



Lean Quarry, A38 junction improvement, Revised area, Cornwall Archaeological Assessment



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Cornwall Archaeological Unit

Lean Quarry, A38 junction improvement, Revised area, Cornwall

Archaeological Assessment

Client	CORMAC Consultancy
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This study was commissioned by CORMAC Consultancy and carried out by Cornwall Archaeological Unit, Cornwall Council.

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

2005 aerial photograph showing Lower Clicker in the southeast, South Treviddo in the northwest, and the A38 and main rail line with flooded Clicker Tor Quarry between them.

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Abbreviations

CAU	Cornwall Archaeological Unit
CIfA	Chartered Institute for Archaeologists
EH	English Heritage
HER	Cornwall and the Isles of Scilly Historic Environment Record
MCO	Monument number in Cornwall HER
NGR	National Grid Reference
NMP	National Mapping Programme
OS	Ordnance Survey

1 Summary

Cornwall Archaeological Unit, County Council was commissioned by Cormac Consultancy in February 2015 to undertake an archaeological scoping assessment of some 80 fields (covering approximately 333 hectares), spanning the parishes of Menheniot and Liskeard, located to the south-south-east of Liskeard. The study is focussed around the A38 / B3252 and B3251 junctions and is a scoping assessment carried out in advance of proposed road junction works.

Land to the west and south of the study area is included within the Looe and Seaton Valleys Area of Great Landscape Value (AGLV). Within the study area is the Clicker Tot Site of Special Scientific Interest. There are no designated Scheduled Monuments, battlefields or gardens, but there is a single Grade II Listed farmhouse at Torr Farm. There are, however, a number of sites recorded within the HER which lie within the study area. In addition a parish boundary zigzags across the area, which will be affected by Hedgerow Regulations.

The assessment consisted of a rapid desk-based assessment using historic mapping and information layers on GIS, and reference to published sources and the HER. There was not a field visit.

This report recommends that a geophysical survey of the finalized project area should be undertaken, followed by an appropriate level of archaeological mitigation, for example an excavation or a watching brief depending on the results of the survey.

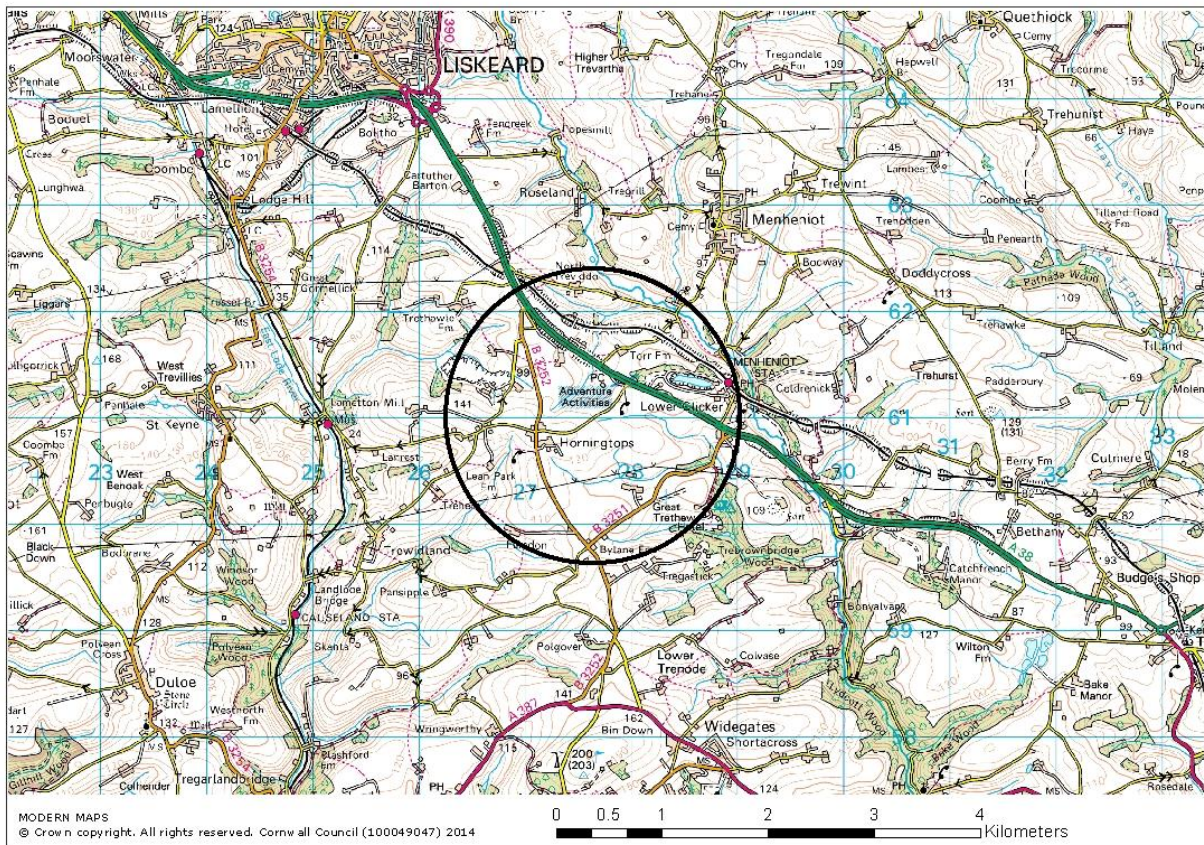


Fig 1 Location map.

