



Bartinney Nature Reserve, St Buryan, Cornwall;
Archaeological Watching Brief for stiles and gateway

Cornwall Archaeological Unit

Report No: 2017R057

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2017R057

Report Name

Bartinney Nature Reserve, St Buryan,
Cornwall; Archaeological Watching Brief for
stiles and gateway

Report Author

Catherine Parkes
BA MCIfA

Event Type

Archaeological
Watching Brief

Client Organisation

Cornwall Wildlife Trust

Client Contact

Nick Marriott

Monuments (MonUID)

Scheduled
Monument
1007271

Fieldwork dates (From)

September
18th 2017

(To)

September
19th 2017

(Created By)

C Parkes

(Create Date)

December
2017

Location (postal address; or general location and parish)

Tredinney Common, Martinney Nature Reserve, St
Buryan, Cornwall

(Town – for urban sites)

(Postcode)

Nearest postcode TR19 6JD

(Easting) X co-ord (Northing) Y co-ord

(Site 1) 39358
(Site 2) 39651
(Site 3) 39780

28947
29105
28961



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Acknowledgements

Francis Shepherd of CAU kindly produced the illustrations of the boundary sections, forming Figures 24, 25a, and 25b, from the field drawings. Ann Preston-Jones, Heritage at Risk Project Officer, Historic England, contributed comments on the draft report.

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Cover West side of opening for stile and gateway in hedge at Site 2, looking north west. An earlier phase of the boundary can be seen, marked by a differently-coloured core to the bank, with associated dark buried ditch fill in front (see also section, Fig 25a).

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1 Project background

In September 2017 Cornwall Archaeological Unit, Cornwall Council (CAU, CC) was commissioned by the Cornwall Wildlife Trust (CWT) to carry out a watching brief, during access works to Tredinney Common, near St Buryan, West Cornwall (Figs 1 and 2). This is a heathland, part of CWT's Bartinney Nature Reserve. The works, at 3 separate locations in 2 boundaries, on and to the north of the north edge of the historic common at 184m-206m OD, comprised insertion of a new gateway with flanking stile, and replacement of two existing stiles.

The site forms part of an extensive historic landscape showing 'time-depth' with layers of early settlement-related activity. Much of Tredinney Common, along with part of Carn Glaze on the north east, has statutory protection, being designated a Scheduled Monument (SM), Historic England (HE) reference number 1007271. The SM includes a Bronze Age barrow, and relict prehistoric and medieval field systems, as well as a prominent abandoned china clay works. Cornwall's HER (Historic Environment Record) plots components of the Scheduled clay works and field system/s at or by the stile and gateway sites. The HER also records numerous significant, upstanding or buried remains in the near vicinity, including settlement-related enclosures (MCOs 50973, 50981) and flint scatters (MCO 188) at Carn Glaze. The hedge bank bounding the historic common, where the two stiles were replaced, is also a parish boundary.

The watching brief was required by HE, as the Scheduled historic boundary banks directly affected by the access works have demonstrable potential for important, Designated and other early archaeological remains relating to the past use and change of the land.

2 Aims and objectives

The archaeological project was aimed at providing guidance and recording for the works, to avoid, minimise, or mitigate for any adverse impacts on significant archaeological remains (Project Design, Cathy Parkes, CAU November 7th 2016). It was undertaken at three locations (see Figs 3-7) and included the following elements;

- Recording of the boundary cut through for the new gateway and stile (Site 2), including its structure, fabric, stratigraphy, and if possible evidence for its date.
- Recording also of any features pre-dating or incorporated within the bank at Site 2 and exposed, disturbed or removed by the works (this was combined with examining disturbed ground for any associated artefacts, though in the event no such finds were encountered).
- Appropriate recording for the replacement of existing stiles (at Site 1 and Site 3).

The 2016 CAU method statement was also designed to accompany the client's application for the Scheduled Monument Consent required for the works.

3 Working methods

- In advance of commencement of any ground-disturbing work, the affected hedge bank was recorded using field notes and photography as appropriate.
- Prior to removal of the bank across the full span of the broadest new access way, the combined stile and gateway at Site 2, the archaeologist determined the exact positioning of, and conducted a watching brief for, a vertically cut transverse section through the hedge bank (at a right angle to the boundary line) involving removal of c2m of its length. (At Sites 1 and 3, hedge removal was limited to c1m-1.5m of the bank's length, so this initial procedure – envisaged for all 3 sites in the Project Design – was not necessary there.)
- The watching brief was conducted during the excavation of all 3 new access ways. Disposal of spoil at appropriate locations, largely on hedge tops, was monitored.

- The preliminary opening at Site 2, and the cuts at Sites 1 and 3, were then recorded. Methodology included annotation of scaled base plans (used in plotting the new opening); description of all layers/contexts revealed by the access works; and drawing of the most representative or informative cross-section at each site (Sections 1-3; Figs 24, 25a and 25b) at a scale of 1:10; and digital photography.

Methodology; Post-Fieldwork

Archiving

- A documentary archive was prepared. In due course this shall be deposited with the Cornwall Record Office, but in the medium term will be stored at ReStore. All digital records were filed on the Cornwall Council network.
- An online OASIS (Online Access to the Index of archaeological investigationS) form was completed (see part 8 of the report, below, for OASIS ID number).

Report

The results of the above were drawn together to generate the report; a draft of this was submitted to Historic England (HE) for comment prior to its formal submission.

Monitoring

CAU advised Ann Preston-Jones, Heritage at Risk Project Officer with Historic England (HE), on the programme and progress of work and on completion of the fieldwork stage. (No highly complex or sensitive remains were encountered, so further liaison with HE, noted as a contingency measure in the Project Design, was not necessary.)

4 Project Results

4.1 The boundaries, their context and setting (brief overview)

The two 'Cornish hedge' boundaries, at which the access works and watching brief took place, are maintained in use, serving a belt of large rough fields around the summit of Bartinney, where seasonal pasture has been renewed as part of the CWT Reserve (Fig 2). Some of this was cultivated in the later 20th century (Nick Marriott, pers comm).

