular piece of sandstone about 1.08m (3. 6") diameter, propped up at an angle on other stones. We interpreted this as a probable millstone [CR28]. The stone had no central eye and we were unable to determine if it

had been quarried *in situ*, perhaps from a detached 'daystone', or lost in transit from another (unknown) quarry location in the immediate area. The extent and process of quarrying millstones in Northumberland is described by Jobey, G. (1986), & in detail by Nolan, J. (2000). In the 19th century most millstones were usually produced within the size range 3' 6" (1.08m) to 4' 6" (1.35m) so perhaps a post-medieval date for it is likely.



Figure 18. Millstone [CR28]

- 4.16. The field immediately south of the Resting Gap field has extensive, but very low and narrow rig and furrow. No archaeological features were identified apart from an extant stock pen CR59 at NY 73801 69137 in the north-east corner of the field with gateways into both fields. The stone-walled pen measures 13.5m x 13m x 1.4m high, with an interior pen 6.8m x 3.5m with a 1.3m wide entrance. Immediately beyond the northern gate is a 2.6m x 1.3m rectangular stone platform which appears to create a narrow 'pinch point' controlling entry to the pen from the northern field.
- 4.17. The next field south, through which the Caw Burn runs, contains a section of the route of the Roman aqueduct, CR57, heading towards Great Chesters fort (Aesica). Figure 19 (below) maps the features recorded, with the aqueduct route marked by a purple line.

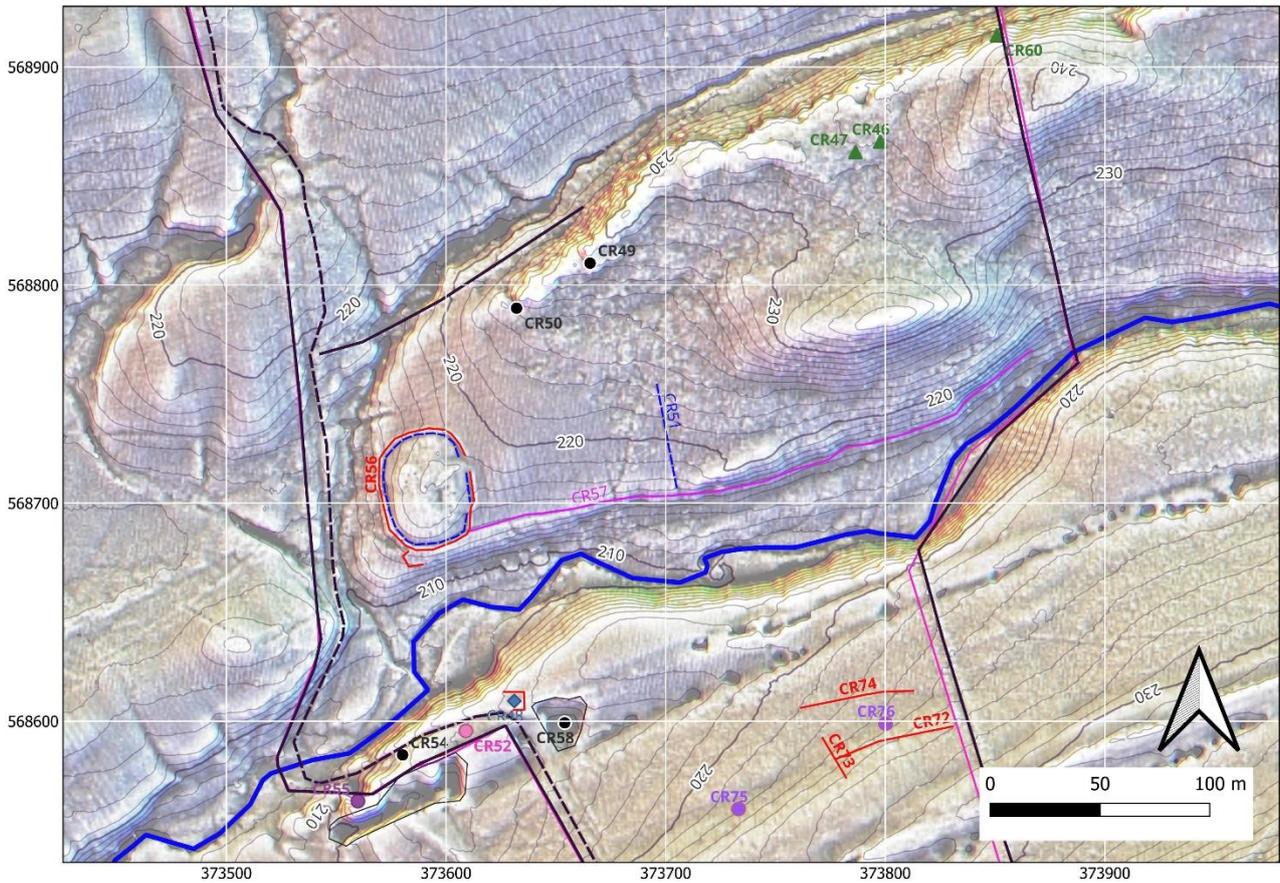


Figure 19. Features recorded in the Caw Burn field

4.18. The Roman aqueduct from the Caw Burn to Great Chesters Roman Fort (Scheduled Monument List No. [1003788](#)) is visible to the north of the Caw Burn located by GPS points 1 to 7, A, B & C on figure 20 below. The plotted GPS points give a close fit to the 216m contour line confirming the track visible on the ground.

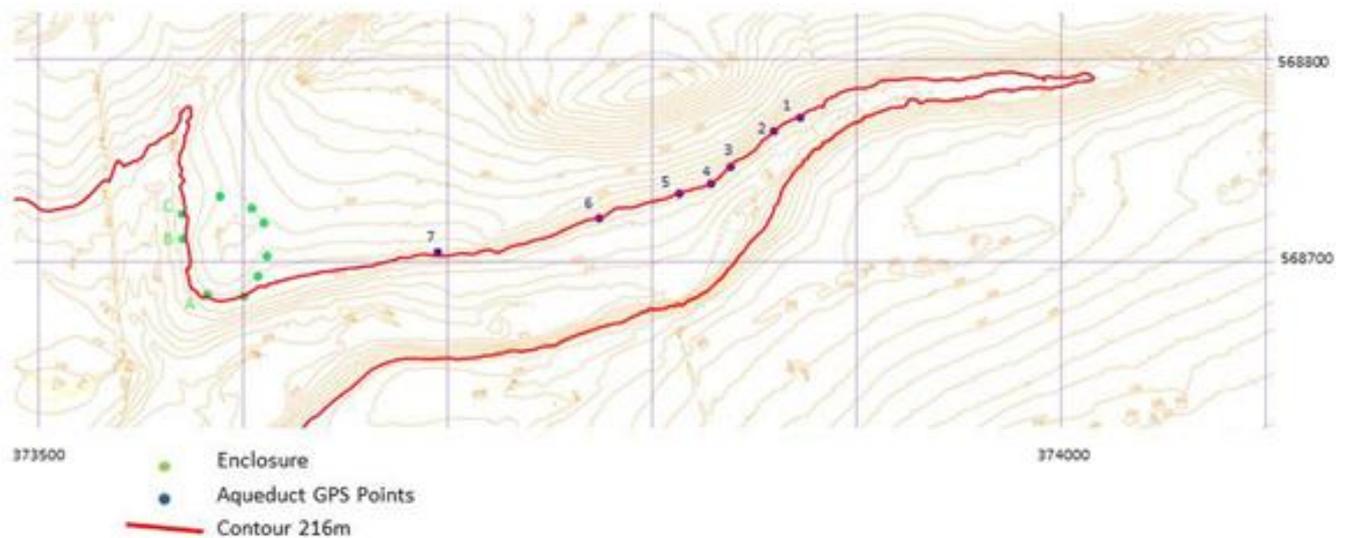


Figure 20. Course of 216m contour (in red) from LIDAR with points along course of the Roman aqueduct [CR57] (in blue) and ditch of the Enclosure [CR56] (in green)

From the fence-line some 10m east of point 1 to point 7 there is a distinct level shelf of approximately 0.5 to 1.0 m width. Between points 1 and 2 a single course of approximately 0.2m x 0.2m stone blocks forming a revetment on the south side of the aqueduct is visible over a distance of about 1m. Several sections have been eroded by slippage of the slope above causing apparent gaps from NY 73851 68757 to NY 73845 68754, NY 73812 68732 to NY 73776 68720, NY 73738 68708 to NY 73714 68701, and NY 73694 68697 to NY 73659 68698. Between points 7 and A the line is along a much broader flattened area with no distinct channel. The aqueduct route is crossed by the 1.0m wide, and up to 0.5m high, perimeter bank of enclosure [CR56] at NY 73609 68688, intersecting with the inner ditch of the enclosure. It deviates from the enclosure ditch at NY 73597 68680 continuing below the SW bend of the enclosure bank until not visible in reeds beyond NY73569 68686. The contour line at 216m, mapped from LIDAR, suggests that its route then runs close to the NW section of the enclosure bank beyond which an elevated structure would have been required for it to cross the small burn running SW into the Caw Burn.