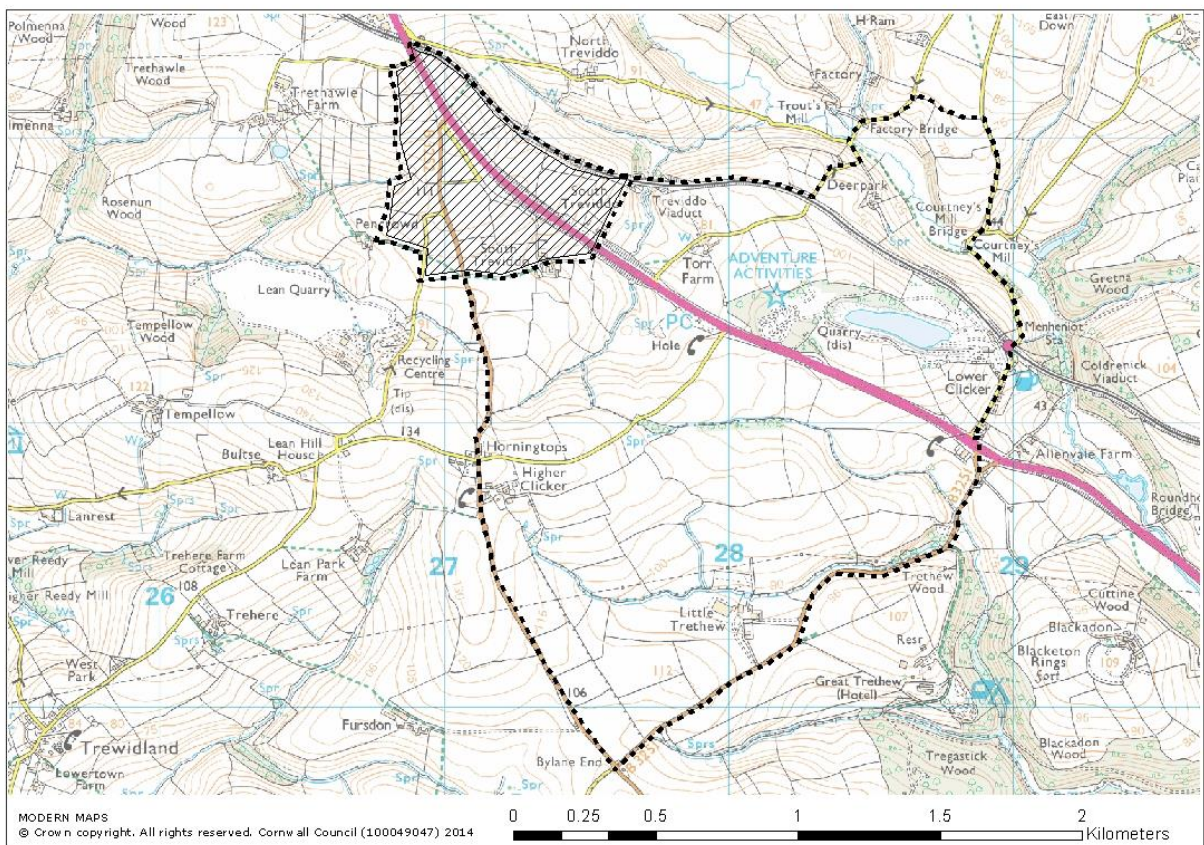


Fig 2 Revised project area, showing former extent as shaded.

2 Introduction

2.1 Project background

Cornwall Archaeological Unit (CAU) was commissioned by Agnieszka Gwizdz on behalf of Cormac Consultancy on 17/2/2015 to undertake a scoping level desk-based archaeological assessment in advance of proposed road junction works on the A38. The study area contains approximately 80 fields (c. 333 hectares) which span either side of the A38 just to the south-south-east of Liskeard in the parishes of Menheniot and Liskeard, in east Cornwall (Figs 1 and 2). Much of the eastern side of the study area runs along the railway line. The finalized junction will occupy a small proportion of this area.

2.2 Aims

The purpose of the project was to undertake a rapid desk-based archaeological assessment of the study area, to identify the heritage resource and relevant constraints, to inform options for the replacement crossing, and to identify further stages of archaeological assessment and / or recording as appropriate.

2.3 Methods

The project consisted of a desk-based assessment. During the assessment historical databases and archives were consulted in order to obtain information about the history of the project area and the structures and features that were likely to survive. The main sources consulted were as follows:

- Cornwall Historic Environment Record (HER) including the National Mapping Programme (NMP) plotting of sites visible on aerial photographs.
- Historic maps.
- Relevant existing archaeological reports and selected published secondary sources.
- All work was undertaken according to the appropriate Institute for Archaeologists *Standards and Guidance*. The CIfA *Code of Conduct* and *Code of Approved Practice for the Regulation of Contractual Arrangements in Archaeology* was followed.

3 Location and setting

The project area is located to the south-south-east of Liskeard (NGR SX27873 61110 centred), and is bisected by the A38 which runs north-north-west to south-south-east through the study area. The B3252 runs north to south from the A38 to the B3251 marking the western edge, while the southern is defined by the B3251, and north-eastern side of the study area is defined by the railway line (Figs 1 and 2).

The project area spans five separate geological zones: to the east is Upper Devonian Mudstone, Siltstone and Sandstone. Running approximately east to west through this is a Devonian Unnamed Igneous Intrusion, which underlies Lean Quarry. To the south is Lower Devonian Sandstone and Conglomerate (interbedded) rock. The majority of the central and western side of the study area is Middle Devonian Mudstone, Siltstone and Sandstone. In the north-west is a small area of Devonian Extrusive (lava based) rock formation.

The project area is an markedly undulating area of landscape, with notable high points at Clicker in the west – 130m above sea level, 128m in the far north-west (in the already assessed area), 112m along the southern part of the area, 86m at Torr Farm, 68m around Treviddo Viaduct and a markedly low point at Lower Clicker – 46m above sea level.

The area is strongly rural and agricultural in character and surrounded by farmstead settlements, most of which date from the medieval and post-medieval periods and have associated field systems.

In addition, beyond the study area the outlying sites include prehistoric find-spots, prehistoric Scheduled Blacketon Rings (DCO1129); occasionally listed medieval settlements, post-medieval settlements, post-medieval quarries and smithies; a range of viaducts, bridges and milestones, etc, plus cropmarks of various character and date. These all help place the study area within its historic context.

4 Policies and guidance

4.1 National Planning Policy Framework 2012

The following paragraphs within the National Planning Policy Framework of 2012 frame planning policy relating to the Historic Environment and are applicable to this assessment:

128 *In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.*

129. *Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.*

132. *When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification. Substantial harm to or loss of a grade II listed building, park or garden should be exceptional. Substantial harm to or loss of designated heritage assets of the highest significance, notably scheduled monuments, protected wreck sites, battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional.*

133. *Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:*

- *the nature of the heritage asset prevents all reasonable uses of the site; and*
- *no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and*

- *conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and*
- *the harm or loss is outweighed by the benefit of bringing the site back into use.*

134. *Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.*

135. *The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.*

139. *Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets.*

4.2 Hedgerow Regulations

Hedgerow Regulations of 1997 state that should it be intended to partially or totally remove a hedgerow considered significant under historic criteria (incorporating an archaeological feature and/or recorded on mapping of the mid 19th century or earlier), the Local Planning Authority must be notified, and may issue a 'hedgerow retention notice' prohibiting removal if it is judged to be important.

Note: Parish boundaries are frequently regarded as being of significance because they often incorporate particularly early boundary elements.