Prior to ploughing in 1973, many, well-preserved later prehistoric fields and roundhouses, in a curving early 'ring fence', lay north east of Sites 2 and 3, stretching away from the boundaries there affected by the present access works (Young 2016, 54, figure 3.1). The early layout in this area, as recorded from 1940s aerial photographs for the National Mapping Programme or NMP (*ibid*), is indicated in Figure 3.

The prehistoric complex extended into the east side of Tredinney Common; and the common also has an abandoned system of medieval 'outfields' covering 4.5 hectares, with low banks defining strips cultivated periodically, or rarely, when economic conditions were favourable (Herring 1995, 63; Herring 2016a, 208). At other times the common was a pasture, as shown by a lidden or pool to the west (Fig 4), supplied by leats with run-off water for livestock (Herring 2016b, 237), and a 'turbary' with customary rights for cutting turf used as domestic fuel (Herring 1995, 5).

The hedge bank at Site 1 lies at the corner of a group of strip fields, and also forms part of a long arcing boundary – delimiting Tredinney Common and the medieval parish of St Buryan (Figs 4 and 9). Site 3 lies on the same medieval boundary: and, like Site 2 (Fig 12), is on the margin of the surviving prehistoric fields. As a result the boundaries at the 3 sites define part of the edge of a Scheduled Monument (SM) area protecting these important survivals on the common. This can be seen from Figure 3, where the NMP plot is reproduced in green and the SM outlined in red.

Another important early feature of the wider setting of the boundaries is the large upstanding prehistoric earthwork on the summit of Bartinney (visible near the centre of Fig 2). The circular enclosure, quite regular in plan, is not considered defensive, and contains cairns, including three conjoined ones in its centre; it may have been a central

ritual or memorialising monument for the district (Jones 2016, 136, 137). This contributes to the potential for buried traces of prehistoric activity in the surrounding area outlined above (although no artefacts occurred in Sections 1-3).

4.2 Details of boundary fabric and fill revealed by the works

4.2.1 Section 1: ENE side of opening, Site 1 (Figs 8-11; Section Fig 24)

The hedge bank here was up to 2m wide and 1.1m high, worn down c0.5m at the stile, with battered sides faced with medium sized rubble granite, laid and pitched, and north side ditch appearing c2m wide and 15cm deep. The works revealed the following fabric:

1. Turf, loose dark brown peaty soil, and roots (hedge bank capping and topsoil).
2. Dark brown-grey silty clay with occasional small grit (hedge bank fabric).
3. Orange-brown friable silty clay (hedge bank fabric).
4. Dark brown-black peaty soil, with thin streaks of grey clay, lenses of orange-brown clay, a few small granite stones, and occasional grit (hedge bank fabric).
5. Pale grey clay, dense but friable, gritty (top of natural subsoil).
6. Orange-reddish brown clay with yellow-grey granite gravel (natural subsoil).

4.2.2 Section 2: West side of opening, Site 2 (Figs 12-19; Section Fig 25a)

The bank here was c1.2m wide and 1.1m high, and had steeply battered sides faced in rubble granite, with medium stones laid over pitched slabs, and flat top. No ditch was evident at surface (but see 9, below). Fabrics and fills revealed are as follows:

1. Turf, dark brown peaty soil, and roots (hedge bank capping and topsoil).
2. Dark brown soft peaty soil, very little stone or grit, a few roots penetrating throughout (hedge bank fabric).
3. Orange-brown silty clay (hedge bank fabric).
4. Dark grey-brown mixed silty and peaty soil, with lenses of orange and grey clay including contexts 3, 5, 6 and 7 (hedge bank fabric).
5. Orange clay (hedge bank fabric).
6. Pale grey clay (hedge bank fabric).
7. Grey-brown clay (hedge bank fabric).
8. Dark brown, mixed clayey and peaty soil yet homogenous overall, with some very small micaceous grit, but no sizeable stone or gravel (hedge bank fabric).
9. Dark brown-black soft peaty soil with few small granite stones (buried ditch fill).
10. Clean white-grey clay and coarse yellowy granite grit (top of natural subsoil).
11. Orange-reddish brown clay with yellow-grey granite gravel (natural subsoil).

4.2.3 Section 3: West side of opening, Site 3 (Figs 20-23; Section Fig 25b)

On the same boundary as Site 1, the bank here was c1.8m wide, and c1m high though only 0.7m high where sectioned. Its steep sides were faced with laid medium rubble.

1. Turf, soft dark brown peaty soil, and roots (hedge bank capping and topsoil).
2. Dark brown soft peaty soil, very little stone or grit; uniform (hedge bank fabric).
3. Dark grey-brown clay, with micaceous fine grit (top of natural subsoil).
4. Orange-reddish brown clay with yellow-grey granite gravel (natural subsoil).

Notes Context 9 in Section 2 was exposed to view in section not in the cut for the access opening, as such; but rather, in a pit immediately alongside the sectioned bank, on the front (south) side of its cut. This new post-pit (together with a similar one on the other, east side of the gateway) was dug to take the base of the gatepost required for the new gate. It measured c1.45m by 0.65m north-south and was 0.8m deep.

5 Interpretation and Significance of Sections

Results of the archaeological watching brief at the three sites, involving two historic boundaries on Tredinney Common, contribute to understanding of development of the historic field systems here. They include possible evidence for early banks, one on a pre-Norman parish boundary with dependent medieval outfields among the most extensive and best preserved in West Penwith (Herring 1995, 63; Herring 2016a, 208).

The long curving boundary intersected by the works at Sites 1 and 3 is considered to be early medieval in origin. It bounds part of the early Christian parish of St Buryan, as well as Tredinney Common; and may even be the 'dyke' recorded here in an early 10th century charter (Herring 1995, 67). It appears from the historic maps consulted to respect another long-distance boundary running roughly north-south just east of the study area, delimiting the parish of Sancreed. This is of further significance because the part of the edge of Sancreed in question also forms part of a great ring of primary boundaries, defining a core area of southern and central West Penwith. That area is interpreted as an early territory, probably prehistoric in origin, and influencing pre-Norman medieval settlement and place-names; identified for the purposes of analysis and discussion as 'Lescudjack land' (this name referring to Lescudjack hillfort near Penzance, a possible territorial centre) (Herring 2016a, 194).