*Figure 21. Perimeter bank of enclosure [CR56] crossing route of aqueduct [CR57]*



*Figure 22. Roman aqueduct [CR57] looking W along slope above the Caw Burn*

Figure 23 (below) shows the line of the Roman aqueduct [CR57] marked with red dots along the slope above the Caw Burn, and the bank of the enclosure [CR56], indicated with green dots.



*Figure 23. Aqueduct [CR57] and Enclosure [CR56] above the Caw Burn*

- 4.19. The aqueduct serving the Roman fort at Great Chesters on Hadrian's Wall was surveyed by the Royal Commission on the Historical Monuments of England in January-February 1988 archived by HE (ref. [AF0621954](#)) with a summary published in *Britannia* (Mackay, D A, 1990).
- 4.20. The Historic Environment Record, [N12313](#), on the basis of aerial photographs some of which can be found on [Historic England's Aerial Photo Explorer](#), describes enclosure CR56 as 'a sod-cast enclosure...sub-rectangular, measuring 50m by 40m, and appears to overlie broad rig. Areas of disturbance on the interior may represent warrening activity and a potential function for the enclosure'. The HER also notes 'within and outside to the east of the enclosure is broad rig cultivation', which presumably was the basis for their designation of the enclosure as being post-medieval. Our survey's detailed examination and recording of the 4m wide N-S aligned broad rig to the east of the enclosure found that it appears to stop just short of the eastern boundary bank of the enclosure. An area of broad rig to the north of the enclosure is aligned E-W. The survey notes observe that 'the ground surface within the enclosure is made up of irregularly shaped higher and lower areas, differing by up to a metre in height. There are a number of smaller and much larger animal burrows dug into a sandy soil. The irregularity of the surface suggests material being dumped within the enclosure'.
- 4.21. Prior to the survey the farmer had commented upon the strangeness of it being so sandy within the enclosure, saying that such sand is found nowhere else on the farm. After the survey we examined more recent aerial photos provided by [Historic England](#). On these we noted that the linear features inside the enclosure run exactly to the inside of the enclosure bank at both north and south and do not extend beyond. They also appear to be slightly narrower than the broad rig to the east of the enclosure.
- 4.22. Our observations tend to support the view, put forward by Historic England, that the function of the enclosure was warrening, the practice of managing a rabbit warren, which provides a suitable and partly artificial system of burrows and tunnels. Historically, warrening was a significant activity, particularly in medieval times, where landowners would establish and maintain warrens for the purpose of rabbit hunting and meat production. Unless the sand was an isolated glacial

deposit, it would appear likely that this material was brought in at some time in order to create a structure appropriate for the farming of rabbits, possibly in the form of 'pillow mounds'. There is a short summary of how these mounds were constructed and used here:

[https://www.blisworth.org.uk/images/Articles/pillow\\_mounds.htm](https://www.blisworth.org.uk/images/Articles/pillow_mounds.htm)

- 4.23. Archival and physical evidence of warrening practice is lower in Northumberland than in many other counties. A search of Keys to the Past for the archaeological term 'rabbit warren' only finds a single record, at the aptly-named Coneygarth, near Ashington ([N11681](#)). The use of the term 'pillow mound' finds only four. None appear to show the quality of survival of anything approaching such an extensive enclosure as found here, and if the interpretation proves correct it would be an important historical asset for the County. Warrening is known to have been practiced from medieval times through to the post-medieval so dating of the enclosure may depend on the evidence of whether the rig & furrow really underlies it. Figure 24 (below) illustrates the sandiness and numerous recent rabbit burrows within the enclosure.



*Figure 24. Enclosure [CR56] showing rabbit warrens*

- 4.24. The ridge to the north-east of enclosure [CR56], above the west end of Swallow Crag, has an extensive area of exposed bedrock. Our survey identified evidence of sandstone quarrying, regarding rocks that exhibit wedge marks indicative of rock-splitting activity. CR49 (NY 73665 68809) presented a line of 10 wedge marks, whilst at CR50 (NY 73631 68754), one of three wedge marks still had part of an iron wedge lodged within.



*Figure 25. Quarrying wedge marks [CR49 & CR50]*

- 4.25. Further east along the ridge we recorded three small turf covered stoney mounds of 2m-3m diameter [CR46, 47 & 60]. The area does not appear to have been extensively cleared and there were no other indications to suggest any particular period for these probable clearance cairns.

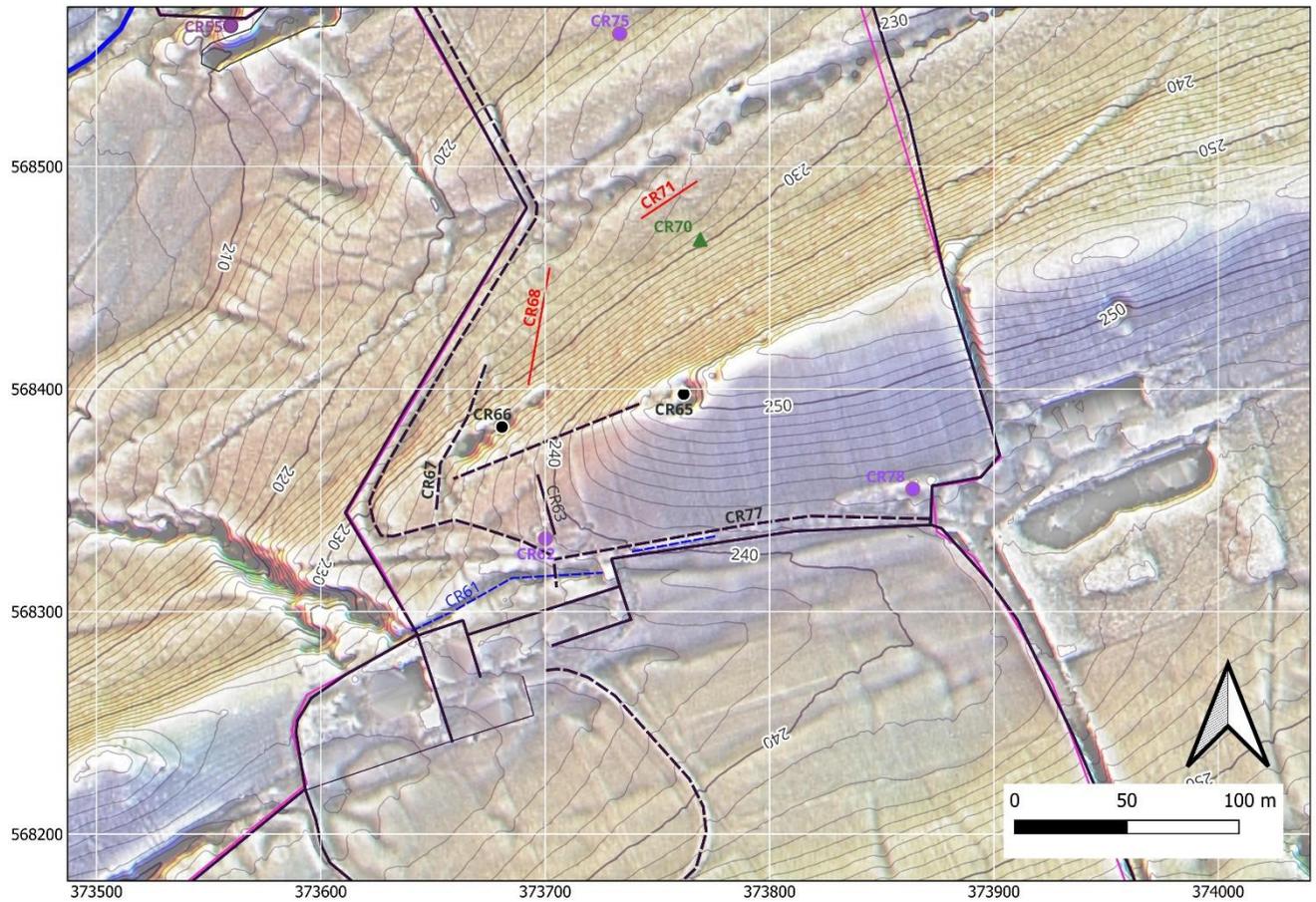


Figure 26. Features recorded S of Caw Burn and N of Cowburn Rigg Farmhouse

4.26. Immediately south of a ford across the Caw Burn (at NY 73557 68565) is a single-celled lime kiln [CR55], described in the HER ([N65116](#)) as late 18th Century. It is also a listed building ([1302848](#)). Just 100m to the east, on the same side of the Caw Burn is a 15m x 15m, 1.5m deep quarry [CR58]. About 180m further south are two further areas of extensive quarrying [CR65 & CR66]. The quarries north of Saughy Rigg are recorded in the HER as [N32778](#). The original quarry supplying the kiln appears from the old maps to be that located due south of the kiln (out of our survey area) with those recorded here, probably opened later.