4.3 Local Plan Policies, adopted by Cornwall Council as unitary authority

4.3.1 Former Caradon District; Local Plan Policy CL19

High priority will be given to the protection, preservation and enhancement of nationally important scheduled and unscheduled monuments and other sites and buildings of archaeological and historic significance in the plan area through the following measures:-

- (i) Development proposals which would prejudice the preservation of nationally important archaeological remains, whether scheduled or not, and their settings, will not be allowed unless the development is also of national importance and there is no alternative site.
- (ii) If there is evidence to suggest that significant remains may exist on the site of a proposed development, the extent and importance of which are unknown, the Local Planning Authority will request the developer to arrange for an archaeological evaluation to be carried out before the planning application is determined, thus enabling an informed planning decision to be made.'
- (iii) Where preservation in-situ is not possible the Local Authority will not allow development to take place until satisfactory provision has been made for a programme of archaeological investigation and recording prior to the commencement of the development.

4.3.2 Former North Cornwall District; Local Plan Policy ENV12

4. Development proposals for the erection of a new building or other structure, or the use of land, will not be permitted where this would adversely affect the character or appearance of a listed building or its setting.

4.3.3 Former North Cornwall District; Local Plan Policy ENV14 2

14 2. Development proposals which adversely affect locally important archaeological sites or remains identified as a result of a prior archaeological investigation will only be permitted where:

- (a) physical preservation in-situ is not feasible in conjunction with the proposed development and the importance of the development clearly outweighs the case for preservation of the remains; and
- (b) satisfactory arrangements for investigation and recording of the remains before or during development.

5 Historical Background

5.1 Outline of Historic Landscape Character

Historic Landscape Character (HLC) Types represent types of landscape sharing a similar historic character today as a result of similar development in the past, the different Types together forming a continuous mosaic. Areas of any particular HLC Type tend to contain a similar, predictable range of archaeological sites and historic features.

Figure 8 is an extract from Cornwall's mapping of HLC Types. As this map shows, the study area is made up of a combination of five different landscape types.

Almost three quarters of the area is made up of Medieval Farmland. Much of the remaining third is made up of Post-medieval Enclosed Land, followed by Modern Enclosed Land, Plantations and Scrubland, and Communications.

The following text is adapted from recent generic HLC summaries, accessible through the Cornwall HER.

- **'Medieval Farmland'** - is a Type of 'Anciently Enclosed Land' (AEL). This is part of Cornwall's agricultural heartland, mostly worked in later prehistory and re-organised in the medieval period often into extensive 'strip' systems associated with co-operating farmsteads grouped in hamlets. These systems are now largely modified, as in much of Cornwall, but have gently curving field patterns distinct from the generally straight-sided fields of later enclosure. Buried archaeological features from the prehistoric, medieval and post-medieval periods, including settlement-related remains, can be expected virtually anywhere in the Type.
- **'Post-medieval Farmland'** - Land enclosed in the 17th, 18th and 19th centuries, usually from land that was previously Upland Rough Ground and often medieval commons. Generally in relatively high, exposed or poorly-drained parts of the county.
- **'Modern Enclosed Land'** - Mainly Anciently Enclosed Land or Post-Medieval Enclosed Land whose field systems have been substantially altered by large-scale hedge removal in the 20th century. It also includes, however, 20th century intakes from rough ground, woodland and marsh.
- **'Plantations and scrubland'** - Plantations and scrubland. Blocks of mainly conifer plantations, comprising those on uplands planted to produce timber, replantings of ancient woodlands which had been intensively harvested and those created as elements of designed ornamental landscapes.
- **'Communications'** - the rail line is the main communication route sufficiently large or significant in impact to be shown on the county-wide characterisation mapping for this area. It is unlikely preserve earlier remains beneath it.

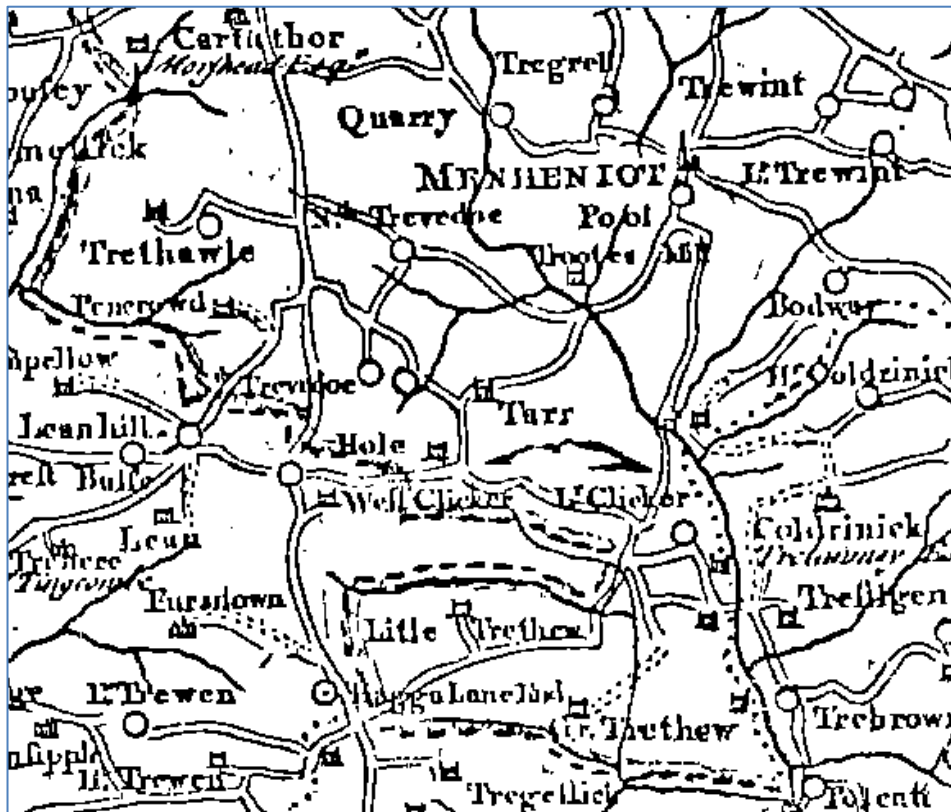


Fig 3 Extract from Martyn's map of 1748, showing the vicinity of the study area.