The boundary including Sites 1 and 3, being pre-Norman, yet secondary to this, then tends to support the suggestion that Lescudjack land is prehistoric in origin. However, no artefacts were found in the course of the watching brief here, so the suggested dating of the boundary has not been confirmed or refined through this project.

Section 1 at Site 1 (Fig 24) did reveal a possible early core preserved within the later, extant form of the hedge (Layers 3 and 4). This lies in the position of a 'gurgo' or derelict ancient bank marked on part of the boundary line on an estate plan of 1778 (Herring 1995, 3), and so the watching brief possibly provides rare evidence, if not definitive dating, of such a feature. It would have been c0.5m high, a height typical of medieval outfield boundaries here and in other parts of the county. The fabric was earthy, containing – at least at the section – none of the clearance stone, thrown out of the way of cultivation, often found in strip boundaries elsewhere. Nevertheless, the boundary may still be medieval (earthy strip banks are known elsewhere in Cornwall, for example at Forrabury, Boscastle, and Lamlavery, Davidstow; Peter Herring, HE, pers comm). The two layers within the putative early bank here (3 and 4) may mark separate phases, or simply construction by first throwing up some adjoining peaty soil (Layer 4) and then topping this with subsoil originally lying beneath it (Layer 3).

The present form of the bank at Site 1 shows the fabric, style and scale typical of post-medieval Cornish hedges, with battered sides of local rubble stone revetting an earthy body, and a flattish top. The boundary probably took this form after 1778 – when the estate surveyor recorded its line as being marked largely with boundstones (not affected by the 2017 works) and partly with the remnant 'gurgo' – and before 1840 when Tithe surveyors indicated it as having a solid, built line (Herring 1995, 9, 11, 67).

In Section 3, at Site 3, the same boundary did not have a distinct core, but was essentially of one phase; probably because here the 'gurgo' was worn or taken down before 1778, as the plan of that date suggests. Alternatively, aurgo may have been removed here when the boundary was rebuilt to admit the previous modern stile; the timbers of this were fixed in large concrete plugs, necessitating cutting away the bank.

Section 2, at Site 2, again reveals a distinct hedge bank core (Layers 3-7, and 8). This may represent an early boundary, being associated, through proximity and profile, with a buried ditch in front (south) of it (context 9), partly overlain by the present, post-medieval style hedge facing, so pre-dating that. This core's texture and colour indicates it was made of turf or peaty soil, with several differently coloured, clayey patches, perhaps added along with turves when the hedger's shovel bit into the subsoil before casting up. It resembles Layer 4 in Section 1, potentially similarly made of turves.

6 Concluding Remarks

The insertion of replacement stiles and new gateway at Bartinney CWT Nature Reserve meant cutting through and removing parts of two historic hedge banks, one a parish and common boundary likely to date from the 10th century AD or earlier. These banks are components of, and serve to bound, an extensive Scheduled Monument, protecting the time-deep and diverse field systems in this area. Works disturbing such nationally-important upstanding features are generally undesirable in principle – and are subject to legal control (SMC). However, here they provide infrastructure for restoring traditional, sustainable land management by grazing, protecting at least part of the area from root or rhizome damage, and concealment, by woody scrub and bracken. CWT, in consultation with Historic England, enhanced the stiles by using local stone, and, through the CAU project, minimised and mitigated for disturbance; the watching brief revealing cores within the banks, one at least potentially marking an early phase.

7 References

7.1 Primary sources

Ordnance Survey, 1809. 2 inch scaled drawing (British Library website)

Tithe and schedule, 1840. Parish of St Buryan (licensed digital copy at CAU)

Tithe map and schedule, 1841. Just-in-Penwith (licensed digital copy at CAU)

Tithe map and schedule, 1843. Parish of Sancreed (licensed digital copy at CAU)

Ordnance Survey, c1880. 25 inch map, first edition (licensed digital copy at CAU)

Ordnance Survey, c1908. 25 inch map, second edition (licensed digital copy at CAU)

Ordnance Survey, MasterMap Topography

7.2 Publications and 'Grey Literature' (archaeological reporting)

Herring, P, 1995. *A report to Penwith District Council and the Countryside Commission on Bartinney Hill, Tredinney Common and Carn Grean* CAU: Truro

Herring, P, 2016a. Medieval West Penwith (c AD 400-1540), Chapter **8**, 193-215, Herring, P, et al *Archaeology and Landscape at the Land's End, Cornwall* CAU: Truro

Herring, P, 2016b. Early post-medieval West Penwith (AD 1540-1750), Chapter **9**, 216-237, Herring, P, et al *Archaeology and Landscape at the Land's End, Cornwall* CAU: Truro

Jones, A M, 2016. Early landscape and ceremony, Chapter **5**, 112-137, Herring, P, et al *Archaeology and Landscape at the Land's End, Cornwall* CAU: Truro

Young, A, 2016. Air photographic mapping, Chapter 3, 53-57, Herring, P, et al *Archaeology and Landscape at the Land's End, Cornwall* CAU: Truro

8 Project archive

The project archive (ref **146714**) is maintained by Cornwall Archaeological Unit, Cornwall Council, Fal Building, County Hall, Treyew Road, Truro, TR1 3AY.

CAU field drawing archive nos.: GRE 894/1 (Section 1), GRE 894/2 (Sections 2 and 3)

Electronic data is stored by CAU in the following locations:

Project admin, and report: \\Sites B\\Bartinney Nature Reserve WB 146714

Digital photographs, and illustrations: \\Bartinney Nature Reserve WB 146714

Historic England/ADS OASIS online reference: cornwall2-301947






Fig 1 Map showing location of Bartinney Nature Reserve in west Cornwall.