Figure 27. Lime Kiln [CR55] from NE

- 4.27. A banked trackway [CR64] runs westwards downslope from the quarry [CR65] into the top of the ridge to the western edge of the CR66 quarry lower down the bank. From here a further 2.5m wide trackway, CR67 runs roughly northwards diagonally downslope. There is also a 1m wide x 0.4m high stony bank, CR68, that runs almost parallel to trackway CR67. A further short section of stoney bank CR69, runs at right angles to CR68 in the direction the present-day stone wall. In the field to the north, on Longsyke farm, an earlier substantial boundary bank runs to limekiln [CR55]. It is likely that all these features were related to the operation of the lime kiln. HE Aerial Mapping records 'a possible leat' running SW to NE from the Caw Burn to the quarry SW of the lime kiln (N32781). Although this also lies outside our area, it is clearly visible on LIDAR (centred at NY 73512 68484), but we note that water would run in the opposite direction (towards the Caw Burn), and it, and a parallel feature to its east, appear more likely to have provide drainage.
- 4.28. Other features in the vicinity include a 6m x 3m x 0.75m deep quarry scoop [CR54], just 25m east of the lime kiln. At NY 73825 68610 lies CR48 a rectilinear banked platform adjacent to quarry CR58. Nearby at NY 73608 68595, CR52, a low rectangular bank 8m x 4.5m x 0.2m high with a shallow inside ditch and a slightly raised interior has features characteristic of a stack stand, although its proximity to the lime kiln and quarry raises the possibility of another function.
- 4.29. Historic England aerial mapping identifies two 'sow kilns', used for small-scale conversion of limestone into lime, in the field south of the Caw Burn. Our survey recorded two small features in this area that may have been sow kilns, CR75 and CR76. Sow kilns may have been used during any period from prehistoric to post medieval. CR75 is located in an area where we recorded two lengths of low earthen boundary bank, CR72 and CR74, of the type that have been found elsewhere in medieval landscapes. CR72 is crossed by a length of low stony bank. A further length of low stony bank, CR71, runs E-W along the bottom of the scarp quarried at CR65 and CR66. In the field between the quarried scarp and the Caw Burn we recorded in all six lengths of potential boundary bank. Although we noted potential relationships between some, overall, it has not been possible to identify any field system pattern in this area.



*Figure 28. Boundary banks [CR72 & CR74]*

- 4.30. Immediately north of Cowburn Rigg farm buildings there is a culverted water channel [CR61]. Four stone culverts were recorded, the western-most being at the farm boundary where the water channel runs into steep natural drainage running northwards downslope to the Caw Burn. To the east of the farm buildings a linear depression indicates the route of the water channel before it emerges through the stone culverts. On figure 29 (below), the left-hand image

is looking east and the right-hand image shows the western culvert and the steep natural drainage channel.



*Figure 29. Culverted water channel [CR61]*

- 4.31. A few metres to the north (at NY 73700 68332), lie the remains of a two-celled rectangular stone structure [CR62], abutting a relict stone wall [CR63]. The structure measures 6.5m E-W x 6m N-S with a central wall running E-W with a possible 1m gap at its E end. There is also a possible 1m wide gap at the structure's SW corner. The eastern end extends beyond the line of the relict stone wall. We are confident that CR62 was originally a stock pen, with structural similarities to the larger extant stock pen [CR59] recorded at the SE corner of the Resting Gap field and described above.



*Figure 30. Two-celled Stock Pen [CR62] looking NE*

- 4.32. The improved pasture fields south of the farm-buildings retain little indication of previous

activities. The only feature on the HER ([N24634](#)), recorded from aerial photographs, is a sub-square sod-cast enclosure about 11m across, described as a post-medieval stack-stand or stock enclosure. This is quite visible on enhanced LIDAR but was not seen on the ground where it was probably obscured by the length of grass currently growing in the meadow. It lies on the east side of a linear N-S boundary bank (of similar appearance) which marks the eastern side of an area of relatively narrow, and parallel, rig & furrow. There is a field gate into the enclosure from the road. Through the wall to the west of the gate, there is a blocked sheep-creep. This leads out to the current road, and illustrates the former open grazing before the road was fenced on its south side in more recent times. South of the road the land rises sharply up to the base of the Whin Sill crags. Apart from one improved field, the terrain is quite rough with some machine-dug drainage features.

- 4.33. The main features of archaeological interest are three parallel E-W bands of quarrying activity, [CR80, CR81 & CR82). CR80 and CR82 are made up of a number of large hollows and spoil heaps downslope, whilst between these, CR81 contains smaller more shallow scoops, and a natural origin for this feature cannot be ruled out. CR80 corresponds to an area of quarrying shown on the HE Aerial Archaeology Mapping Explorer and described as of uncertain date on the HER ([N32784](#)) as it is not shown on the early OS maps.



*Figure 31. Quarry [CR80 ]*

- 4.34. A long E-W ditch runs parallel to the quarries downslope of CR80 and drains from both east and west into a straight ditch CR84 which runs northwards. The connection between these two water-courses is shown on the 1<sup>st</sup> Edition OS map which shows it continuing close by Well House to join a tributary of the Caw Burn south of Black Hill. It currently accepts water from two deep parallel drains running W-E across the field in herring-bone fashion. The appearance of the 8m wide gap between the ditch [CR84] and the parallel dry-stone wall gave rise to questions as to whether this may have been a trackway heading north which may have been used for the movement of quarried limestone towards the Caw Burn lime kiln. There was however no evidence for this on the old maps or that a track here had ever been artificially surfaced.



*Figure 32. Ditch [CR84] parallel to field wall*

- 4.35. The other feature of note in the quarried area at NY 73740 67737 was CR83, a 5.5m x 5m enclosure with a 0.6m wide, 0.3m high, turf-covered stony bank, located adjacent to a spoil heap. It was unclear whether the enclosure was related to quarrying activity or had an earlier or later agricultural function.



*Figure 33. Small sub-circular enclosure [CR83]*

- 4.36. At NY 73744 67988 adjacent to the northern end of ditch [CR84] and the field wall running north from the road is a double water trough [CR85], with an abutting stone platform. This feature appears to have replaced a well shown further west on the 2<sup>nd</sup> edition OS map, which may have been the source of the name, Well House.



*Figure 34. Water Trough [CR85]*

## 5. Discussion

- 5.1. The most interesting features of our survey at Cowburn Rigg were: the northernmost unenclosed round-house settlement with associated burial monuments, areas of cord rig agriculture, and a possible burnt mound, which may all be tentatively dated to the Bronze Age; our find of a millstone probably dated to the medieval or post-medieval periods; the rectilinear, ditch and banked enclosure north of the Caw Burn previously suggested (on the basis of its current condition) as a possible rabbit warren; the Roman aqueduct from the Caw Burn to Great Chesters Roman Fort.
- 5.2. Limited excavation of one of the burial monuments, and/or one of the potential round-houses could provide accurate dating evidence for their construction, and confirm evidence of their use.
- 5.3. Further examination (by test-pitting) of the potential burnt mound, and of other mounds in the area, would be useful to confirm identification.
- 5.4. The presence of a substantial, enclosed artificially-managed rabbit warren would be almost unique in Northumberland. It is possible that limited excavation within the enclosure could find evidence to prove that function. If it was constructed in the medieval period, it could be expected to be accompanied by archival documentation, if that could be found; if it was of a more recent period, however, this may not be the case.
- 5.5. These features each have their stories to tell about how the land has been settled and continued to be used over a long period of time. In many cases, we have only speculation to offer, and definite answers will require further work.
- 5.6. Linking the existing heritage monuments to the landscape demonstrates the continuity of use of the area from prehistoric times. Strangely absent was any clear native settlement or agricultural remains from the Iron Age or Roman period. Each period has left some evidence in their wake although much has been erased by later occupation and especially by large areas of rig & furrow ploughing, drainage, and land improvement. Land-use reflects the underlying geomorphology, geology, and generations of agricultural toil in what has always probably been a marginal and challenging hill-farming environment.

## 6. References

Jobey, G. (1986). Millstones and millstone quarries in Northumberland. *Archaeologia Aeliana Series 5*. Vol 14, pp. 49-80. <https://doi.org/10.5284/1060803>

Loktionov, A. (2013) "Something for Everyone: a Ritualistic Interpretation of Bronze Age Burnt Mounds from an Ethnographic Perspective", *The Post Hole* 26: 20-33.

