



Helman Tor, Lanlivery, Cornwall,
Archaeological Watching Brief

Cornwall Archaeological Unit

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Helman Tor, Lanlivery, Cornwall,

Archaeological Watching Brief

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The Project Manager was Andy Jones.

The views and recommendations expressed in this report are those of Cornwall Archaeological Unit and are presented in good faith on the basis of professional judgement and on information currently available.

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Cover illustration:

Part of the site of the watching brief – a hedge bank on Helman Tor, site of a Neolithic tor enclosure. This view shows how the bank kinks to follow the line of the early ramparts north to a natural tor, and captures some of the erosion (here topped with loose stone) and prominent but dilapidated modern fencing which prompted the works.

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Abbreviations

CAU	Cornwall Archaeological Unit
CCRA	Cornwall Committee for Rescue Archaeology (precursor of CAU)
CIfA	Chartered Institute for Archaeologists
CWT	Cornwall Wildlife Trust
HE	Historic England
HER	Cornwall and the Isles of Scilly Historic Environment Record
OD	Ordnance Datum – height above mean sea level at Newlyn
OS	Ordnance Survey
SM	Scheduled Monument

1 Summary

This report presents the results of a watching brief of May 2017 by Cornwall Archaeological Unit for Cornwall Wildlife Trust, covering repair works to a field boundary on Helman Tor in the parish of Lanlivery, central Cornwall. Helman Tor has a Neolithic tor enclosure, a designated Scheduled Monument, and the watching brief was required by Historic England to guide and record the repairs, to avoid, minimise, or mitigate for any adverse impacts on significant archaeological remains. Project methodology included a rapid desk-based assessment of historic maps and other documentary sources; recording of the hedge prior to the works using annotation of a large-scale survey of 1984, profile drawing at a scale of 1:20, and digital colour photography; and watching brief during ground-disturbing works.

The fabric, form and character of the boundary were recorded. It has a stone-faced earth bank or Cornish hedge typically measuring 1.5m-2m wide and 1m high, spreading to c3m in places, and has steeply battered, stone-revetted sides, and a fairly flat top. Facing stones are all local granite rubble, mostly c0.1m-0.2m across in the upper part of the hedge, and up to around 0.5m across and less frequently as much as c1m across in the base of the bank. No stone-splitting marks were visible. An internal ditch running c2m wide along the western half of the boundary was not significantly disturbed by the repair work, so was not examined at any depth, but was interpreted as a hedger's ditch, made to quarry material for the hedge bank alongside while effectively heightening it, of the kind typical of traditional built boundaries in Cornwall.

During the works limited datable material was encountered. A small piece of limestone rubble c8cm across and c4cm thick from the earthy core material, fractured possibly as a result of heating, was found behind the south face of the hedge further down towards its east end. Historic use of limestone in farmland on the granite areas of Cornwall can be attributed to the improvement of acid soils with burnt lime, a practice recorded as recently adopted and still limited in extent in Cornwall in 1667. This find may then indicate that the hedge was built in its present form in or after the later 17th century.

Evidence from historic maps is consistent with this dating. The whole of the boundary is depicted on an estate map of c1690. The boundary appears too on the OS 3 inch scale drawing and first one inch mapping of 1805 and c1806; and also on the more detailed, later historic maps, the tithe survey of 1839 and the OS maps of c1880 and c1908, which demonstrate that it followed the course it takes today.

The desk-top study and field work together indicate that hedge bank itself does not form part of the Neolithic tor enclosure. The hedge is considered to have been made in its present form during post-medieval times to serve as a stock-proof field boundary, incorporating, east of the tor enclosure, part of an earlier boundary attached to the latter and possibly medieval in date. A potential historical context for this adaptation of the medieval field system is the development of tin streaming and associated stimulus to farming in the area in post-medieval times.

Although the body of the hedge is considered post-medieval, its earthy core may still be regarded as archaeologically sensitive, in particular where it runs along the rampart line. The presence of a sizeable earth-fast boulder in its outer edge there may indicate that the base of this edge of the hedge bank, not disturbed by the 2017 works, could incorporate some Neolithic rampart fabric, perhaps *in situ*. The loamy core of the hedge bank has potential for containing some redeposited Neolithic settlement-related material. This is especially so where the hedge runs along the rampart line since here it was derived from the ditch along its uphill side, dug into the ground inside the ramparts in a similar position to excavated platform T16 within the edge of the tor enclosure a short distance to the south. Here worked flints, pottery and other remains of Neolithic occupation were found in excavations of 1986. However, it should be noted that the loam in the hedge core appeared very similar both on and away from the rampart line, and also that loam covering the occupation site T16 was found on excavation to contain only very small numbers of early artefacts.