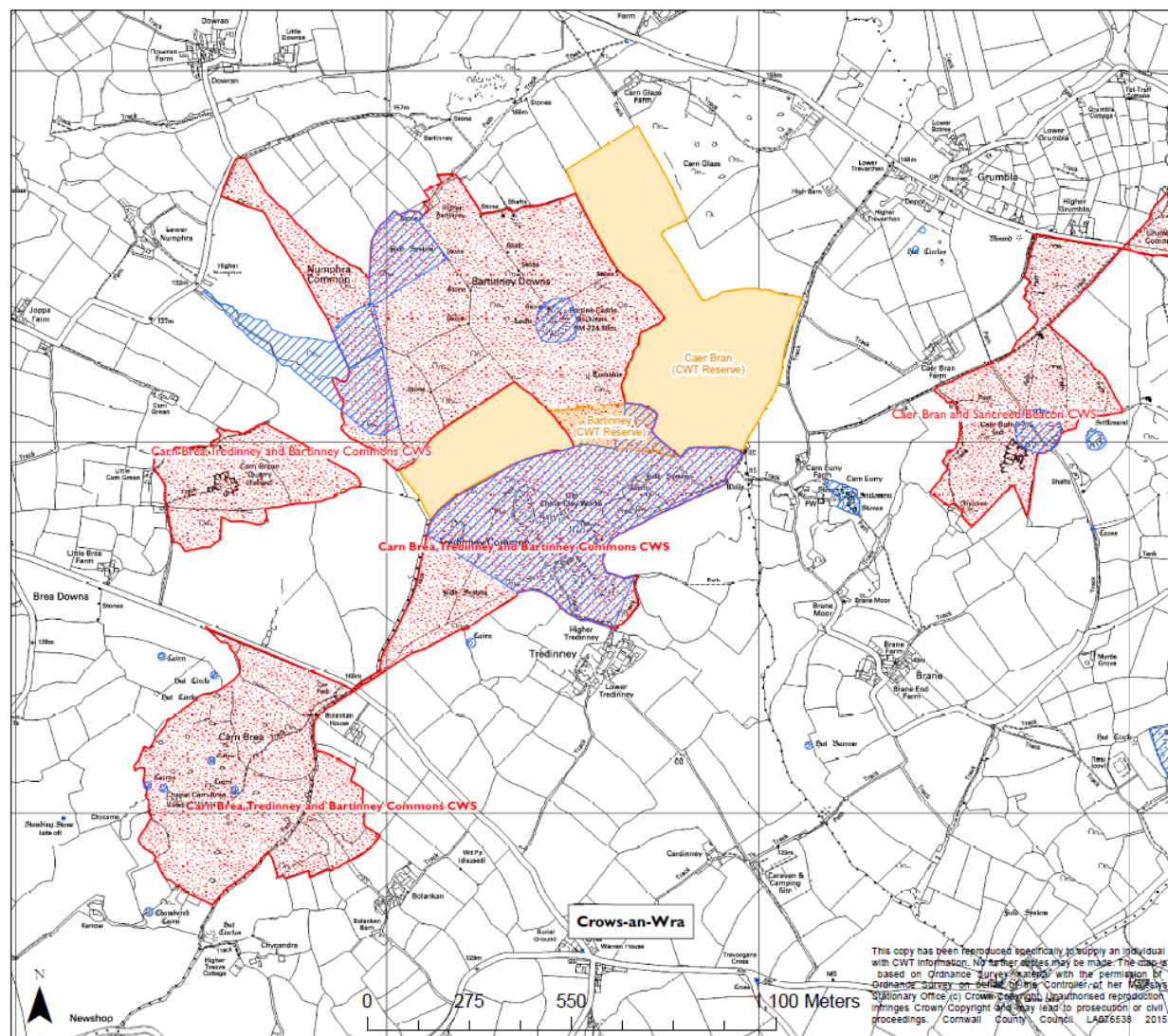
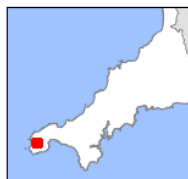


Cornwall Wildlife Trust

**MAP I
BARTINNEY NATURE RESERVE
LOCATION & DESIGNATIONS**

Legend

-  Scheduled Ancient Monuments 2010
-  County Wildlife Sites (CWS)
-  Cornwall Wildlife Trust Reserves



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Fig 2 Cornwall Wildlife Trust mapping of extents of Nature Reserves and Scheduled Monuments in the Bartinney area.