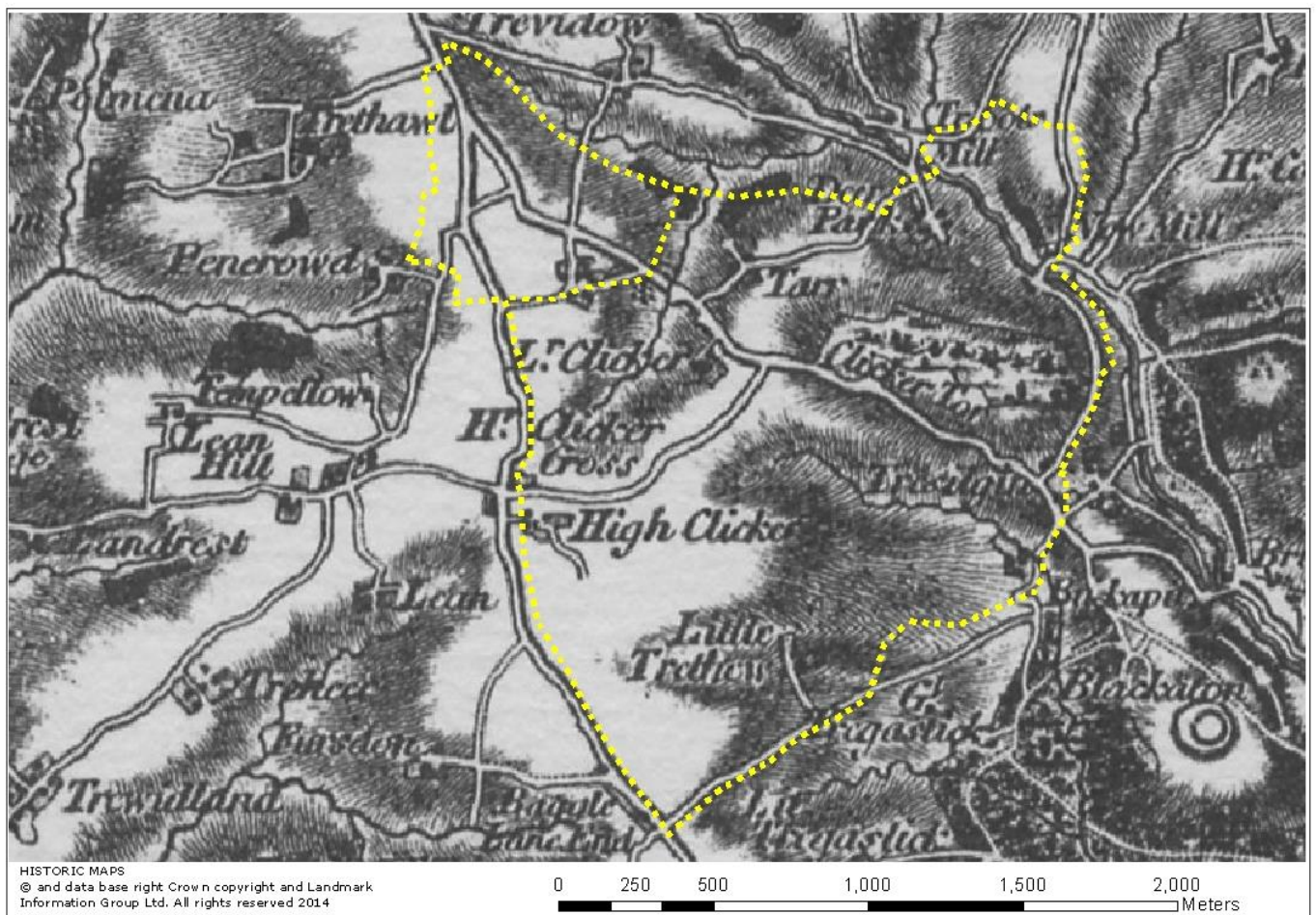


Fig 4 Extract from the OS First Edition One Inch Map c1809.