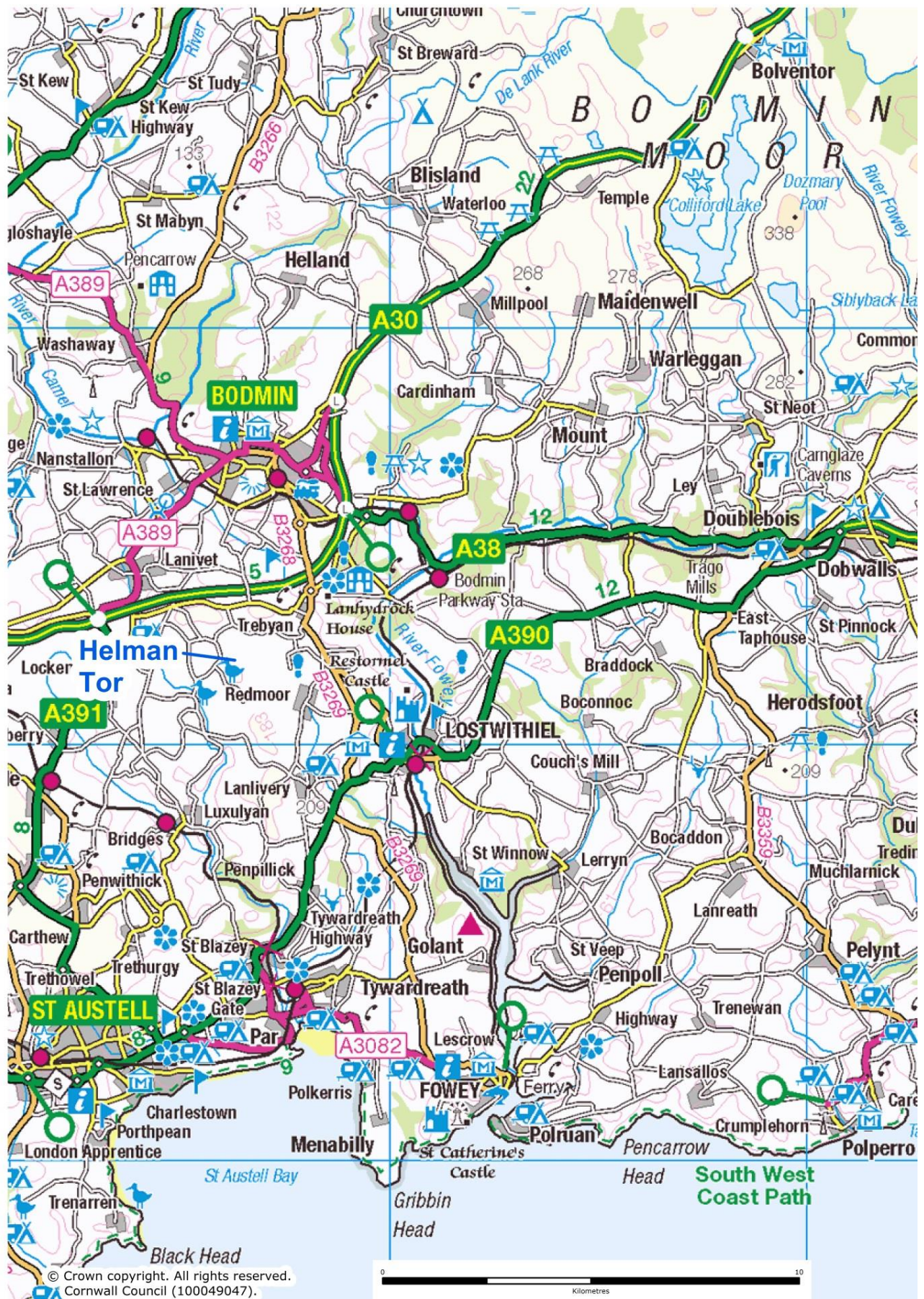


Fig 1 Map showing the location of Helman Tor south of Bodmin in central Cornwall.

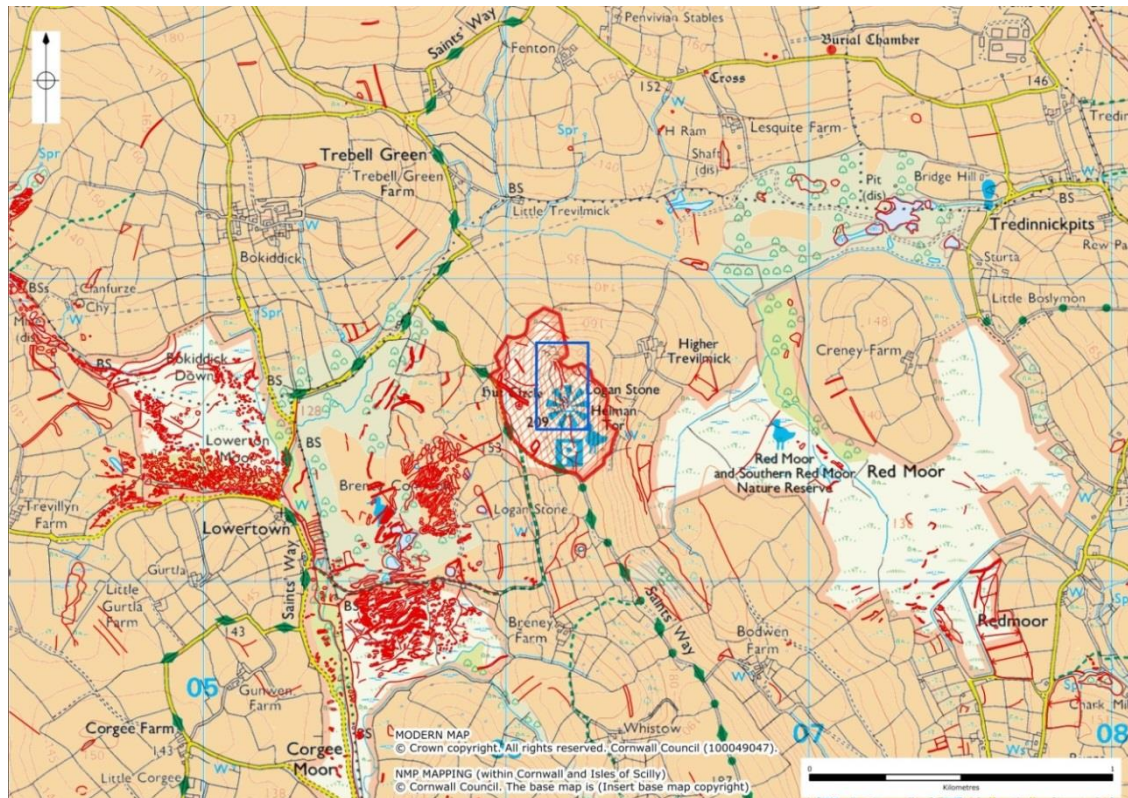


Fig 2 Map of the area, with the SM protecting the tor enclosure outlined and cross-hatched in red; NMP plot of features visible on aerial photographs, also in red; and inset box defining the extent of the detailed archaeological site plan, Figure 28, in blue.

Note also the Neolithic 'burial chamber' at Lesquite, top right of the map.

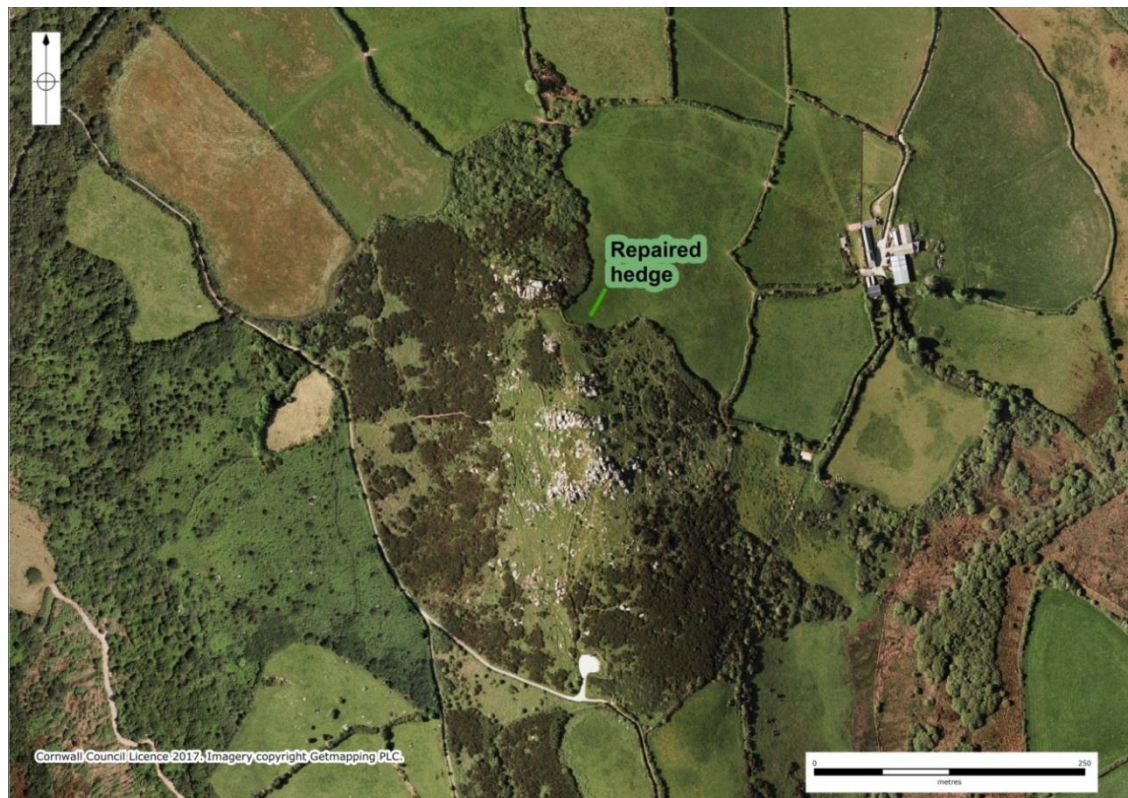


Fig 3 Aerial photograph of 2005 showing the site at the edge of the rough hilltop.