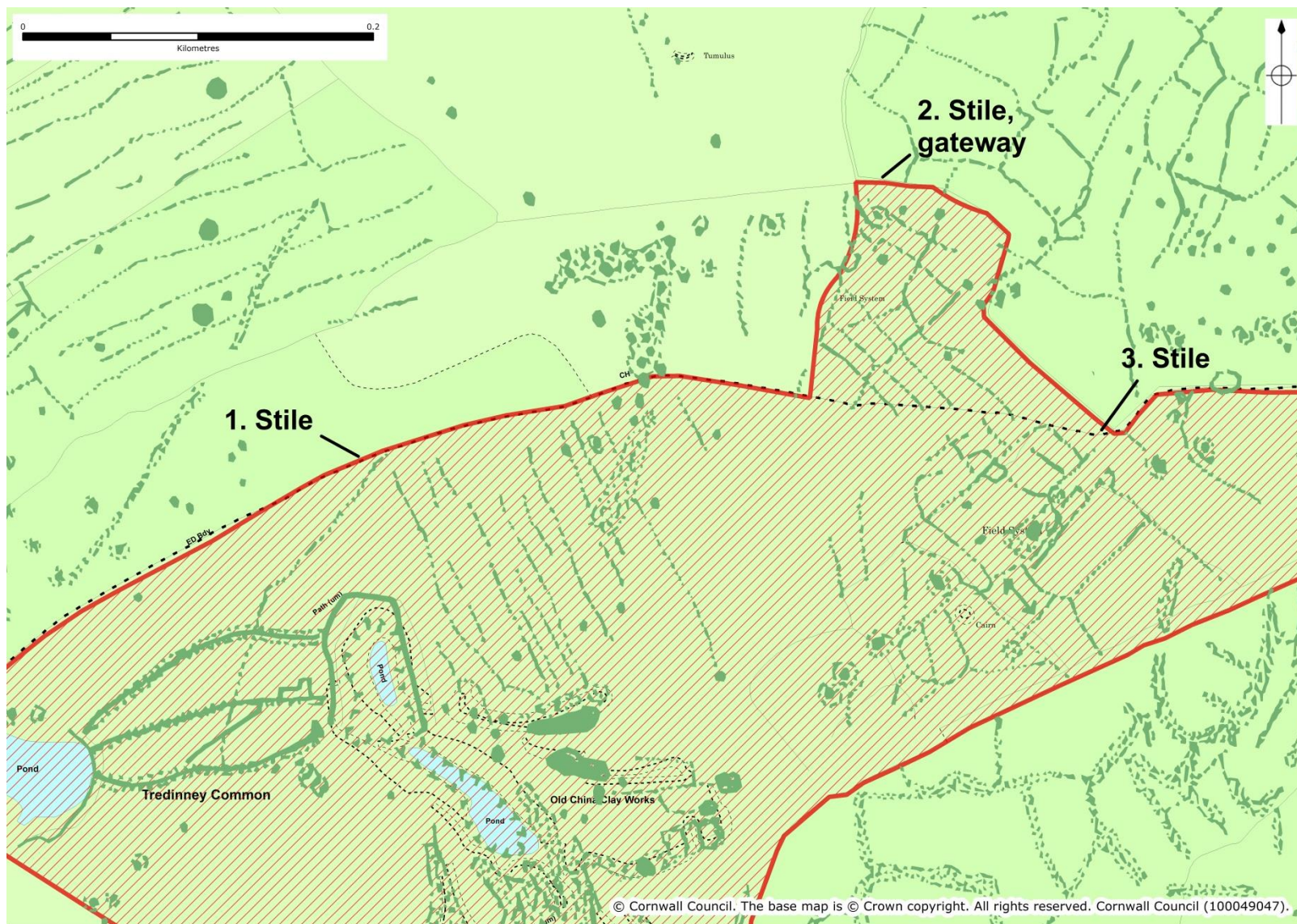


Fig 3 Map of north east part of Tredinney Common showing the three access works sites, with SM in red and NMP plot in green.

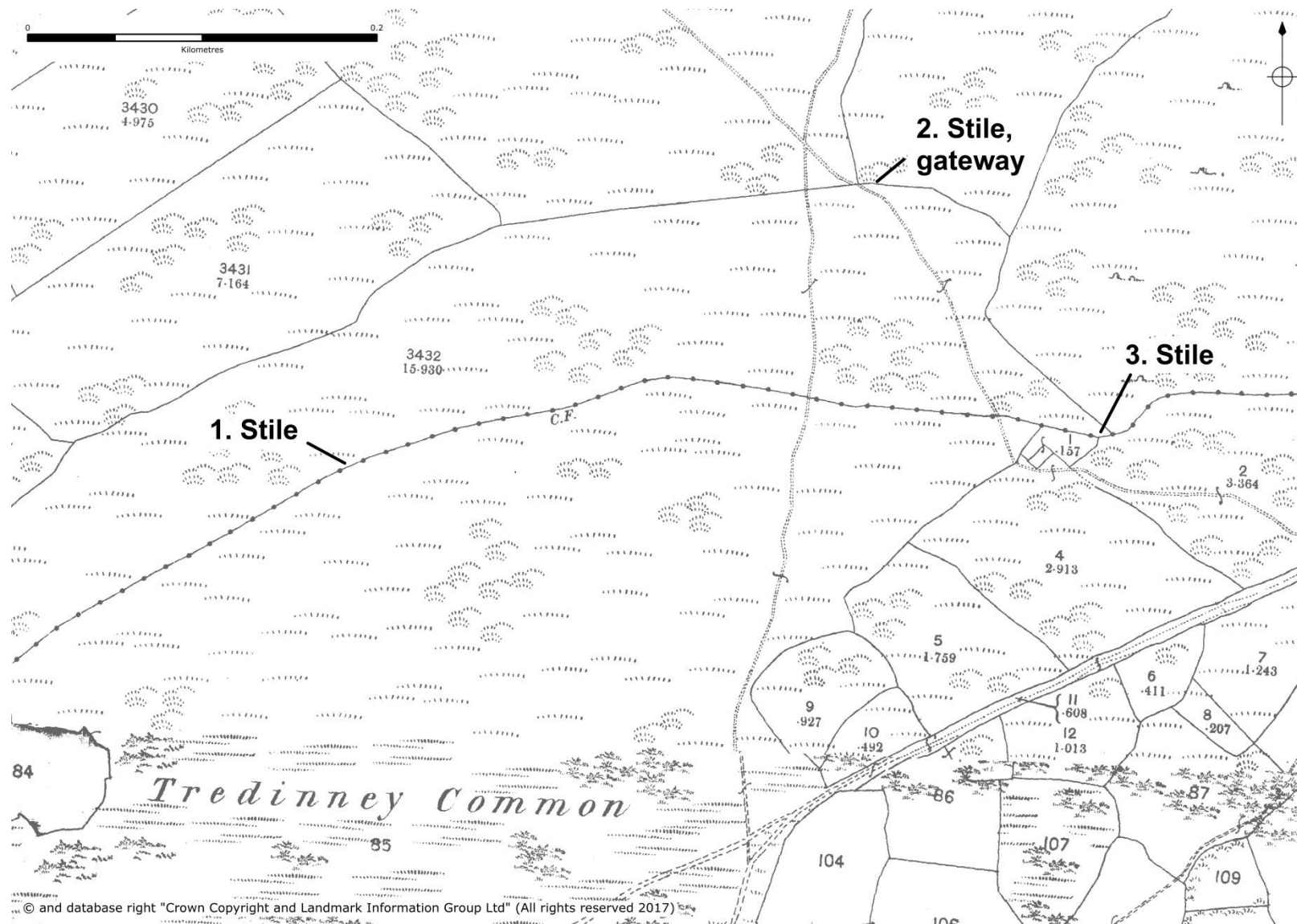


Fig 5 OS map of c1880, with access works sites superimposed; the downs have enclosures not recorded c1840, but remain rough ground.