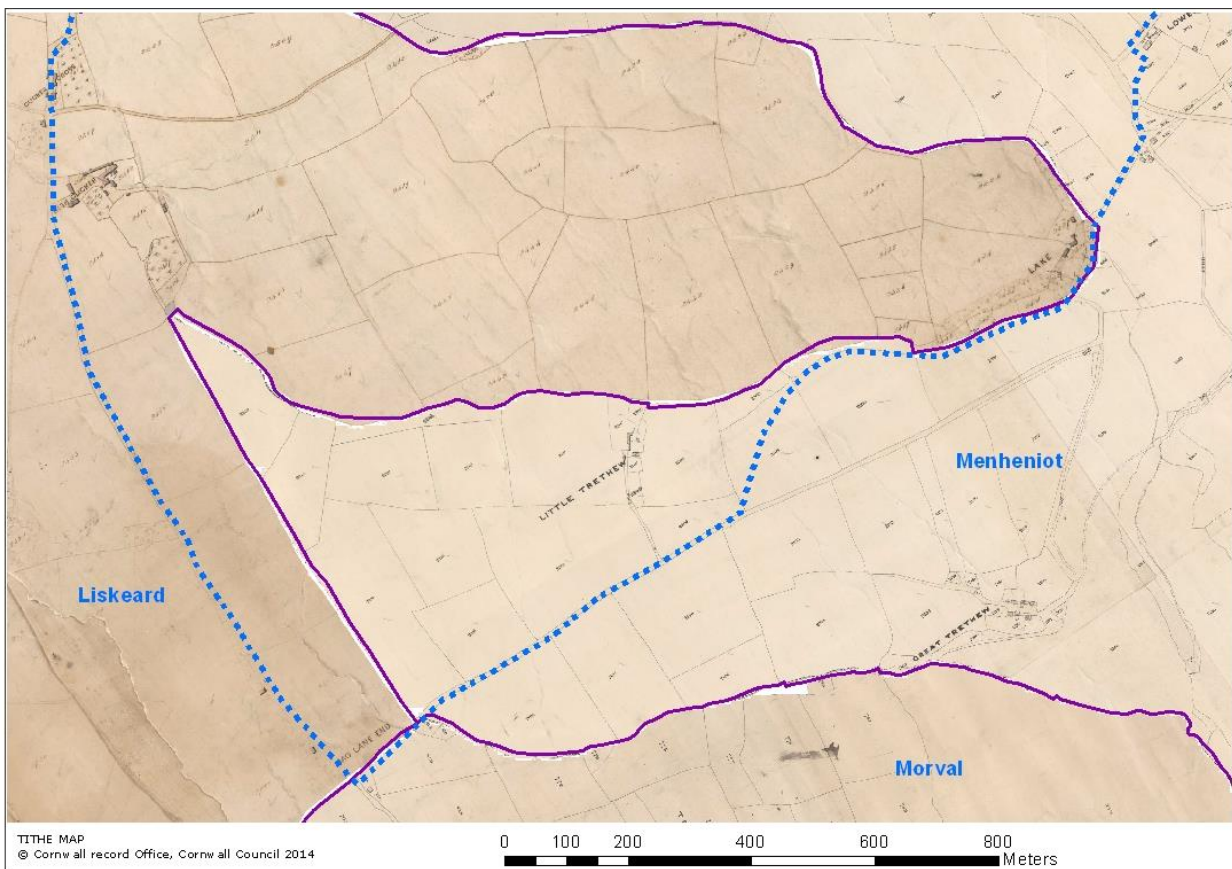
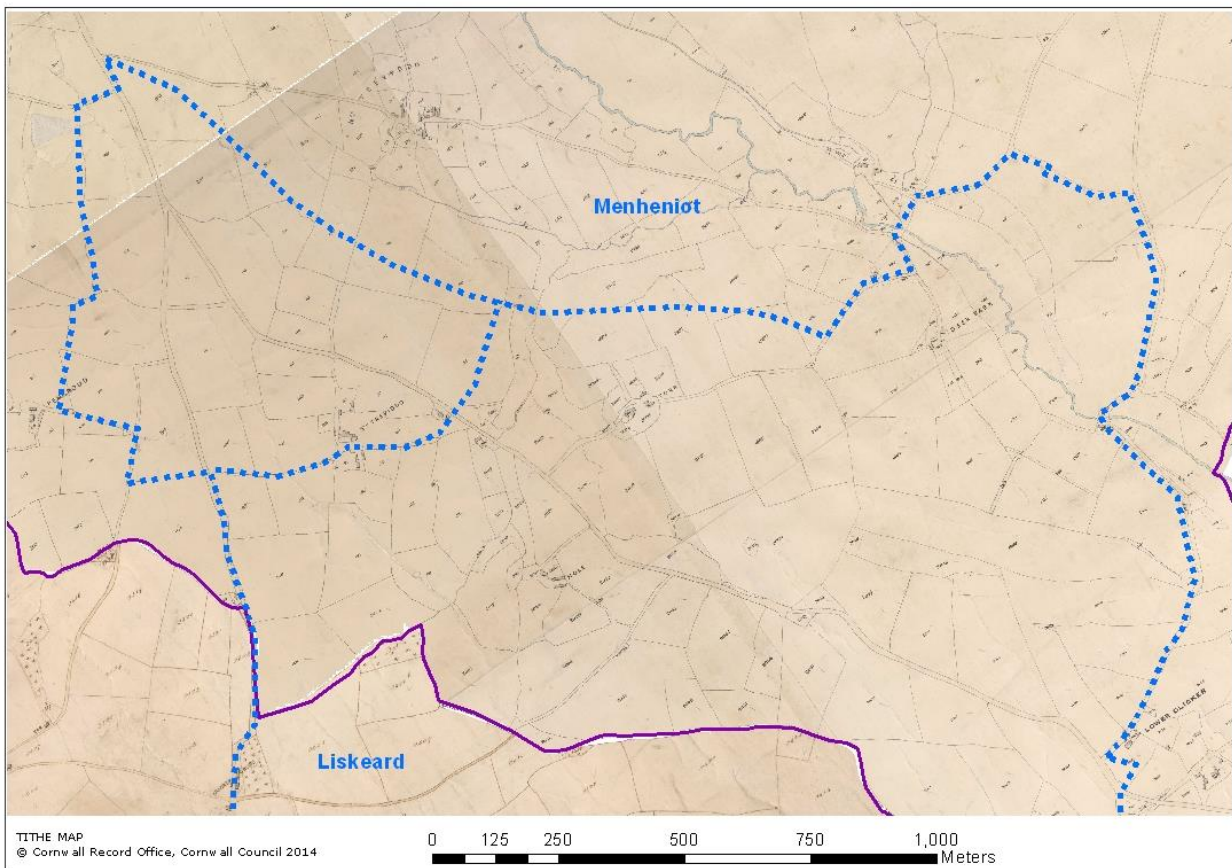


Fig 5 Liskeard and Menheniot Tithe Map extracts, c1840, showing the northern and southern halves of the study area (top and bottom), the parish line (solid), and the former study area (shaded).