2 Introduction

2.1 Project background, and previous projects at Helman Tor

A watching brief was carried out in May 2017 by Cornwall Archaeological Unit (CAU) for Cornwall Wildlife Trust (CWT), covering works to a field boundary on Helman Tor in the parish of Lanlivery, central Cornwall (Fig 1). The works were designed to repair erosion and collapsed parts of the boundary bank, and to improve its appearance in keeping with its traditional character (see Section 5). An archaeological watching brief was required by Historic England (HE). Helman Tor has a Neolithic tor enclosure on its summit, and the site of the groundworks lies in an extensive area of the hill, including the enclosure, designated a Scheduled Monument (SM) (Section 4). A Neolithic chambered tomb, also a SM, stands across the valley to the north at Lesquite (Fig 2).

2.2 Aims

As established in the CAU Project Design, the archaeological watching brief was aimed at guiding and recording the works, to avoid, minimise, or mitigate for any adverse impacts on significant archaeological remains, through the following;

- Identifying of any historic map evidence, and/or information emerging from the repair works, for the date and style of the boundary bank itself.
- Recording of any evidence revealed by the repair works, for the original form, material, style and date, and later modification, of the boundary.
- Ensuring that disturbance of the rampart or associated early remains is avoided or minimised.
- Recording of any features or artefacts pre-dating or incorporated within the affected boundary bank and exposed, disturbed or removed by the works.

2.3 Methods

Methods used included the following, as set out in the Project Design.

2.3.1 Desk-based assessment

Rapid desk-based assessment was undertaken both before and after the fieldwork, using historical databases and archives to obtain information about the history and development of the site. The main sources consulted were as follows:

- Cornwall HER.
- Early maps (see Section 8.1).
- Published histories (see Section 8.2).

Previous archaeological projects, not related to this watching brief but of importance for it in terms of the wider background of the study and investigation of Helman Tor, are as follows;

- Large-scale survey of the tor enclosure, 1984, by CCRA (Cornwall Committee for Rescue Archaeology).
- Part excavation of the tor enclosure, and adaptation of the 1984 plan, 1986 (Mercer 1997).

2.3.2 Fieldwork

- Prior to the works, the affected boundary was examined and recorded as appropriate to locate and represent its form, character, evidence for development or change, relationship to the prehistoric remains, modern erosion damage, and the extent and nature of the repair works. Methods used included annotation of the pre-existing large-scale survey, profile drawing at a scale of 1:20, and digital colour photography.
- The archaeological watching brief was conducted during the repair work, including trimming of parts of the hedge bank to allow rebuilding of its stone facing. Some

insertion of facing stones proceeded without watching brief where fabric involved was found not to be archaeologically sensitive (working procedures and contingency arrangements having been agreed with the contractor).

2.3.3 Post-Fieldwork

Following the fieldwork, the results of the desk-based study and fieldwork were integrated to generate this report, drawings were produced, and photographs were archived.

3 Location and setting

Helman Tor lies south of the town of Bodmin in central Cornwall (Figs 1 and 2). It is a dramatic hill, its summit rising above the north end of a granite ridge isolated from the granite massifs forming the spine of Cornwall, steep-sided, and topped with several tors or prominent outcrops resembling giant piles of rock. The top of the hill reaches around 200m OD in height; its base lies at about 150m OD (c175m OD on a saddle on the ridge to the south). Surrounding its slopes are several extensive wetland areas including Red Moor below the north east side where the watching brief took place; this marsh is the source of a tributary of the Fowey, the major river of the region (rather than the northernmost headwater of the Fowey as suggested in Mercer 1997, 5). Soils here are the Moretonhampstead type of typical brown podzolic soils.

The 2017 works were located on the north east side of the summit of the hill (cover photo, and Figs 2, 3 and 28). The stretch of stone-faced earthen field boundary bank or 'Cornish hedge' affected by the works is approximately 110m long. For nearly half of its length this rises across the contour up the flank of the hill towards the tor enclosure; it then turns to the north west to run around the north east shoulder of the summit to the northernmost tor, so following the course of early rampart/s there, as discussed further below. It bounds rough ground on the hilltop against improved fields to the north east.

4 Designation; Scheduled Monument

The whole of the hedge site forms part of a Scheduled area, as shown in Figure 2;

- 'Earlier prehistoric hillfort, stone hut circle settlement and field system at Helman Tor', List Entry No. 1007306' (Heritage Gateway website).

Along its lower half, the hedge bank bounds the 'constraint area' or legal mapped boundary of the Scheduling. Above this, the hedge lies within the margin of the SM.

The hedge, dividing rough and 'improved' land, is also part of the boundary of the CWT Helman Tor Nature Reserve.

5 Outline of groundworks

The CWT work at the site involved stock-proofing the boundary bank, and had two main elements. Firstly, the bank, eroded and slumped to varying degrees in numerous places, was repaired *ad hoc* and matching the existing style (Figs 21, 22 and 23). Secondly, a modern fence on its top made of vertical posts and mesh and barbed wire - quite prominent when seen from the tor enclosure inside, since it stood up over the site of the early rampart on the brink of falling ground - was replaced by wire on low, angled 'outriders'.

Several aspects of the work entailed some disturbance of ground or fabric in the SM;

- Retrieval of tumbled revetment stone for reuse, by hand or through careful use of a mini-digger (wet weather was avoided, to minimise damage by tracking).
- Vertical trimming of the front of the hedge bank by mini-digger or mattock, to reveal any stone facing concealed by slumping, or to allow this to be repaired.
- Limited, superficial excavation by mini-digger in the boundary ditch, to provide turf to top the bank after the stone face had been rebuilt, as well as retrieve any grassed-over fallen facing stone there.

6 Results

As Figure 28 shows, the hedge bank at Helman Tor repaired in 2017 stands partly on the tor enclosure's 'enceinte of massively built, boulder-constructed wall....certainly present on the eastern side of the summit of the hill and at the southern extremity' (Mercer 1997, 9, 12). It is close to Terrace T16, a well-defined platform between the massive boulder-built enclosure wall on its forward (eastern) side and a 'clear bank of upcast material on its rearward side', c15m to the south at its nearest point. Excavations at T16 in 1986 revealed Neolithic structural and cultural activity - midden debris, 'substantial ground-fast evidence for timber supports for structures', relatively large quantities of pottery and lithic debris (*op cit*, 5, 12-13, 56).