<https://www.theposthole.org/read/article/187>

Mackay, D. A. (1990). The Great Chesters aqueduct: a new survey and section. *Britannia* 21. Vol 21, pp. 285-289. <https://doi.org/10.2307/526304>

Nolan, J. (2000). Harbottle Hill Millstone Quarry, Northumberland. Survey Report. Lancaster University Archaeological Unit. [https://eprints.oxfordarchaeology.com/6845/1/L8978\\_VL\\_Report\\_Full.pdf](https://eprints.oxfordarchaeology.com/6845/1/L8978_VL_Report_Full.pdf)

A Note on Pillow Mounds: [https://www.blisworth.org.uk/images/Articles/pillow\\_mounds.htm](https://www.blisworth.org.uk/images/Articles/pillow_mounds.htm)

## 7. Appendix

### 7.1. Survey plans

Including results of detailed survey in northern area of the site and contours at an interval of 0.2m created from Environment Agency LIDAR (DTM, 1m). Background image is LIDAR (DSM, 1m) enhanced using multi-directional hillshade and Prismatic Openness.

### 7.2. Contours created from Environment Agency LIDAR data (DTM) at interval of 1m

### 7.3. Survey plan - Legend

	Road
	Fence
	Wall
	Track
	Stream
	Quarry (large)
	Quarry (small)
	Bank
	Ditch
	Lime Kiln
	Stack stand
	Platform
	Group of stones
	Cairn
	Ring bank
	Other
	Cord rig
	Roman Aqueduct
	Cowburn Rigg - farm boundary