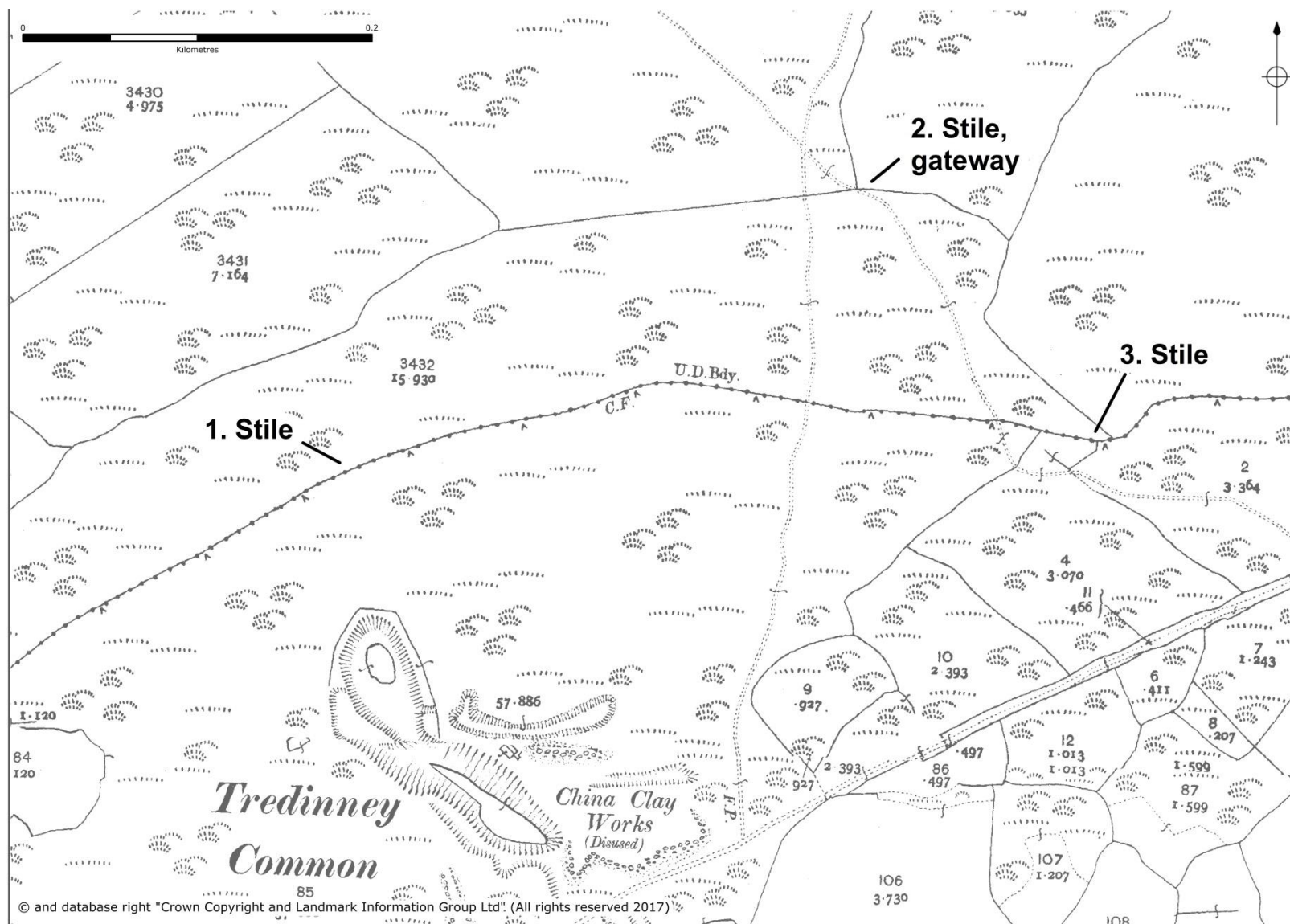


Fig 6 OS map of c1908, with access works sites superimposed; showing the china clay works on Tredinney Common.