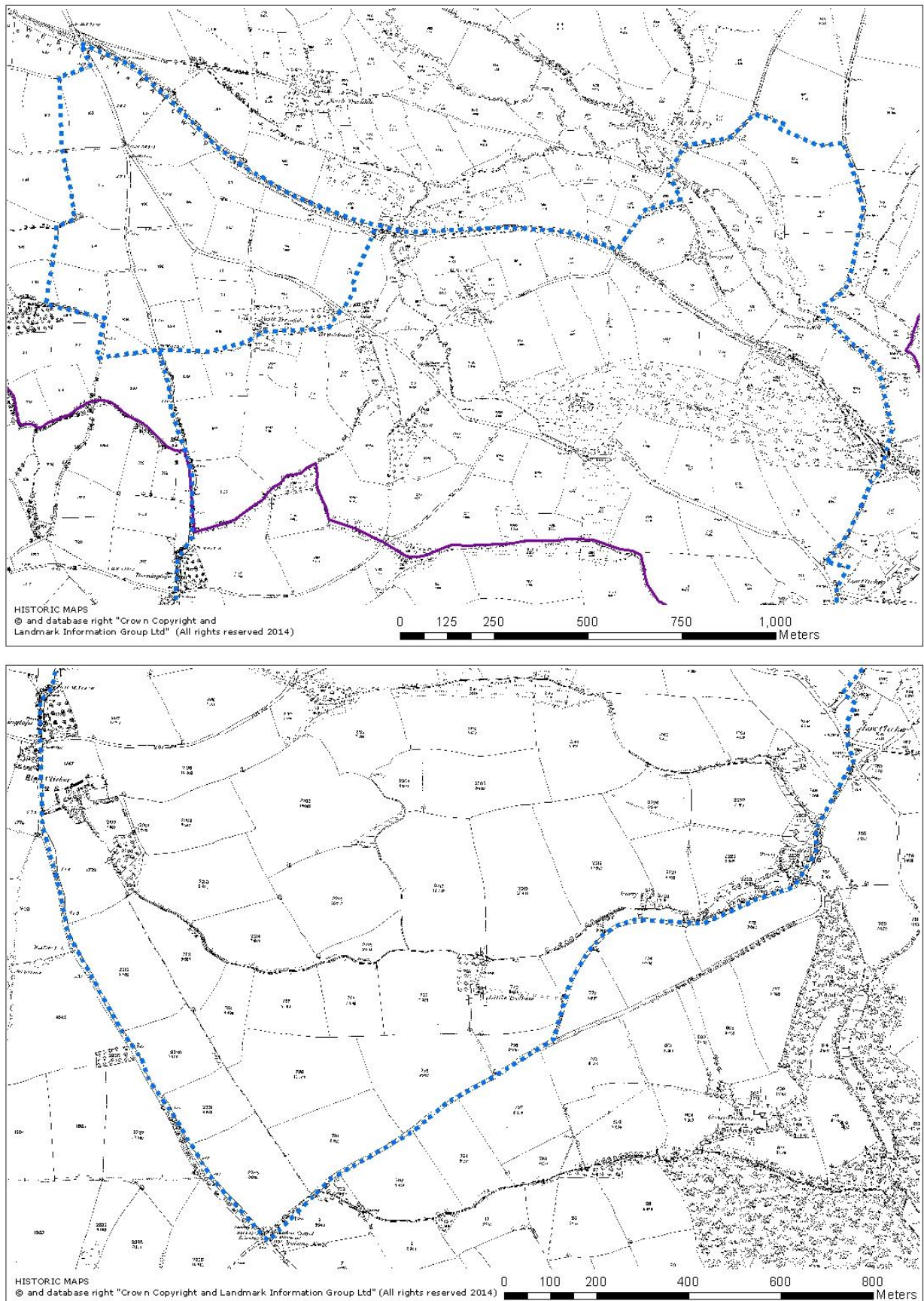


Fig 6 First Edition of the Ordnance Survey 25 Inch Map, c1880, showing the northern and southern halves of the study area (top and bottom). The former study area is shown and the parish boundary is shown as a solid line.

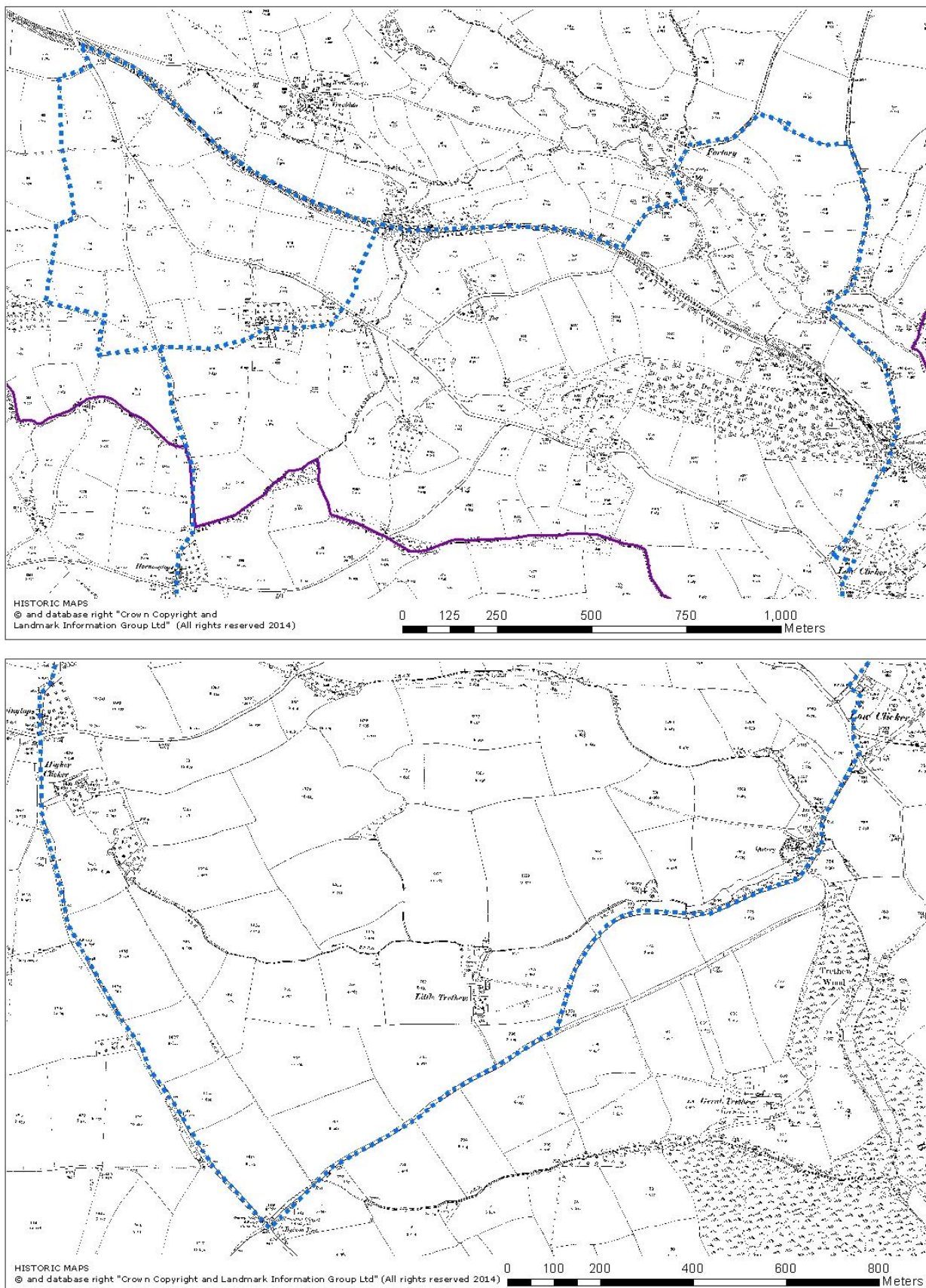


Fig 7 Second Edition of the Ordnance Survey 25 Inch Map, c1907, showing the northern and southern halves of the study area (top and bottom). The former study area is shown and the parish boundary is shown as a solid line.