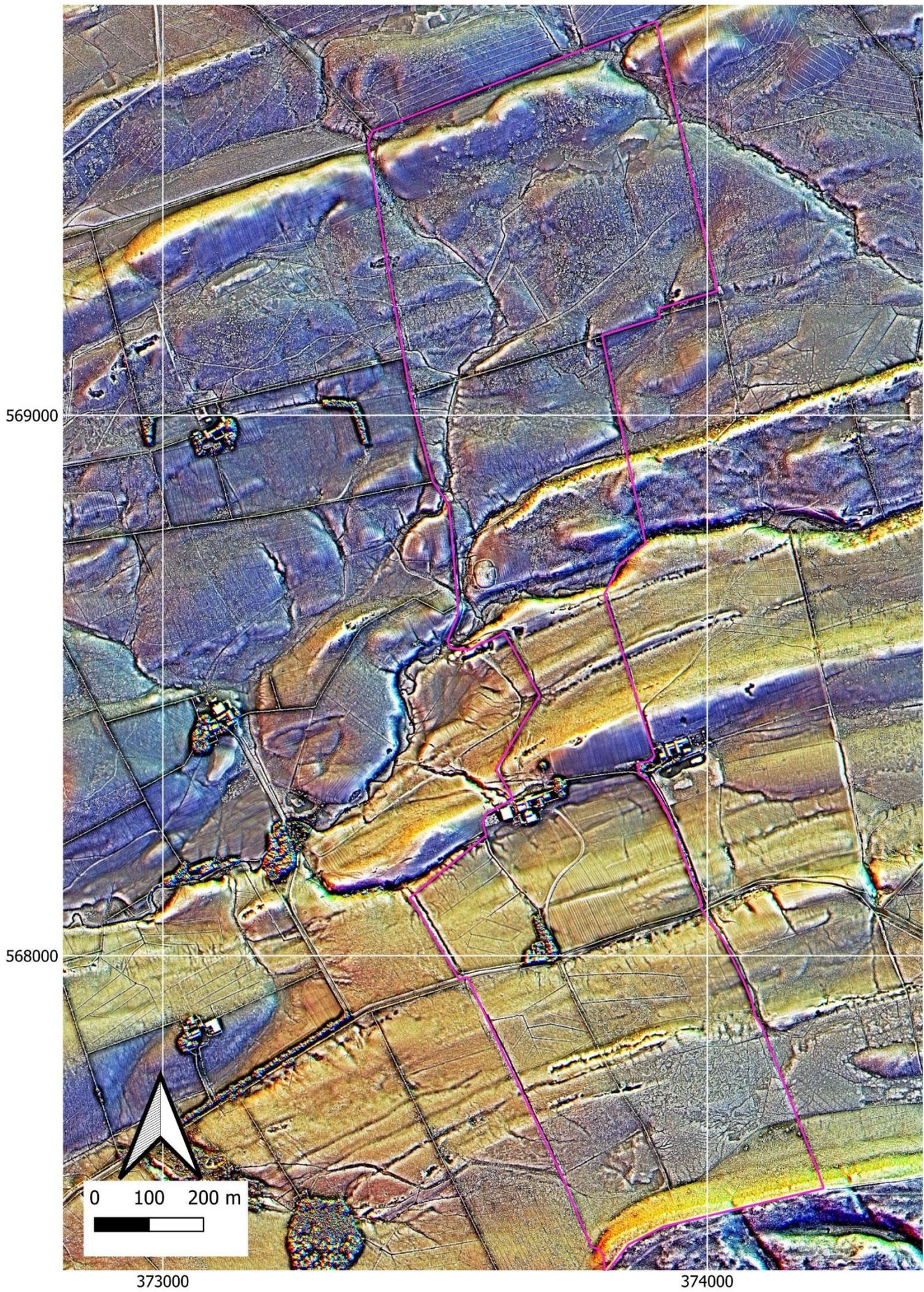


Figure 35. LIDAR (DSM, 1m) enhanced for archaeology using Prismatic Openness

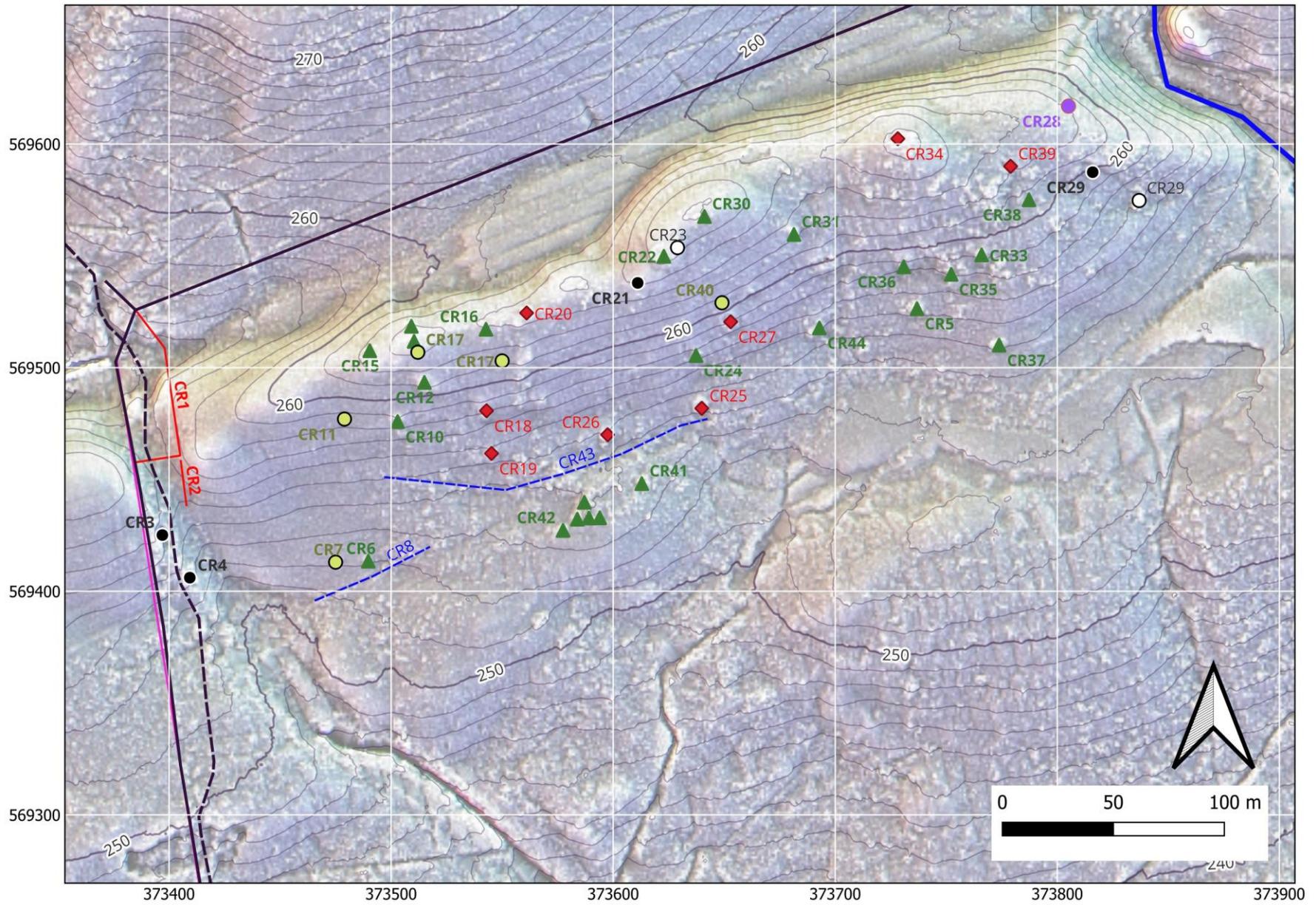


Figure 36. Survey Plan 1

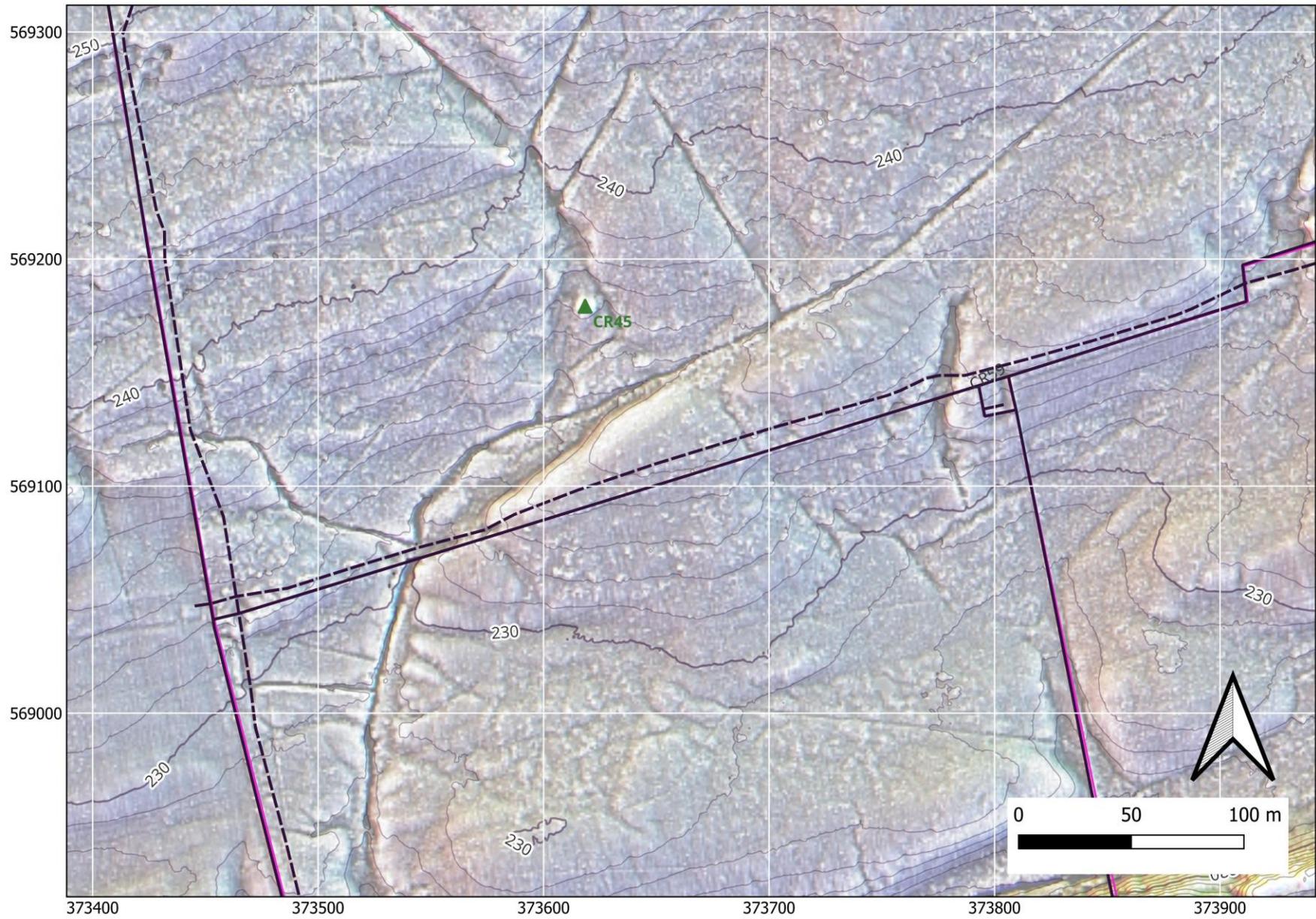


Figure 37. Survey Plan 2

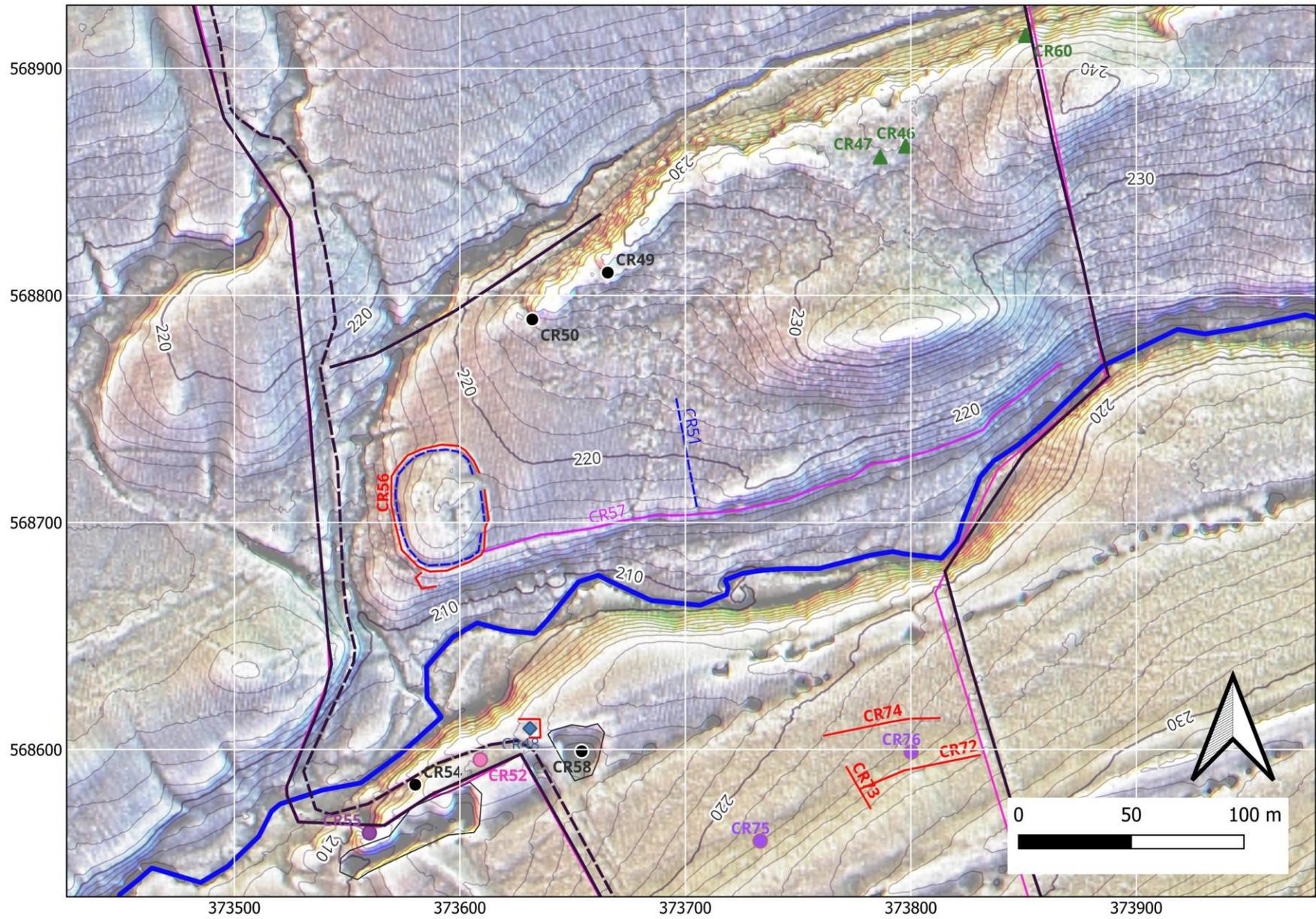


Figure 38. Survey Plan 3

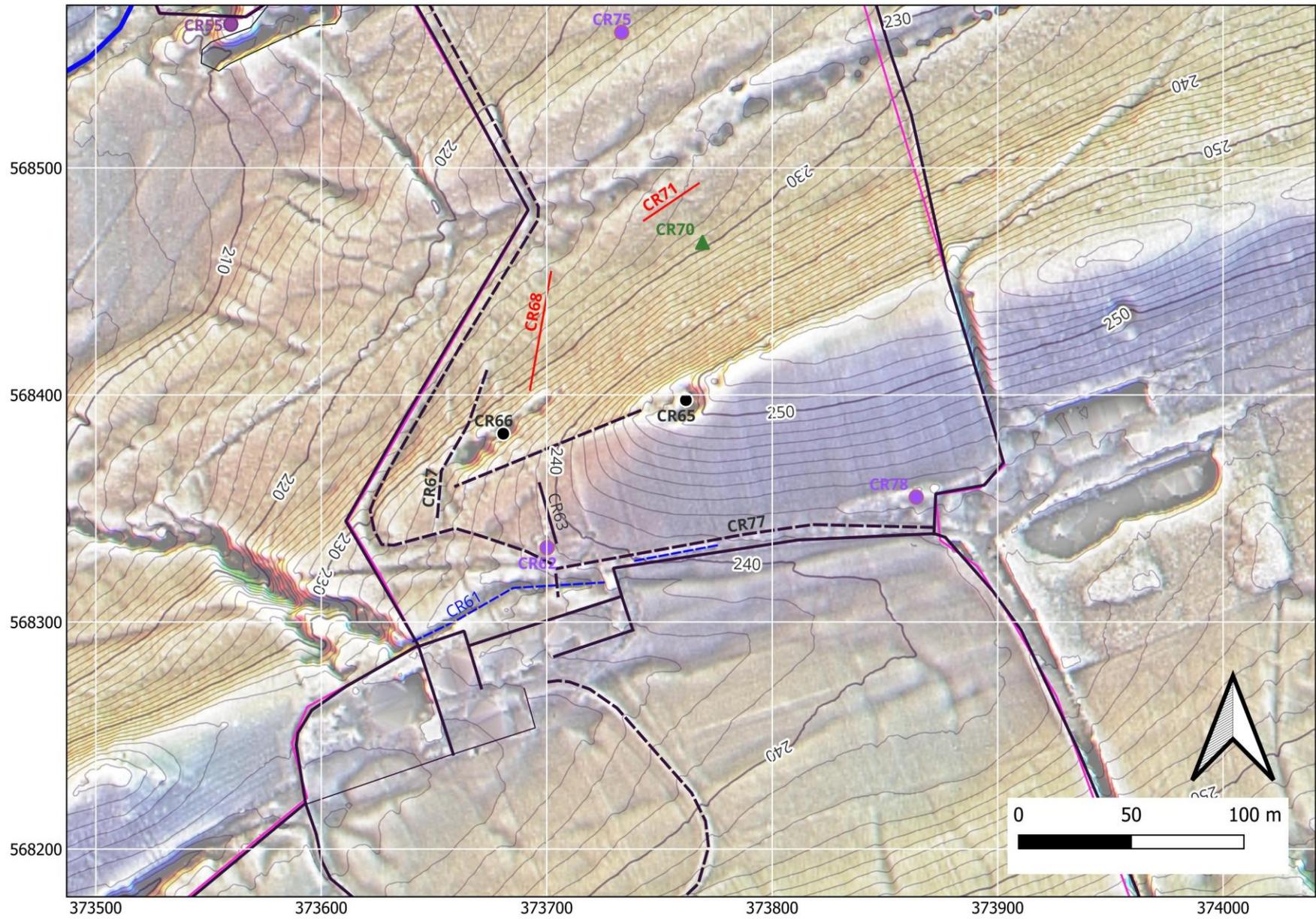


Figure 39. Survey Plan 4

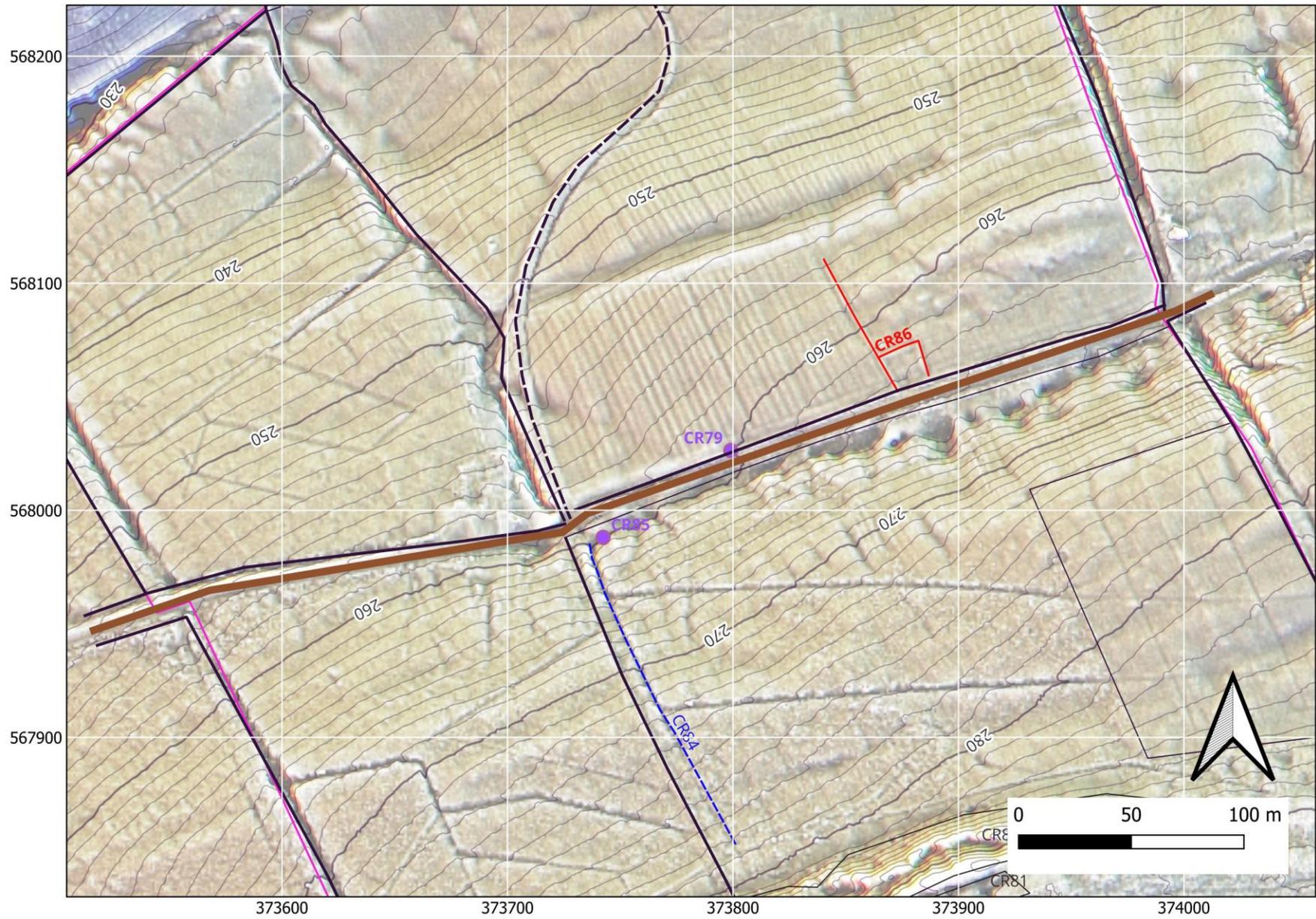


Figure 40. Survey Plan 5

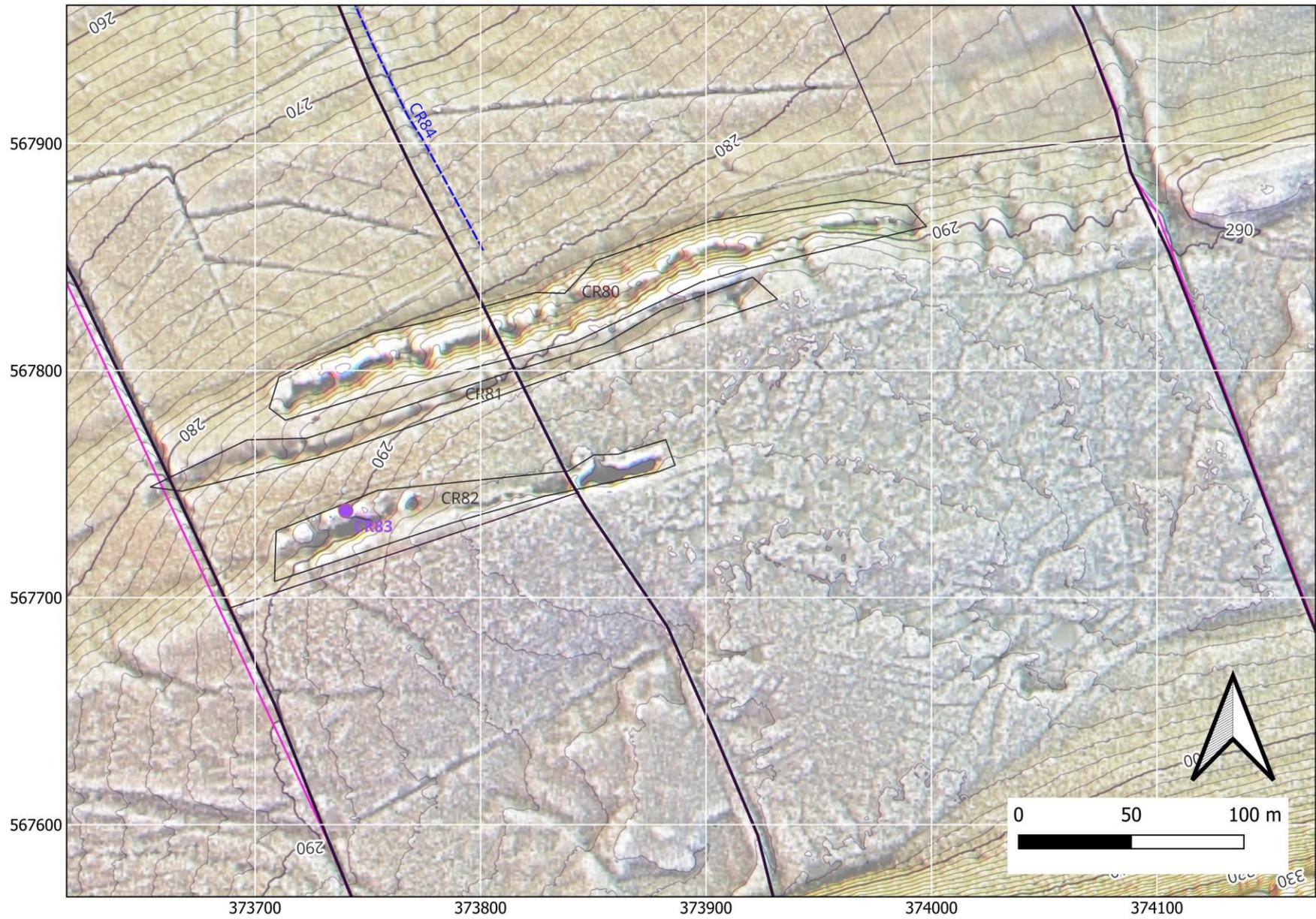


Figure 41. Survey Plan 6

## Cowburn Rigg Gazetteer

Figure 42. Gazetteer

Site No.	Site Form	GPS from	GPS to	Ref	Description	Notes
CR1	Stoney Bank	NY 73384 69525	NY 73388 69458		Turf-covered stoney bank, double-faced, runs S from current wall then bends NW at NY 73405 69466 towards current wall. 1m wide x 0.1 to 0.3m high.	Corresponds to walled entrance into the field at Resting Gap shown on 1 <sup>st</sup> Ed. OS map.
CR2	Stoney Bank	NY 73404 69458	NY 73402 69438		Turf covered low stoney bank on same alignment as CR1. 0.8m wide	Possible continuation of CR1
CR3	Quarry	NY 73397 69425			11.5m x 5.5m x 1.5m deep quarry adjacent to field wall.	
CR4	Quarry scoop	NY 73409 69406			Irregular scoop 8.8m x 4m x 2.5m deep. Some small spoil heaps on upper side.	
CR5	Cairn	NY 73737 69532			Reed-covered stoney mound, 4m N-S x 5m E-W x 0.5m high	
CR6	Cairn	NY 73491 69414			5m diameter flat-topped turf-covered stoney mound.	Clearance cairn ?
CR7	Cord rig	NY 73475 69413			E-W cord rig. 1.2m wide	
CR8	Ditch and bank	NY 73466 69396	NY 73514 69425		0.8m wide ditch, 0.25m deep, with 1m wide bank on N upslope side.	Straight
CR10	Cairn	NY 73502 69477			10m x 7m x 0.4m high turf covered stoney mound	
CR11	Cord rig	NY 73479 69477			E-W cord rig 1.2m wide	
CR12	Cairn	NY 73518 69498			Natural change of slope with clearance stones added. Oval 13m SE-NW x 5m SW-NE x 1m high downslope	
CR13	Cairn	NY 73511 69511			3.8m x 3.3m x 0.4m high cairn with rectangular depression 0.8m x 1.2m. Located on the ridge	
CR14	Cairn	NY 73510 69518			4m x 2.3m x 0.4m high turf-covered stoney mound	
CR15	Cairn	NY73491 69506			Rectilinear turf-covered stoney mound 4m x 1.6m	
CR16	Cairn	NY 73544 69518			3.3m diameter x 0.3m high turf-covered stoney mound	
CR17	Cord Rig	NY 73512 69507	NY 73550 69503		1.2m wide cord rig. Small, possible clearance mounds at each corner.	
CR18	Ring bank	NY 73543 69482		<a href="#">N6549</a> (clearance cairn)	6m E-W x 6.4m N-S stoney bank, up to 0.4m high on upslope side. Scooped on shallow upslope with level interior. Possible roundhouse site.	