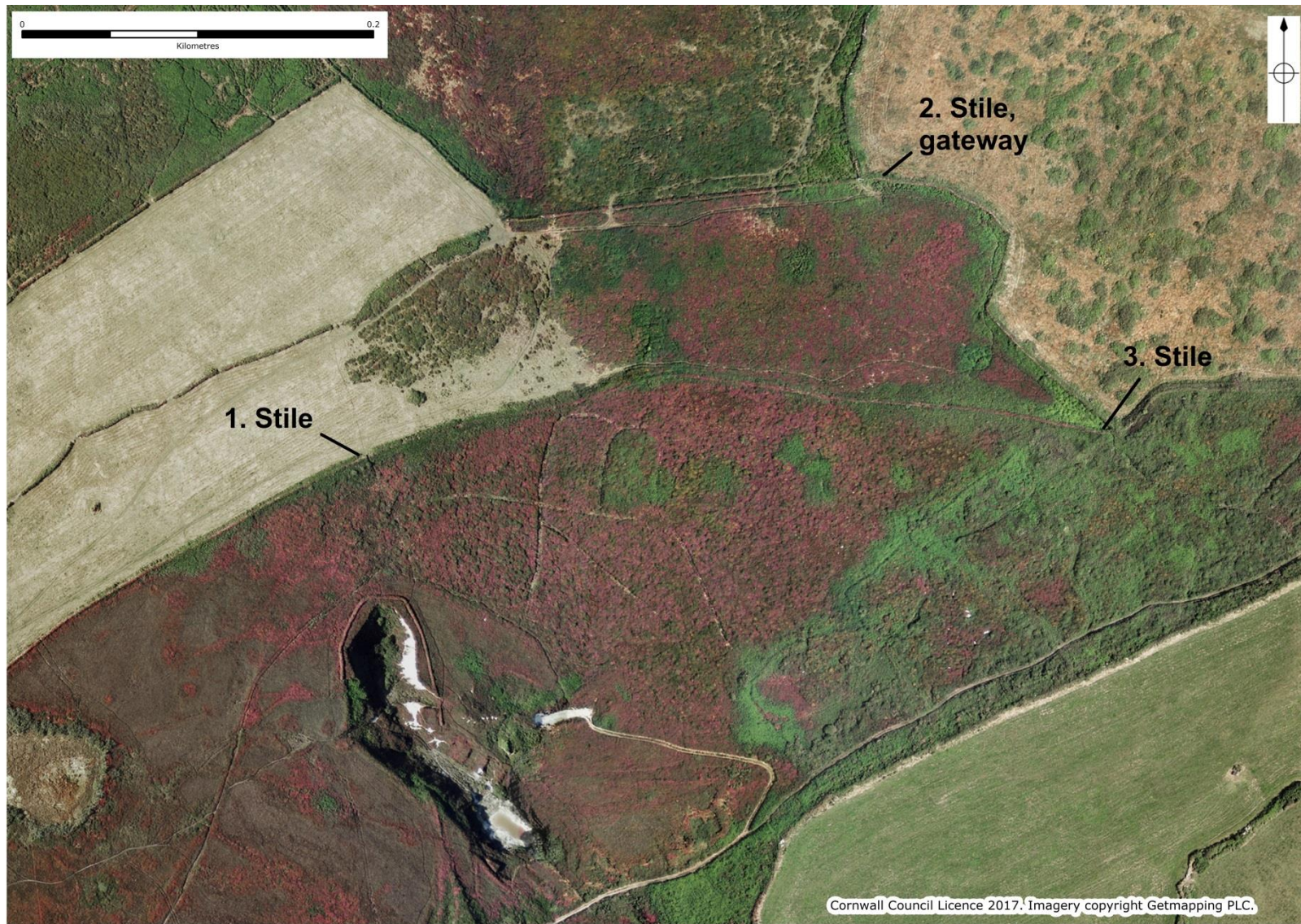


Fig 7 Cornwall Council aerial photograph coverage, showing ground conditions around the access works sites.



Fig 8 Bank at Site 1, bounding SM (foreground), after removal of old stile, looking SSW. The truncated end of the bank at the stile, visible here, is shown in section in Fig 24.



Fig 9 Site 1 cleared of scrub, looking WSW, showing bank's external ditch, and setting.



Fig 10 New opening at Site 1, looking WNW, showing side modified for 20C stile.



Fig 11 Site 1 opening, looking north east, with stratigraphy seen in section in Fig 24.



Fig 12 Site 2 before works, showing south side of bank bounding SM, looking east.



Fig 13 Site 2 cleared of bramble, showing stone facing to south side, looking west.



Fig 14 Site 2 before works, looking east along top, showing vegetation and setting.



Fig 15 Dismantling facing stones on north side of hedge bank at Site 2, looking west.



Fig 16 Site 2, west side, with evidence of earlier phase bank seen in Section 2, Fig 25a.



Fig 17 Site 2, with buried ditch exposed in western post pit, seen in Section 2, Fig 25a.



Fig 18 Cut north side of bank at Site 2 exposing peaty earth fabric, looking south west.



Fig 19 Opening at Site 2, looking north to Castle-an-Dinas (left) and other distant hills.



Fig 20 Bank at Site 3, forming the edge of the SM (left), before works; looking WNW.



Fig 21 North side of hedge at Site 3 after trimming of vegetation, with worn pathway.



Fig 22 Site 3, south side, showing concrete post base in core of bank (left of 1m scale).



Fig 23 West side of opening, Site 3, largely of one phase; see also section, Fig 25b.