The repaired hedge separates rough ground on upper Helman Tor, on its south and west, from an improved field to the north and east (Fig 3). It should be noted, though, that alongside and beneath the westernmost part of the hedge, roughly parallel to this, the improved field incorporates a substantial linear earthwork (Figs 4 and 5). This is interpreted as part of the rampart of the tor enclosure which continues along the contour south of the affected hedge as recorded on the 1984 survey (Fig 28), and is included in the Scheduling. Here the rampart is a stony bank c4m-5m wide and 1.6m high on the east, with an uneven surface supporting the hedge on its west, and a scarp forming its outer side against the rest of the field on its east. It is unimproved, bearing bluebells and other rough vegetation, unlike the remainder of the field incorporating it.

The hedge bank itself is covered in grass, bracken, bluebell and other flora, together with gorse, and blackthorn particularly towards the east. Prior to the repairs, the hedge bank was worn, slumped, or both in many places, most severely at an actively eroding part, some 2m long, just north of the corner where the hedge climbs onto the Neolithic rampart. This most damaged part of the hedge, before repair, is shown in Figures 6 and 7, and recorded in Profile 1 (Figs 28 and 29). It had been trampled by livestock so that it had a low rounded back and a spread of tumbled earth and stone on the uphill, western side; it was topped by a modern fence of round-section posts and meshed and barbed wire, with several loose stones piled on it at the fence line.

More typical parts of the hedge, less affected by erosion or collapse, show the form recorded in Profile 2 (Figs 8, 28 and 29). The bank generally measures around 1.5m-2m wide and 1m high, spreading to c3m in places, and has steeply battered, stone-revetted sides, and a fairly flat top (cover photo, and Fig 9). Facing stones are all local granite rubble, mostly measuring in the region of 0.1m-0.2m across in the upper part of the hedge, and up to around 0.5m across and less frequently as much as c1m across in the base of the bank. Stones were inspected during the watching brief for stone-splitting marks, whether drill-holes or wedge marks, but none were visible.

In some places, below the tor enclosure, where the bank was wider and had a blunt-topped inverted V-shape in profile, no revetment was exposed when the sides were trimmed, and it was not clear whether this was because it had not been present. A more substantial length of hedge of this kind, close below the ramparts, was left untrimmed and was secured by the new fencing skirting rather than topping it, to preserve this possible historic variation of form (Fig 10). However, the bank's variations in form and profile did not appear to have particular archaeological significance such as correlation with its incorporating part of the body of an early rampart (see below for comment on the significance of the relative straightness of its course towards the east).

West of the repair work, on the top of the hill, the boundary was made out of the edge of the prominent rock outcrop extending to the north (Fig 11). This was achieved either by building the natural rock ledges up with stone, or simply by incorporating their southern faces where these were sufficiently high. Beside the tall tor at the west end of the boundary, a small recess in the south face of the boundary, c0.45m above the ground, and measuring c0.2m across and 0.1m deep, appeared to have been made as a foothold, allowing one to climb on to the tor with its little 'cheesewrings' of superimposed rocks bearing several eroded basins. Here, against the northern tor, the boundary was made stock-proof using wire on outriders in 2017 (without other repair).

Along the repaired hedge as a whole, the historic hedge-facing style was not clear in many places due to slumping or vegetation growth, but appears mostly to have consisted of using laid slabs and occasional boulders in the lower half of the bank, and roughly coursed pitched (i.e., vertically set) smaller stones above. Many relatively large but thin stones are present, no doubt because of the prevalence of thin slabs among the rocks of the tor from which the hedging stones derive. In places along the hedge, such slabs had been stood up to face the base of the hedge with their longer sides along it, rather than laid – or they had been so, but had slipped or fallen (Fig 12). Like the variations in its form, changes in the style of the facing of the hedge, visible in places, did not appear archaeologically significant. Some evidently represent discrete, previous patching or replacement of failed earlier work (Fig 13).

A ditch runs along the upper side of the western half of the repaired bank. This is around 2m wide, but shallow, its surface being generally only c0.25m below ground level though deeper, up to c0.9m deep, where it cuts through the line of the early rampart (Figs 14 and 15). The repair works did not significantly affect the ditch – small areas of its turf cover were carefully scraped and placed on top of re-built parts of the hedge bank – so the project did not provide any evidence for its full depth or its fill.

From the evidence of its form and relationships visible on the ground and recorded on the 1984 survey (Fig 28), it appears that this is a hedger's ditch, made to quarry material for the hedge bank alongside while effectively heightening it, of the kind typical of traditional built boundaries in Cornwall. It does not appear to continue east, downslope, beyond the corner in the hedge line at the southernmost point of the repaired length. This is considered to be because the hedge below that southernmost point originated from an earlier, medieval or post-medieval bank (for which the fabric may have been obtained by scraping or ditching on one or both sides which is significantly earlier and no longer evident) while the hedge above the southern corner, where the uphill ditch is clear, was built out from this at a later date, leaving its upper part out of use (Figs 16 and 28, and see map analysis, below).

The trimming of the inner (uphill) side of the hedge for reinsertion of revetment stones revealed no complex stratigraphy or features associated with human activity (rabbit holes and collapse cavities were fairly frequent). It showed that, along the line of the rampart, behind the stonework, and beneath a turf and root layer with bracken rhizomes reaching down to c0.4m from the hedge top in places, the hedge bank is made of a consistent soft dark brown loam, with occasional small granite grit, very few small stones, and some medium granite rubble (Figs 17, 18 and 19). In places the matrix was slightly orangey and less light, probably because it was subsoil from the base of the hedger's ditch (the works did not reveal relationships between browner and more orangey material).

The loamy hedge core material seems comparable to the Layer 2 found by the 1986 excavations, at the nearby site T16 just inside the tor enclosure, covering the site under the turf Layer 1; a dark brown crumbly loamy soil with quartzite grit and rhizome penetration, where only a very few artefacts of Neolithic date were found (Mercer 1997, 16). This would be consistent with the fabric for the hedge having been dug up from the ground adjoining on its uphill side – to save effort in casting it up, as is usual in hedging – so forming the ditch there noted above.

Other evidence also points to the hedge on the line of the rampart having been formed by building up from the west side of the back of the long-tumbled and spread rampart, not by reshaping the actual rampart. The profile of the hedge, the uniform earthiness of its core material contrasting with the stony rampart remains, the lack of substantial upright stones within it, the scarcity of very large facing stones, and the presence of a quarry ditch on the west of the hedge, are consistent with its being superimposed on the rampart and largely of material derived from the hilltop on its upper side. As revealed by the excavations of 1986, the enclosure wall or rampart in front of T16 was made of massive blocks, laid or in some cases standing upright (or slumped); the enclosure in general was described as having boulder walling 'truly cyclopic with blocks of ½ tonne and more making up the body' (Mercer 1997, 25, 56).

However, some material in the hedge bank may have been sourced from the rampart or from tumble from it. The part on top of the rampart has a slanting earth-fast boulder at its base at the point recorded in Profile 2, possibly incorporated in the rampart (Figs 8 and 29). The visible side of this measures up to c0.9m across. Several of the facing stones in the hedge downslope (east) of the rampart, unusually large compared to the facing as a whole, may well have been shifted from the rampart – perhaps where it was cut through to make the hedger's ditch – for use in making the hedge downslope. A large boulder in the hedge ditch just outside the rampart, which had been displaced from the hedge revetment, was reincorporated in it as part of the repairs (Fig 15).