CR19	Ring bank	NY 73546 69462			6.5m N-S x 6.2 E-W x 0.3m high turf-covered bank with stones. Curved corners but sides appear straighter. Shallow ditch inside perimeter bank. Possible entrance gap at SE	
CR20	Ring bank/Cist	NY 73562 69528		<a href="#">N6549</a> (clearance cairn)	7m diameter turf-covered stoney bank up to 0.3m high with possible collapsed cist inside. A further low small mound in interior. Located on the top of the ridge.	
CR21	Banked scoops	NY 73611 69539			Two adjacent banked scoops, 2m and 1.7m diameters. 0.3m deep.	
CR22	Platform ? Cairn	NY 73624 69549			10m diameter circular platform on crest of the ridge. Some boulders on rim and internally. Possible 5m diameter internal gully.	Possible cairn or even roundhouse
CR23	Stone group	NY 73629 69553			3.5m diameter semi-circle of small boulders 10m NE of CR22.	Clearance or natural
CR24	Cairn	NY 73640 69503			6m x 3.4m x 0.4m high flat-topped cairn. Possibly kerbed perimeter.	May be 'tidy' clearance or a possible kerbed cairn burial
CR25	Ring Bank Roundhouse ?	NY 73636 69483		<a href="#">N6549</a>	8.7m E-W x 8.5m N-S x 0.4m high bank with stones. Possible entrance gap on S side	Location of a Tim Gates possible roundhouse
CR26	Ring Bank Roundhouse?	NY 73601 69471		<a href="#">N6549</a>	8.3m N-S x 7.9 E-W x 0.4m high bank with stones.	Location of a Tim Gates possible roundhouse
CR27	Ring Bank Roundhouse?	NY 73654 69520		<a href="#">N6549</a>	6.6m N-S x 7.6m E-W x 0.15m high bank. Slightly scooped.	Location of a Tim Gates possible roundhouse

CR28	Millstone	NY 73805 69617			3ft 6in diameter worked stone, resting on upright stone. No central eye.	Below a shallow rocky edge. ? quarried in situ.
CR29	Quarry ?	NY 73808 69590			Possible shallow quarry-face runs downslope with exposed rocks below at NY 73829 69584 and NY 73840 69573	Maybe a natural feature.
CR30	Cairn	NY 73646 69572			Turf-covered small cairn. 2.3m E-W x 1.8m N-S x 0.3m high	
CR31	Cairn	NY 73680 69558			7m N-S x 6m E-W x 1m high. Some large stones visible	
CR33	Cairn	NY 73768 69547			5.5m E-W x 4.7m N-S x 0.5m high. Turf covered	
CR34	Ring Bank	NY 73731 69601		<a href="#">N6549</a>	Stoney circular bank, 8m N-S x 9m E-W x 0.2m high. 1m deep 2m x 1.5m robber trench at centre. Located at crest of ridge.	Location of a Tim Gates possible roundhouse, but exposed position for habitation.
CR35	Cairn	NY 73752 69542		<a href="#">N6549</a>	5m N-S x 2.5m E-W x 0.4m high with visible stones	
CR36	Cairn	NY 73734 69545			4m diameter stoney mound 0.4m high	
CR37	Cairn	NY 73773 69509			6m E-W x 3m N-S x 0.3m high stoney mound in low lying area of cotton grass	