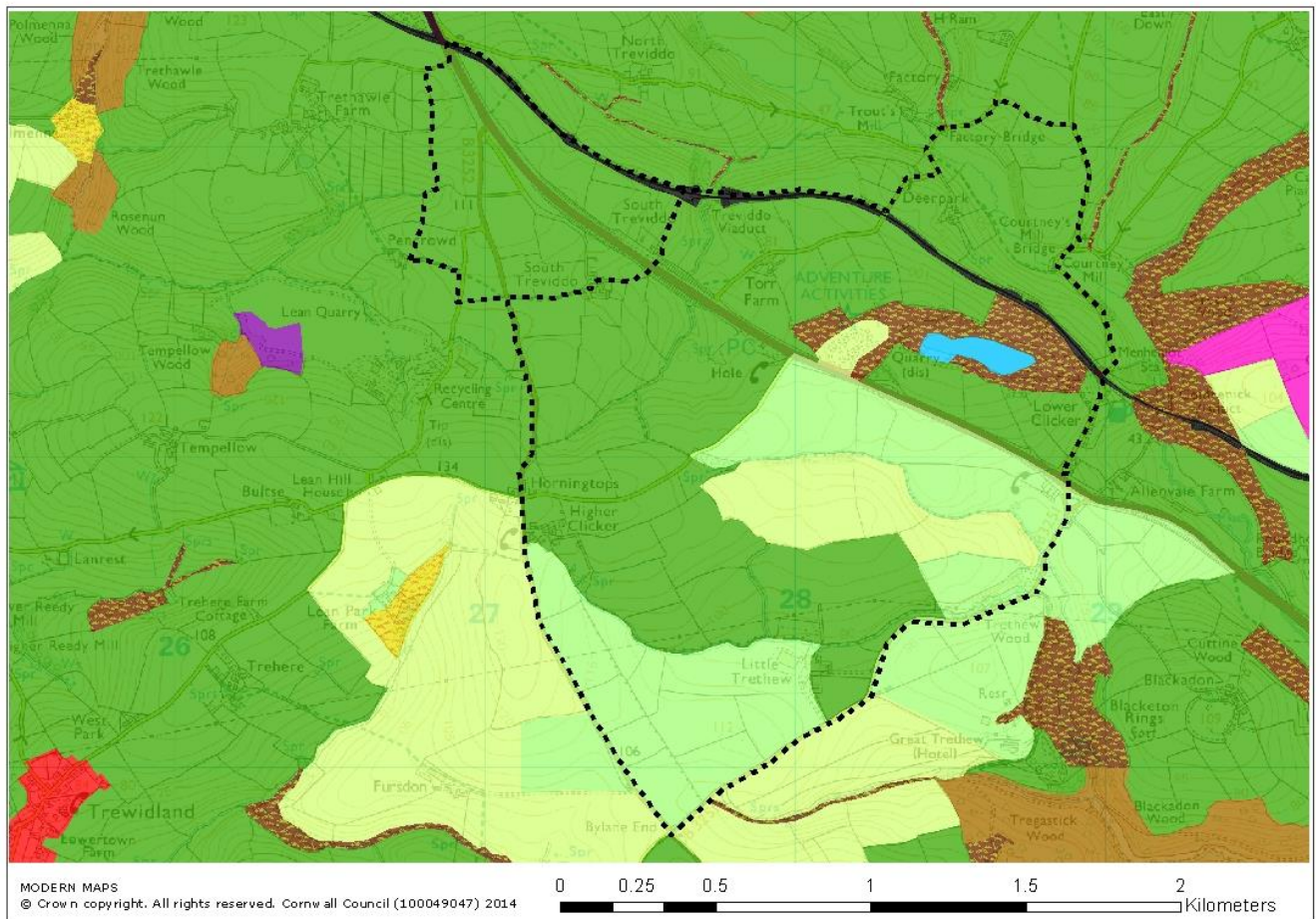


Fig 8 Ordnance Survey digital mapping showing the Historic Landscape Classification of the study area.

Dark green is Medieval Enclosed Land, mid green is Post-medieval Enclosed Land, pale green is Modern Enclosed Land, and brown is Plantation and Scrub.

5.2 Overview of recorded archaeological sites

In total, 53 sites have been identified within the project area. They include sites of various types and date, reflecting how the area has been used and altered by people in the past. All sites are listed in the Site Inventory and shown on Figures 10 and 11 at the back of this report.

The sites identified include:

- Prehistoric find – **Sites 37, 38 and 52**, are all associated with find-spots and include a number of worked flints and cores, plus a greenstone axe, plus another of unknown source. They may be associated with buried settlement activity.
- Medieval settlement associated sites **Site 8, 9, 15, 30 and 47**. All of these may have associated subsurface building remains or enclosures of various date and function which extend beyond the mapped limits. Related artefact spreads may be valuable in dating the origins and growth of these sites. The main South Treviddo **Site 8** settlement is known to have shifted and altered, and is likely to have left sub-surface 'house and courtelage' remains beneath what is shown on modern mapping to be a blank space. **Site 30** includes Grade II Listed Post-Medieval Torr farmhouse.
- Removed boundaries forming part of the South Treviddoe, Pencrowd and Trethawle field systems **Sites 11 to 13 and 19. Sites 23 to 25, 27 and 44** form parts of the Horningtops, Little Trethew, Higher Clicker and Menheniot field systems. These are NMP sites shown on figures 10 and 11. Some of the retained or current field boundaries can be seen from the historic mapping to have been straightened since 1840 (Figs 5, 6, 7 and 8). Others have retained their classic slightly curvilinear medieval plan. The removed boundaries and the straightened boundaries will have left sub surface remains in the form of ditches and/or mounded or lynchet remains which may seal old land surface deposits.
- The main roads and lanes **Site 16** are of medieval origin, but have various post-medieval and later changes. The main A38 and B3252 are shown as well established routes by the mid 18th century on Martyn's 1748 map (Fig 3). Associated road-related sites include: guide post **Site 17**, milestone **31 and** road bridges **43 and 48**.
- Trackway sites **Site 18** (now removed) and **Site 22** were not always clearly defined by flanking boundaries and as such are not consistently mapped. They might not be expected to contain significant subsurface remains, beyond compacted potentially cobbled surfacing; unless they have become partial holloways.
- A small enclosure/field **Site 10** is shown on all mapping since the 1840 Tithe map. The Tithe map appears to show a centrally located double gatepost setting spanning the lane to Pencrowd Farm. Possibly an entrance gate or perhaps an animal corralling feature. These settings may survive as buried cut features with associated surfacing. A further small cropmark enclosure **Site 26** was located by NMP at Higher Clicker.
- The spring and associated Tithe mapped small enclosure **Site 14** may have preserved waterlogged remains as well as sub surface enclosure remains.
- Post 1840s railway associated sites include; **Sites 1 to 4, 33, 34, 39 to 41 and 45**. **Site 4** is the rail line, **Site 39** is Menheniot Station, while all other sites are bridges and viaducts.
- Post-medieval quarry **Site 5** is not shown on the mapping, but was identified by NMP on aerial RAF photographs dated to 1946.
- Other post-medieval quarry sites within the study area include **Sites 28, 29, 36 and 46**. **Site 46** forms part of an SSSI (see Fig 9).
- Undated cropmark enclosure **Site 7** is of uncertain character or significance. It may be a remnant prehistoric enclosure site, but could be of a later date. It seems unlikely to be associated with the construction of the railway and may

underlie a removed field boundary (shown on the Tithe map, but not on subsequent mapping).

- Undated mound **Site 6** is of uncertain character and origin. It was plotted by NMP from a 1946 RAF photograph and is now almost entirely overlain by the current A38. It is unlikely to survive in the slither of land lying between the original A38 and B3252 unless there was an associated ditch. A further undated mound site was located by NMP at **Site 35**, to the east of Torr Farm.
- Footpath **Site 20** ran across the south-eastern edge of undated enclosure **Site 7** and is only shown on the 1880 and 1907 OS maps. It links with **Site 3** at its eastern end. Additional footpaths, still in public use are shown on Figure 9.
- Two post-medieval smithy sites lie on the edge of the study area at **Sites 49 and 53**.
- At the extreme southern end of the study area is non-conformist chapel **Site 50**, at Bylane End.
- The site of former Courtney's Mill **Site 42**, a corn mill, which stood close to Courtney's Mill Bridge (**Site 43**).