Some of the results presented above provide evidence for relative chronology of parts of the hedge bank. The lower, eastern part of the boundary is potentially primary and medieval in origin. The hedge here appears from its relative straightness, orientation and position to reuse the line of an earlier, slighter bank, which continues uphill on the course of the present hedge beyond the point where this curves north east to adopt the line of the prehistoric rampart (Figs 16 and 28). It is likely that remains of that low bank attached to the rampart run on inside and at the base of the hedge here, below the material exposed by the hedging works. This may then have been rebuilt in a similar style to, so possibly in the same phase as, the westward extension of the hedge re-using the rampart line. A patch of stone facing in the eastern half of the hedge, noted above, being less accomplished, may represent relatively recent repair (Fig 13).

During the works limited datable material was encountered. A piece of white glazed pottery of 19th century type was exposed in turfed-over slumped material outside the facing of the hedge on the south side, downslope from the tor enclosure; this being effectively unstratified contributes nothing meaningful to the dating of the bank. A small piece of limestone rubble c8cm across and c4cm thick from the earthy core material, fractured possibly as a result of heating, was found behind the south face of the hedge further down towards its east end (Fig 20). Historic use of limestone in farmland on the granite areas of Cornwall can be attributed to the improvement of acid soils with burnt lime, a practice recorded as recently adopted and still limited in extent in Cornwall in 1667 (Isham 2000, 6). This find may then indicate that the hedge was built in its present form in or after the later 17th century. The apparent lack of drill-split stones in the fabric of the hedge bank tends to support its being post-medieval, many such stones being visible on the hilltop, some quite close to the hedge.

Evidence from historic maps is consistent with this dating. The whole of the boundary appears on a plan of the holding in which it lay, Trevilmick, forming part of the Lanhydrock Atlas, surveyed c1690. At that time the lower part of the hedge line separated two pastures, Great Hill on the south east slopes of Helman Tor and Littell Hill on the north east slopes; while the upper half of the hedge divided Littell Hill from the hilltop of 'Helmon Tarr', noted in the Atlas as 'Rockie' and not included in the accompanying key to land-use, so probably very rough ground, perhaps more valued for its stone and its furze and other wild resources than for grazing. The boundary appears too on the OS 3 inch scale drawing and first one inch mapping of 1805 and c1806 respectively (Fig 24); and also on the more detailed, later historic maps, the tithe survey of 1839 and the OS maps of c1880 and c1908 (Figs 25, 26 and 27), which demonstrate that it followed the course it takes today.

The Lanhydrock Atlas plan for Breney, adjoining Trevilmick, and the 1805 scaled drawing (though not the smaller scale first OS map), also show a cottage or small farmstead on the north west side of Helman Tor, abandoned during the period between the OS mapping of c1880 and c1908. The c1690 Atlas further shows a (tin) stamping mill on the stream to the west of that little settlement; and the sinuous lines of extensive tin streaming in the area are visible on the National Mapping Programme (NMP) plot from aerial photographs (Fig 2). It is possible that both the lost cottage, and the reorganisation of the field boundaries on the other, north east side of the hilltop which produced the hedge repaired in 2017, reflect increased population pressure in this marginal farming area resulting from the tin streaming industry in the marshy valleys around the hill.

7 Conclusion

The repair works carried out to the boundary on the north east side of the summit of Helman Tor, for CWT, successfully returned the historic stone-faced hedge bank to stable, stock-proof condition, avoiding unnecessary disturbance, and preserving and matching the existing character of the hedge, including variations in its style. The substitution of low wire on angled 'outrider' posts for the former prominent, hedge top fence represents a significant aesthetic improvement to the tor enclosure. This is particularly so where the repaired boundary runs along the early rampart on the crest of the summit, its fencing no longer intruding in the sweeping views from the rampart line or from the natural rocks protruding from the crest of the hill above. The works can be expected to have wider, long-term value in enhancing the condition of the tor enclosure and its setting, through helping to secure the grazing of the hill, improving the visibility and accessibility of the monument in a sustainable way.

As discussed in more detail above, in Section 6, the archaeological results of the project, including desk-based assessment of historic maps and 1984 earthwork survey, initial site examination and profile drawings, and watching brief findings, together indicate that the hedge bank itself does not form part of the Neolithic tor enclosure rampart. The hedge is considered to have been made in its present form during post-medieval times to serve as a stock-proof field boundary, incorporating, east of the tor enclosure, part of an earlier boundary attached to the latter and possibly medieval in date. A potential historical context for the adaptation of the medieval field system indicated by the extension of the hedge onto the rampart is the development of tin streaming and associated stimulus to farming in the area in post-medieval times.

Although the body of the hedge is considered post-medieval, its earthy core may still be regarded as archaeologically sensitive, in particular where it runs along the rampart line. The presence of a sizeable earth-fast boulder in its outer edge there, shown in Profile 2, may indicate that the base of this edge of the hedge bank, not disturbed by the 2017 works, could incorporate some rampart fabric, perhaps *in situ*. Neolithic artefacts including stone axes have been found in the field system on the east side of the tor (Mercer 1997, 7, referencing earlier work), as well as recovered during the 1986 excavation within the tor enclosure. The loamy core of the hedge bank therefore has potential for containing some redeposited Neolithic settlement-related material. This is especially so where the hedge runs along the rampart line since here it was derived from the ditch along its uphill side, dug into the ground inside the ramparts in a similar position to excavated site T16 a short distance to the south where worked flints, pottery and other remains of Neolithic occupation were found. However, it should be noted that the loam in the hedge core appeared very similar both on and away from the rampart line, and also that loam covering the occupation site T16 was found on excavation to contain only very small numbers of early artefacts.

8 References

8.1 Primary sources

Note: these sources are listed in chronological order.

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Joel Gascoyne, c1690. *A Map of the village of Breney in the Man: of Bodardle* (published in Holden et al 2010, 224)

Ordnance Survey (Robert Dawson surveyor), 1805. *Fowey, Cornwall* 3 Inch scaled drawing (British Library website)

Ordnance Survey, c1806. 1 Inch Map First Edition (licensed digital copy at CAU)

Tithe Map and Apportionment, 1839. Parish of Lanlivery (licensed digital copy at CAU)

Ordnance Survey, c1880. 25 Inch Map First Edition (licensed digital copy at CAU)

Ordnance Survey, c1907. 25 Inch Map Second Edition (licensed digital copy at CAU)

Ordnance Survey, MasterMap Topography

8.2 Publications

Holden, P, Herring, P, and Padel, OJ, 2010. *The Lanhydrock Atlas* Cornwall Editions: Fowey

Isham, K, 2000. *Lime kilns and Limeburners in Cornwall* Cornish Hillside Publications: St Austell

Mercer, R, 1997. The excavation of a Neolithic enclosure complex at Helman Tor, Lostwithiel, Cornwall *Cornish Archaeology* **36**, 5-63

8.3 Websites

British Library (OS scaled drawings)

Heritage Gateway (Online database of Sites and Monuments Records, and Listed Buildings)

9 Project archive

The CAU project number is **146688**

The project's documentary, digital, photographic and drawn archive is maintained by Cornwall Archaeological Unit

Electronic data is stored in the following locations:

Project admin and report: G:\TWE\Waste & Env\Strat Waste & Land\Historic Environment\Projects\Sites\Sites H\Helman Tor Watching Brief 2017 146688

Digital photographs: R:\Historic Environment (Images)\SITES.E-H\Sites H\Helman Tor 146688, Watching Brief 2017

Field drawings are stored as GRE 879/1

Historic England/ADS OASIS online reference: cornwall2-146688



Fig 4 View NNW from Neolithic earthwork north east of summit (foreground) to hedge corner at SX 06183 61714 and tor beyond, taken before groundworks began.