CR38	Cairn	NY 73785 69575			3m diameter x 0.5m high turf-covered stoney mound	
CR39	Ring bank Roundhouse ?	NY 73779 69590			7m diameter circular turf-covered stoney bank	
CR40	Cord Rig	NY 73649 69529			Area of 1m wide E-W cord rig	
CR41	Cairn	NY 73613 69447			Mostly turf-covered neat stoney mound 4m N-S x 2.5m E-W x 0.3m high	
CR42	Group of 5 cairns	NY 73588 69439		<a href="#">N6549</a> (cairn 4)	Group of five cairns in area of reeds. Cairn 1 (NY 73588 69439) turf-covered, 5m diameter x 0.4m high. 1m square robber-trench towards S side. Cairn 2 (NY 73590 69432) 2.5m N-S x 3.5m E-W x 0.3m high. Exposed. Cairn 3 (NY 73585 69431) 5m diameter x 0.3m high. Exposed. Cairn 4 (NY 73578 69427) turf-covered, 4m N-S x 5m E-W x 0.4 high. Cairn 5 (NY 73593 69434) turf-covered, 4m diameter x 0.3m high.	Located in low lying area with extensive reeds (some died-off recently).
CR43	Ditch and Bank	NY 73642 69473	NY 73497 69449		Long E-W slightly curving and bending 0.5m wide x 0.2m deep ditch with low upcast bank on S side. Intermediate points NY 73631 69472, NY 73622 69467, NY 73605 69459, NY 73591 69453, NY 73579 69450, NY 73562 69446, bends NW at NY 73551 69444, NY 73521 69447, and terminates at NY 73497 69449	Located just N of CR42
CR44	Cairn	NY 73696 69519			3m diameter x 0.3m high turf-covered cairn	
CR45	Burnt Mound ?	NY 73621 69189			Kidney-shaped double-topped mound located in wet reedy area. Overall mound 11m diameter 1m high on S side, 0.75m high on N side. E mound 5m N-S x 4m E-W. W mound 4.5m N-S x 3m E-W. Location N of small patch of cord rig recorded as <a href="#">N25717</a> & <a href="#">N24639</a> .	Location & shape suggests burnt-mound, although not very stoney on surface. Some burnt-looking small stones were retrieved from animal burrow.
CR46	Stoney mound	NY 73797 68865			Turf-covered 2m diameter x 0.2m high mound.	Possible clearance
CR47	Stoney mound	NY 73786 68861			Turf-covered 2m diameter x 0.3m high mound.	
CR48	Banked platform	NY 73631 68610			Curving grassy earthen bank 0.5m wide x 0.25m high encloses a small platform	
CR49	Quarry stone	NY 73665 68809			Stone with line of 10 wedge slots for quarrying	
CR50	Quarry stone	NY 73631 68788			Stone with three quarrying slots with iron wedge in one slot	
CR51	Drainage ditch	NY 73695 68754	NY 73705 68706		0.7m wide shallow ditch with low upcast bank on both sides.	Quite straight, but not necessarily modern.
CR52	Stack Stand	NY73608 68595			Low rectangular bank 8m x 4.5m x 0.2m high with shallow inside ditch with raised interior.	
CR53	Linear earthen bank	NY 73599 68583	NY 73588 68580		1.5m wide x 0.2m high	