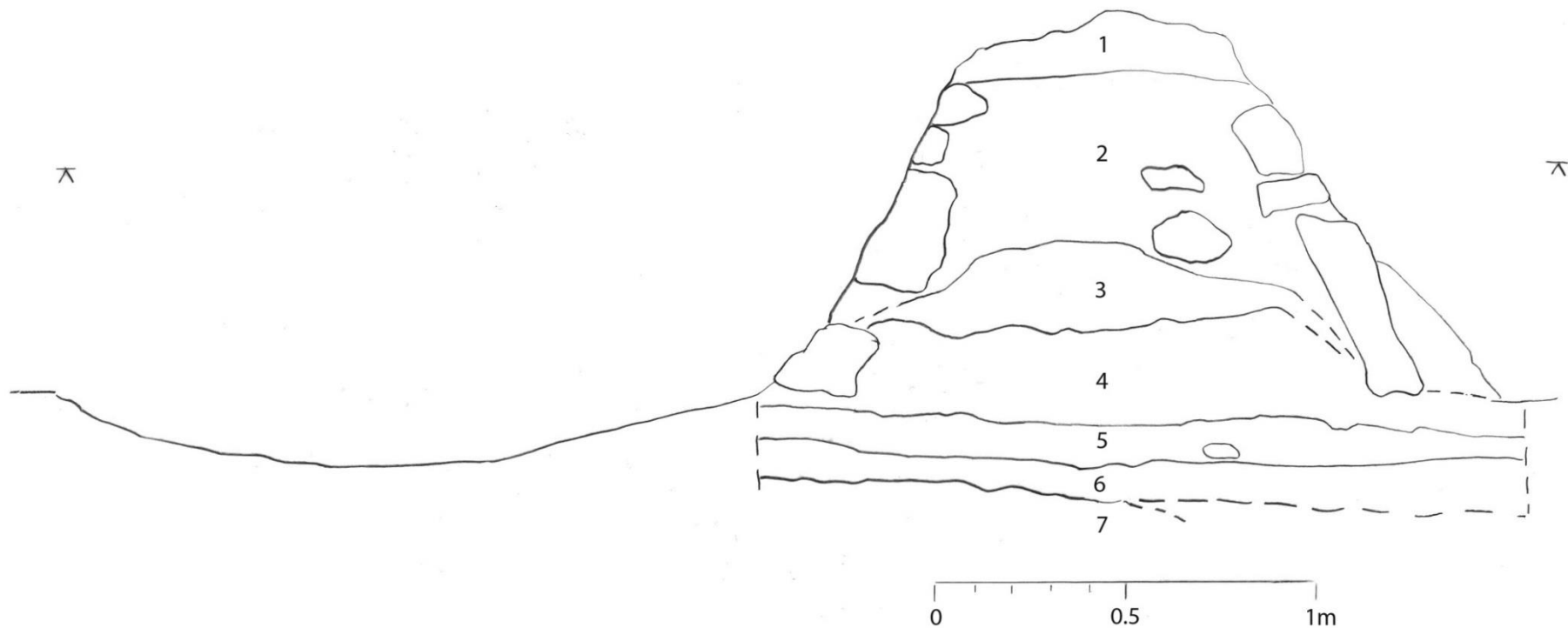


Fig 24 Section 1; ENE side of opening for stile, Site 1. The ground SSE of the boundary – to its right, in the drawing – lies within the SM. See main text (part 4.2.1) for contexts exposed in the hedge bank, numbered 1-7. Note the linear depression on the NNW (left), a hedge quarry-ditch. (This feature was not affected by the works, so does not appear in the section. No doubt it is part filled as a result of natural silting, stock trampling, and perhaps short-lived cultivation, and is substantially deeper than its profile here might suggest.)

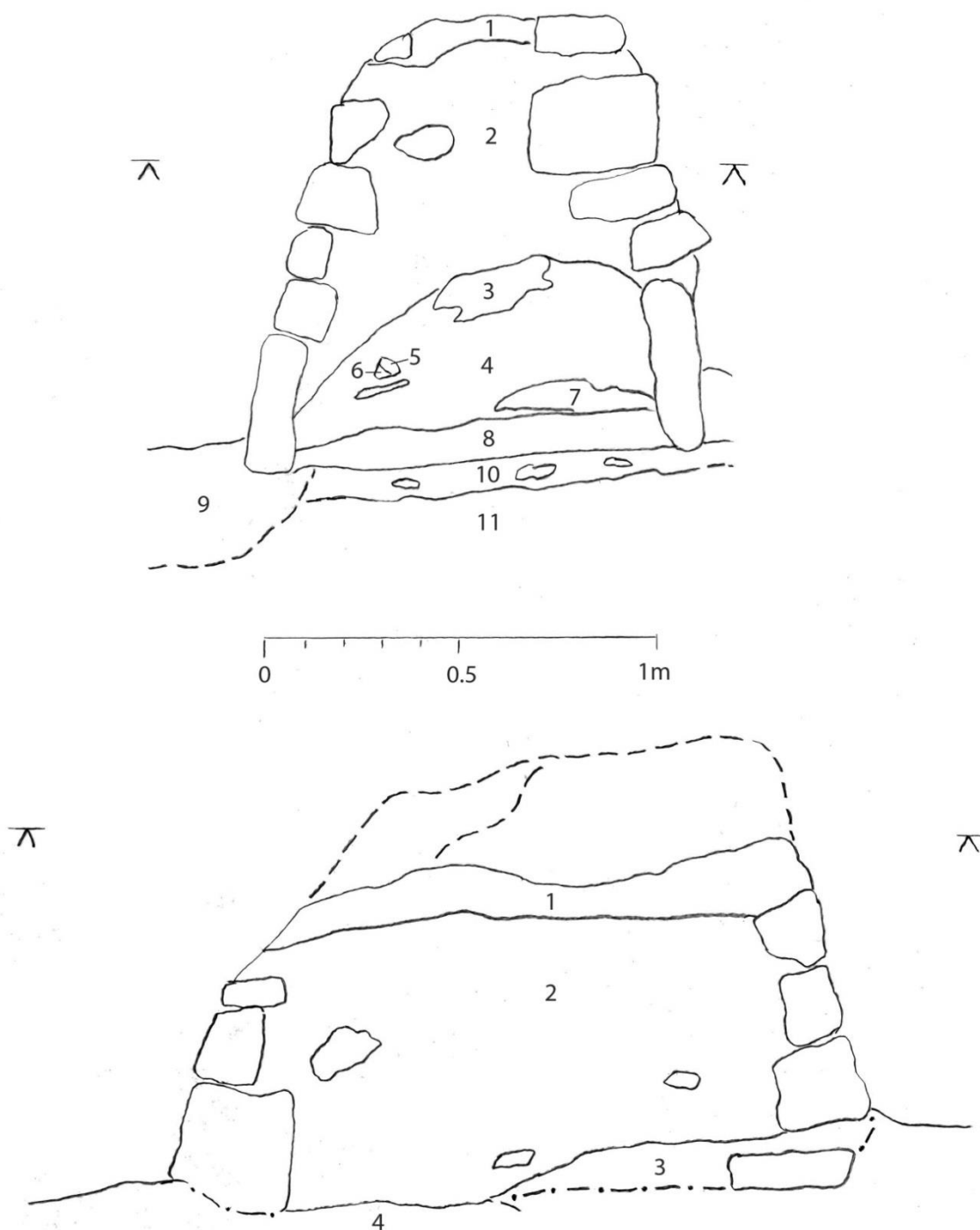


Fig 25a **Top** Section 2; West side of opening for combined gateway and stile, Site 2.

The ground south of the boundary – to its left, in the drawing – lies within the SM.

Fig 25b **Below** Section 3; West side of opening for stile, Site 3; again, SM to south.

See text (Parts 4.2.2 and 4.2.3) for details of numbered contexts. Of particular interest, in Fig 25a, is the evidence for an earlier bank and ditch (Contexts 3-9).

Cornwall Archaeological Unit

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