Fig 5 Outer side of hedge on rampart, looking NNW, with 1m scale at rampart base.



Fig 6 Badly worn hedge with tumble spread into hedger's ditch alongside at SX 16183 61714, with 1m scale marking the line of Profile 1, looking NNW along the inner side.



Fig 7 Worn hedge shown in Fig 6, looking NW, from its outer side on the early rampart.



Fig 8 Better preserved part of hedge on the rampart at SX 06183 61714, with a boulder in its base as recorded in Profile 2; looking south west to one of the summit tors.



Fig 9 South west side of hedge at the point where it turns and climbs onto the rampart.



Fig 10 Bank just outside rampart, with sloping sides at least partly lacking facing stone.



Fig 11 Hedge WNW of the repaired part (mending here involved simply re-fencing), incorporating faces of natural rock at the foot of the northernmost tor on the hilltop.



Fig 12 Fallen facing slab (left in place during the works) formerly raised on one long thin side, at SX 06183 61714 beside the hedge on the rampart line, looking NNW.



Fig 13 South face of hedge outside rampart with showing a previous repair (right).



Fig 14 Ditch along the inner side of the hedge on the rampart line, looking NNW.



Fig 15 View from below of the boundary cut through the rampart, with displaced facing boulder (at the 1m scale) probably from the rampart, now re-used in the hedge.



Fig 16 View towards rampart showing how the hedge kinks away from its former upper part which is visible in the photo as a relict bank running across the foreground.



Fig 17 Careful trimming of the hedge to allow re-facing with fallen or similar stone.



Fig 18 West side of the hedge bank beside the northern tor, revealed by trimming, showing homogenous dark brown loam core and few stones behind the facing slabs.



Fig 19 South side of the hedge bank below the tor enclosure, exposed by trimming, with dark brown, slightly orangey loam core and few stones, similar to that in Fig 18.



Fig 20 Small, broken piece of limestone rubble measuring 8cm across, from fabric of hedge 20m from its east end, indicative of rebuilding in the post-medieval period.



Fig 21 Hedge on the rampart, after repair, looking NNW. The erosion seen in Profile 1, left of the 1m scale, has new facing matching that of older work, right; prominent fencing is replaced with outriders; disturbance to the internal ditch is minimal.



Fig 22 Hedge rising onto the rampart, after repair. New facing is ad hoc, piecemeal where feasible, or matched to pre-existing work, to preserve historic character.



Fig 23 Hedge as seen from 20m west of its east end, after repair. A distinct patch of earlier repair (left), seen as it was before works began in Fig 13, is retained undisturbed, helping to preserve a sense of the time-depth of the hedge facing.



Fig 24 First edition 1 inch OS map of c1806, with the project site marked in green.

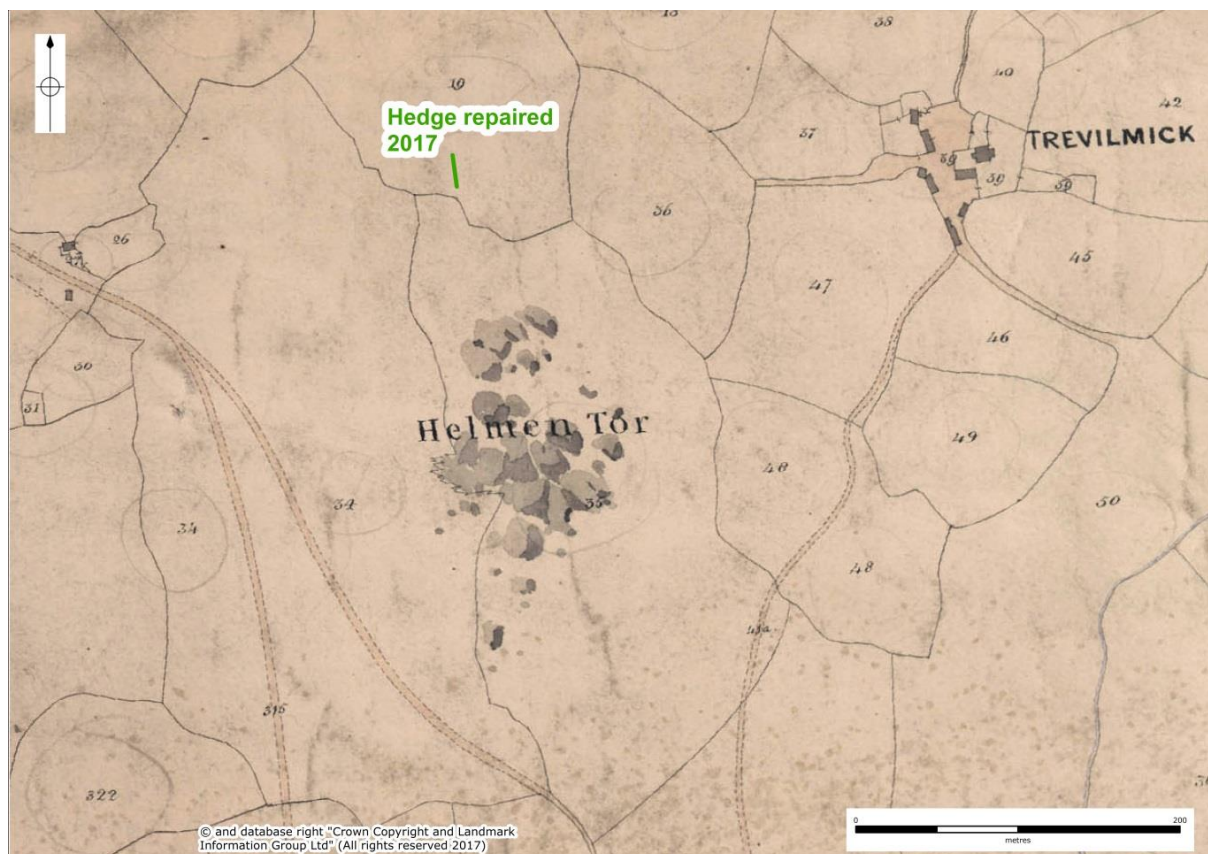


Fig 25 Lanlivery parish tithe map of 1839, with the project site marked in green.