CR54	Quarry scoop	NY 73581 68581			6m x 3m x 0.75m deep turf-covered scoop	
CR55	Lime Kiln	NY 73557 68565		<a href="#">N6516</a>	Single cell lime kiln built into bankside.	Late 18 <sup>th</sup> century
CR56	Enclosure	NY 73580 68710		<a href="#">N12313</a>	Ovoid banked enclosure 50m x 40m defined by sod cast bank 0.2m to 0.5m high, 1m to 1.5m wide. Broad rig and furrow, 4m wide, outside to E and inside enclosure. Extensive rabbit warren disturbance. SE corner of bank overlies Roman aqueduct CR57.	
CR57	Roman aqueduct	NY 73865 68766	NY73569 68686	<a href="#">N6480</a> <a href="#">1003788</a>	Visible as 1m wide platform on side of steep slope descending S to Caw Burn. Several sections removed by bank slippage. Gaps from NY 73851 68757 to NY 73845 68754, NY 73812 68732, to NY 73776 68720, NY 73738 68708 to NY 73714 68701, and NY 73694 68697 to NY 73659 68698. Crossed by CR56 bank at NY 73609 68688 intersecting with inner ditch of the enclosure. Deviates from enclosure ditch when this goes uphill from NY 73597 68680 and continues below enclosure bank until not visible in reeds beyond NY73569 68686.	
CR58	Quarry	NY 73657 68604		<a href="#">N32778</a>	Quarry 15m x 15m x up to 1.5m deep.	Close to Lime Kiln CR55
CR59	Stock Pen	NY 73801 69137			Extant stone walled 13.5m x 13m x 1.4m high, with internal pen 6.8m x 3.5m with 1.3m wide entrance. N and S gates 1.6m wide provide access to adjoining fields. Immediate beyond N gate is a rectilinear stone plinth 2.6m x 1.3m x 0.3m high creating a pinch point for entering pen from N field.	Not shown on 1 <sup>st</sup> Ed. OS but is on 2 <sup>nd</sup> Ed.
CR60	Cairn	NY 73850 68915			Turf-covered mound 3m x 2.5m x 0.4m high	
CR61	Culverted water channel	NY 73776 68334	NY 73644 68288	<a href="#">N32782</a>	Water channel seen as 2.5m wide x 0.2m deep ditch E of farm buildings, aligning with stone culvert immediately N of farm buildings at NY 73721 68315, NY 73702 68312, NY 73672 68305, and NY 73644 68288. 3.1m wide x 0.7m deep at boundary wall before joining steep natural drainage channel running down to Caw Burn.	
CR62	Rectilinear building (Stock pen)	NY 73700 68332		<a href="#">N32783</a>	2 celled 6.5m E-W x 6m N-S stone bank. Central wall runs W-E with possible 1m gap at E end. Possible 1m wide gap at SW corner. E end extends beyond line of relict stone wall CR63	Similarities to extant stock pen CR59
CR63	Relict stone wall	NY 73700 68333	NY 73694 68359		0.5m wide up to 1m high relict stone wall butting onto N side of stock pen CR62	
CR64	Banked trackway	NY 73743 68390	NY 73659 68356		Trackway along change of slope from W end of upper quarries CR65 to W end of lower quarries CR66. Intermediate points NY 73752 68386, bending N downslope at NY 73666 68356	
CR65	Quarry	NY 73772 68402	NY 73743 68390		Quarrying at top of slope	
CR66	Quarry	NY 73680 68381	NY 73647 68359		Quarrying lower down the slope	
CR67	Trackway	NY 73647 68353	NY 73674 68408		Trackway 2.5m wide running E downslope below quarries CR65 and CR66	
CR68	Stoney Bank	NY 73691 68393	NY 73701 68454		Stoney bank 1m wide x 0.4m high runs downslope from E end of quarry CR66 via NY 73696 68412 and junction with bank CR69 at NY 73697 68419.	Aligns with boundary shown on 1 <sup>st</sup> Ed. OS
CR69	Stoney bank	NY 73697 68419	NY 73683 68427		Stoney banks 1m wide x 0.3m high	
CR70	Cairn	NY 73768 68467			Turf covered mound 4.7m x 3.4m x 0.4m high	
CR71	Low stoney bank	NY 73743 68476	NY 73767 68493		Low stoney bank 0.5m wide x 0.2m high	
CR72	Earthen boundary bank	NY 73776 68582	NY 73833 68596		1.5m wide x up to 0.5m high earthen bank follows change of slope. Intermediary points NY 73785 685813 and NY 73798 68588	
CR73	Low stoney bank	NY 73782 68573	NY 73774 68592		1m wide x 0.2m high turf covered stoney bank runs N and S from CR72 at NY 73777 68584	
CR74	Boundary bank	NY 73812 68611	NY 73763 68605		2m wide x 0.2m high linear bank with shallow 0.5m ditch on S side. Intermediary point NY73780 68608	
CR75	Sow Kiln ?	NY 73732 68562			Low stoney arc 2m diameter x 0.2m high, interior 0.3m deep. Opening on N side	

CR76	Sow Kiln ?	NY 73800 68599			1m diameter x 0.2m high with sunken interior and possible opening on NE side	
CR77	Trackway	NY 73866 68338	NY 73740 68315		3m wide shallow trackway runs between Saughy Rigg Farm and Cowburn Rigg Farm. Intermediate point NY 73840 68331	
CR78	Earthen Mound	NY 73864 68354			22m x 7m x 0.5m high earthen mound with nettles.	Probable former farm dump
CR79	Sheep creep	NY 73799 68026			Blocked sheep creep, 0.45m wide x 0.75m high. Feature predates fence S of road.	Road shown as unenclosed on S side on 1 <sup>st</sup> & end Ed. OS.
CR80	Quarry	NY 73738 67793		<a href="#">N32784</a>	Extensive E-W linear quarry, depth 1.5m to 2m. Spoil heap 10m wide.	On Lidar
CR81	Quarry	NY 73740 67770			Series of smaller, shallower scoops along bottom of natural change of slope. Runs parallel to CR80. #m wide depression between scoops.	On Lidar. Possible natural feature (sink holes ?)
CR82	Quarry	NY 73750 67738			Extensive E-W linear quarry. Parallel and similar to CR80	On Lidar
CR83	Enclosure	NY 73740 67737			5.5m E-W x 5m N-S. Turf-covered stoney bank up to 0.3m high x 0.6m wide. Adjacent spoil heap to W.	
CR84	Ditch	NY 73798 67854	NY 73740 67988		0.5m wide x 0.3m deep straight ditch runs N down-slope from long E-W ditch that runs below CR80 quarry from both sides of current stone wall.	Ditch 8m E of stone wall giving appearance of possible trackway platform, but no indications of a stone surface.
CR85	Trough	NY73744 67988			Adjacent to N end of ditch CR84	
CR86	Enclosure & bank	NY 73876 68064		<a href="#">N24634</a>	Small sub-square enclosure about 11m across. Visible on LIDAR but not on ground, possibly obscured by length of grass in meadow. Field gate into enclosure from road in SW corner.	