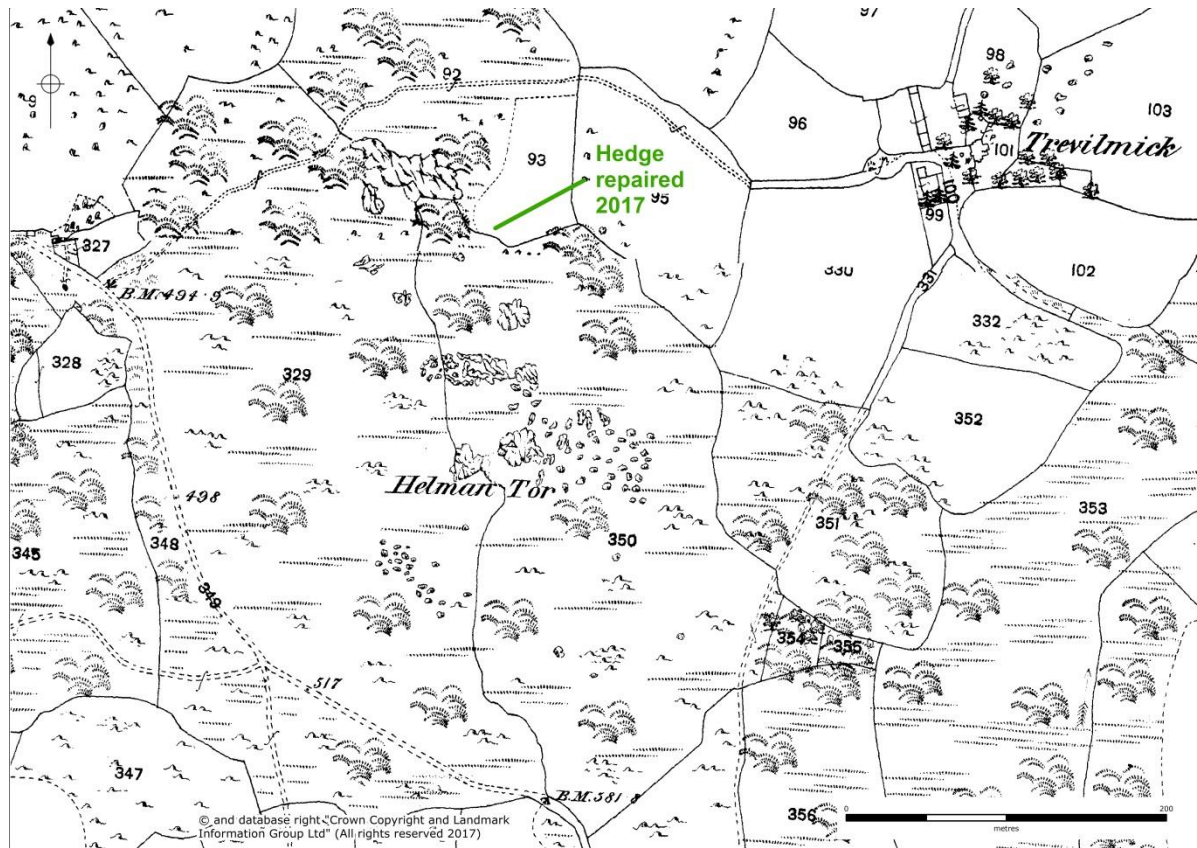


Fig 26 First edition 25 inch OS map, c1880, with the project site marked in green.

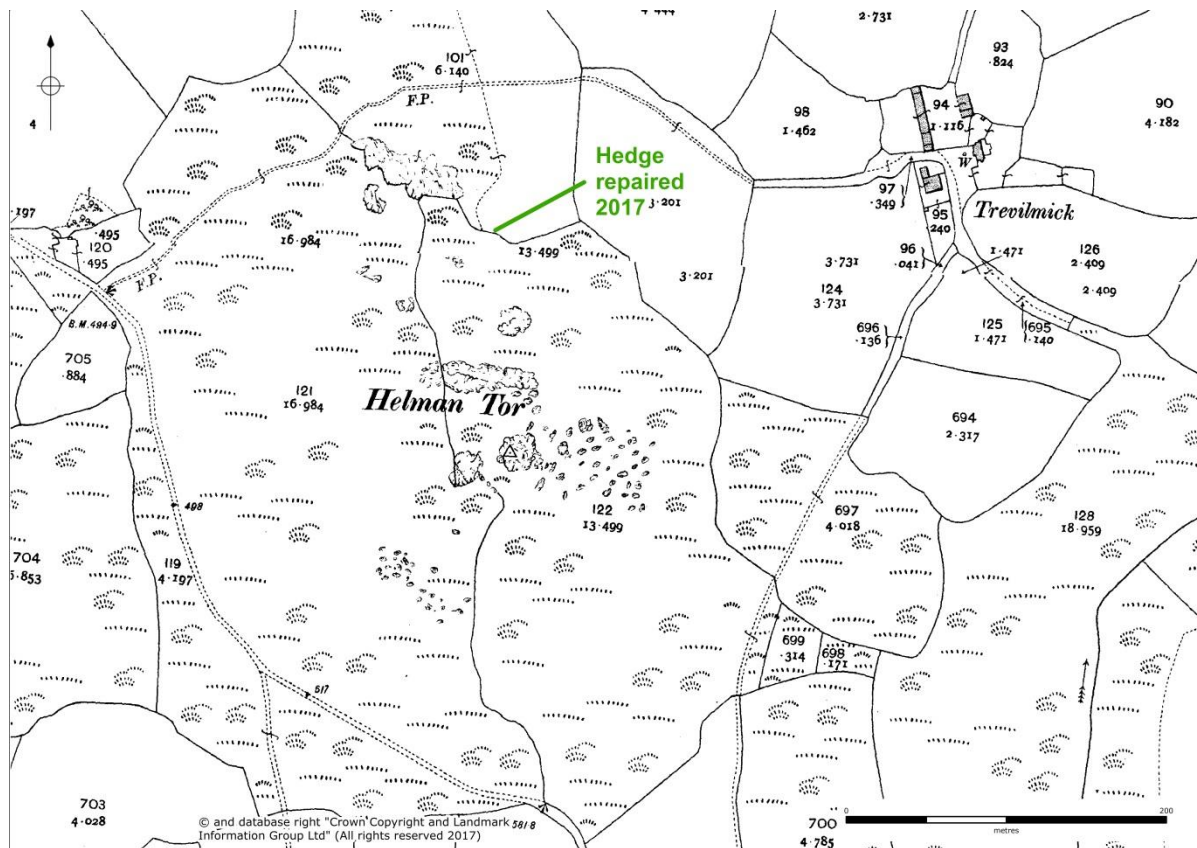


Fig 27 Second edition 25 inch OS map, c1908, with the project site marked in green.

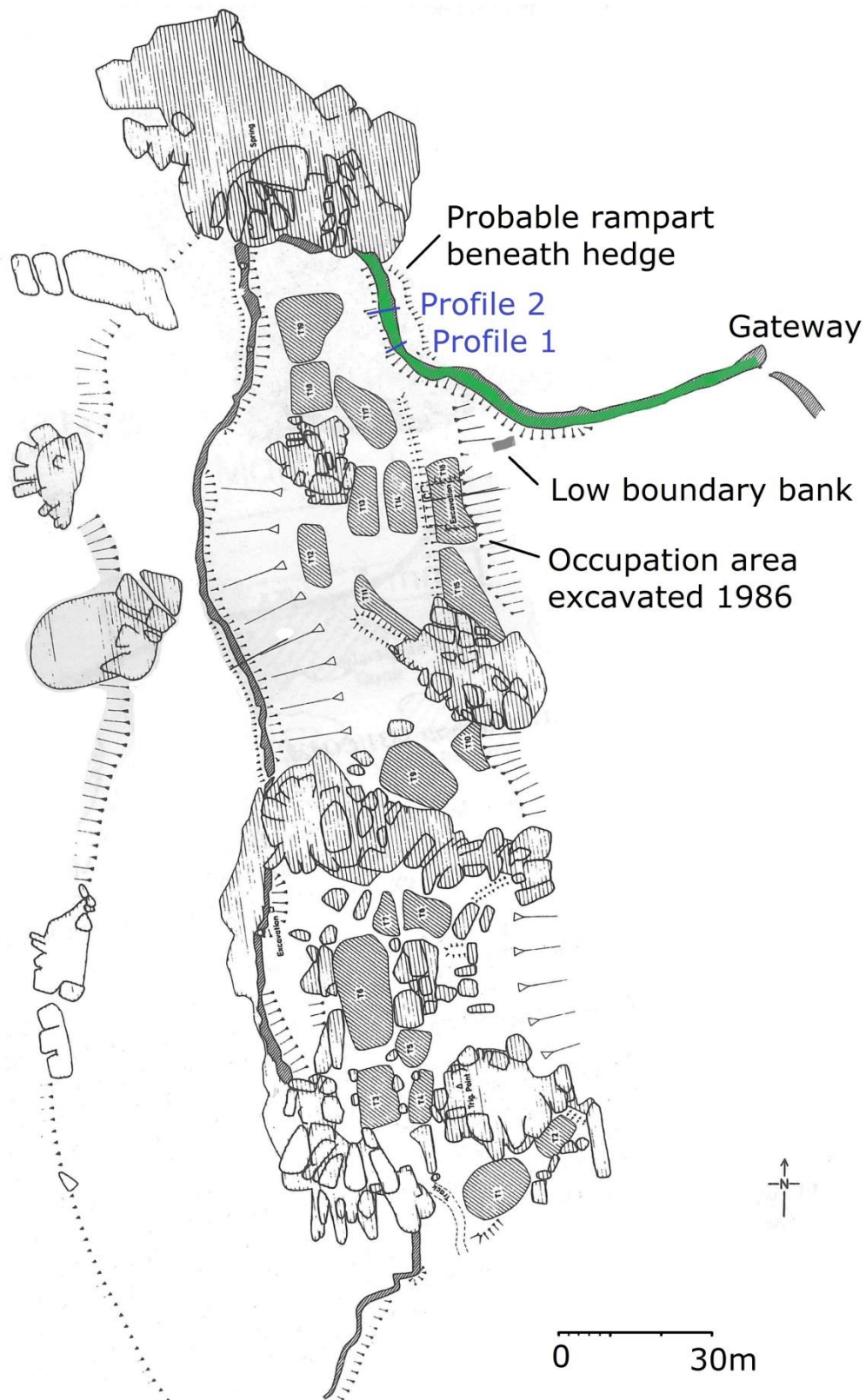


Fig 28 Plan of the tor enclosure, with natural rock piles and outcrops shaded pale grey: showing the low boundary bank south of the centre of the repaired hedge; the hedge itself in green; and hedge profile lines in blue (after CCRA 1984, and Mercer 1997).

The darker grey areas labelled T1, etc, are potential levelled occupation areas (Mercer).

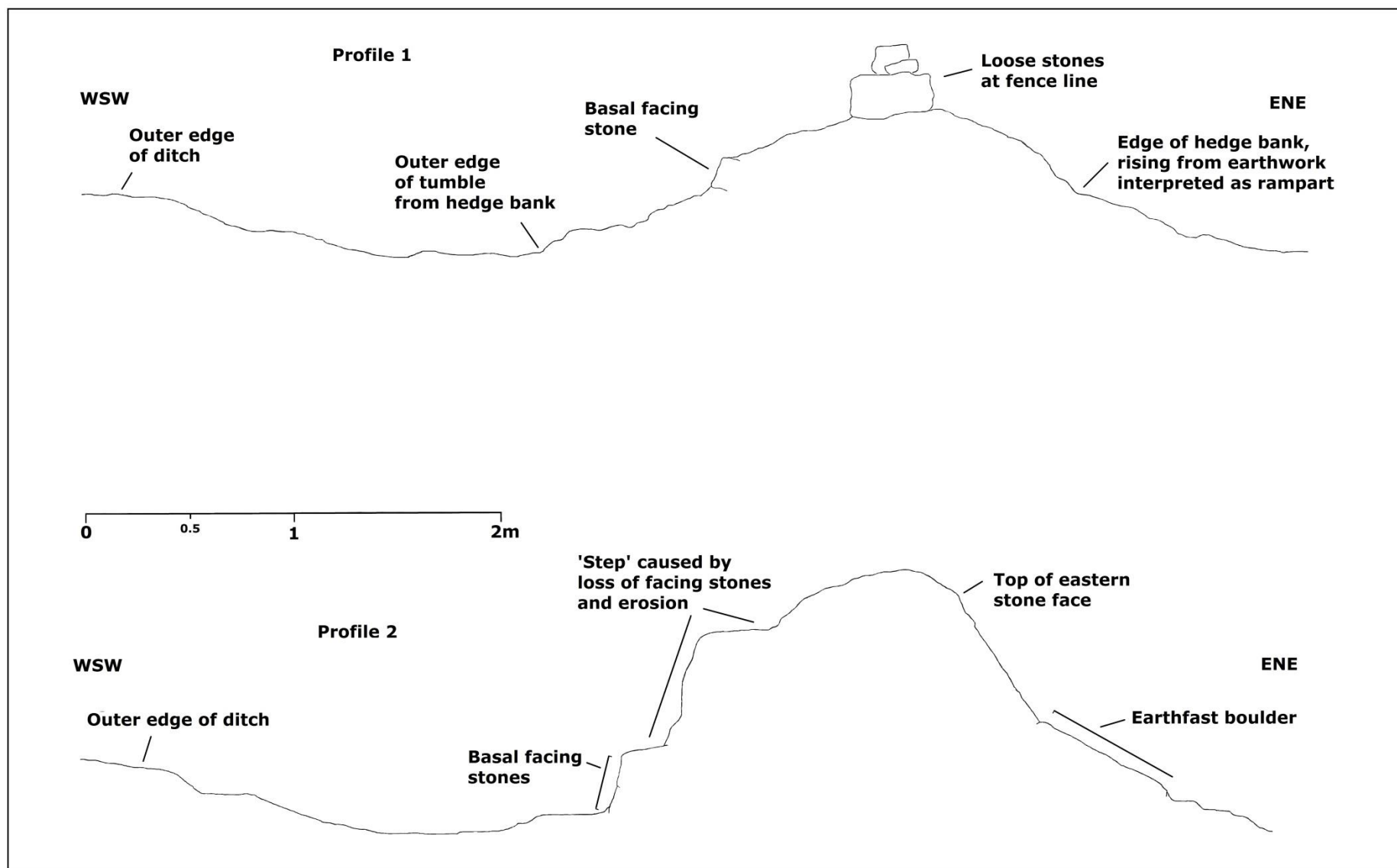


Fig 29 Profiles of the hedge, showing a badly eroded part (Profile 1) and a more typical part (Profile 2), both on the early rampart line.

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