5.2.1 Potential for further, buried prehistoric and later remains

The study area largely consists of Anciently Enclosed Land, two thirds of it classified as Medieval Farmland. It is likely to contain subsurface archaeological remains associated with medieval and earlier settlement and agriculture related activity. This might include banks and ditches, walls, pits, postholes and houses.

There are known artefact scatters and find spots within the immediate area. It is likely that more exist below ground, particularly prehistoric remains focussed around Clicker Tor. High, distinctive areas within the landscape are known across Cornwall to have attracted activity throughout the prehistoric period.

In addition there are large swathes of Post-medieval Enclosed Land and Modern Enclosed Land, both of which have the potential to contain early remains.

5.2.2 Field boundaries

Field boundaries in the study area are almost all of medieval origin, as suggested by the historic mapping and their pattern. Alterations have occurred, including the straightening out of at least two boundaries (adjacent to **Site 3** and **5**), and the removal of a number of the South Treviddo field system boundaries since the 1840s (shown as green lines on Fig 10).

Other altered and realigned boundaries also exist within the revised area. Of the extant field systems, associated boundary features will include gate posts, stiles or lynchetting associated with long-term ploughing and soil creep. These all contribute to the Historic Landscape Character.

5.2.3 Potential waterlogged ground

Areas of wet ground are potentially of archaeological interest because they may preserve peat deposits suitable for environmental sampling, providing evidence for past vegetation conditions, changes to the landscape and material suitable for scientific dating.

Waterlogged ground may contain organic materials or objects preserved in anaerobic conditions, which do not survive under normal conditions. At least four springs are marked on modern mapping for the study area, plus the mapped contours suggests low lying areas along valley bottoms and coombes. All require further assessment via walkover survey.

6 Assessment of importance of the resource

6.1 Designated Sites of National Importance

6.1.1 Site specific designations

There are no Scheduled Monuments, Battlefields or Registered Parks and Gardens within the study area. There is one Grade II Listed Building – a post-medieval farmhouse at Torr Farm.

6.1.2 Wider Landscape designation

Beyond the southern and western periphery of the study area is the Looe and Seaton Valleys Area of Great Landscape Value (AGLV). The north-western part of the study area (to the west of the B3252) falls within this area.

Contained within the eastern side of the study area is Clicker Tor Quarry, a Site of Special Scientific Interest (SSSI).

6.2 Undesignated Sites of Regional and Local Importance

6.2.1 Specific sites

There are 53 sites within the study area, thirty nine of which are HER recorded sites. All are deemed to be of local or regional importance on the basis of currently available information. One has a National significance – on the basis of its listing. None have been visited, monitored or recorded during this project. However, this rapid scoping assessment does highlight the potential for remains to be associated with:

- **Site 7** – undated enclosure.
- **Site 8** – South Treviddo settlement.
- **Site 14** – waterlogging around the spring.
- **Site 19** – removed field system elements.
- **Sites 37, 38 and 52** – prehistoric find-spots with the potential for associated remains and further spreading.
- **Site 35** – an un-dated mound.

In addition the medieval settlements of **Sites 9, 30 and 47** may contain medieval remains associated with changing layout and shifting focusses of activity.

6.2.2 Wider landscape

Much of the study area is covered by Anciently Enclosed Land which is known to frequently contain a range of prehistoric, Romano-British and medieval sites, as was found at Scarcewater (Jones and Taylor 2010) or Tremough (Gossip and Jones 2007), where significant archaeological remains survived as sub-surface features within busy agricultural landscapes.

The presence of additional sites has not yet been confirmed, but should be expected.

7 Recommendations

Further stages of archaeological work are likely to be required when the area for the junction becomes more closely defined. These stages are likely to include the following.

7.1.1 Additional assessment

Further archaeological assessment of the final area of the proposed scheme would be needed to provide full recommendations for avoiding, reducing, or mitigating adverse impacts on the archaeological resource.

- **Walkover survey** of the final scheme is necessary to provide for appropriate identification of upstanding remains. It also allows for the identification of new sites or areas of concern. In some cases, a walkover survey may remove suspected sites from the list.
- **Geophysical (magnetometer) survey** is recommended for any part/s of the study area affected by the finalized scheme, to identify any archaeological remains in advance of works and reduce potential delays.

7.1.2 Written scheme of investigation for archaeological mitigation

Following the above assessment, an agreed programme of archaeological recording should be put in place and a WSI (written scheme of investigation) approved, in advance of any development works.

Measures proposed may include one or more of the following elements: archaeological watching brief, controlled soil stripping, archaeological excavation, and palaeoenvironmental sampling, with reporting at an appropriate level.

8 References

8.1 Primary sources

(Maps are listed in chronological order).

Thomas Martyn, 1748 *Map of Cornwall*

Ordnance Survey, c1809. 1 Inch Map First Edition (licensed digital copy at CAU)

Tithe Map and Apportionment, c1841. Parish of Menheniot (licensed digital copy at CAU)

Tithe Map and Apportionment, c1841. Parish of Liskeard (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, 2007. Mastermap Digital Mapping

8.2 Publications

Cornwall County Council, 1996. *Cornwall Landscape Assessment 1994*, Cornwall County Council: Truro

Gossip, J. & Jones, A.M. 2007. *Archaeological Investigations of a Later Prehistoric and a Romano-British Landscape at Tremough, Penryn, Cornwall*. Oxford: British Archaeological Reports, British Series 443.

Gover, J.E.B., 1948. *Place Names of Cornwall*: typescript held in CAU Library, Truro

Jones, A.M. & Taylor, S. 2010. *Scarcewater, Pennance, Cornwall, archaeological excavation of a Bronze Age and Roman landscape*. Oxford: British Archaeological Reports, British Series 516.

Padel, O, 1985. *Cornish Place-Name Elements*, English Place-name Society: Nottingham

Stengelhofen, J., 1988. *Cornwall's Railway Heritage*: Truro

Thomas, D.St.J., 1988. *A Regional History of the Railways of Great Britain - The West Country*, **Vol 1**: Trowbridge

9 Project archive

The CAU project number is **146473**

The project's documentary, digital, photographic and drawn archive is maintained by Cornwall Archaeological Unit, Cornwall Council, Fal Building, County Hall, Treyew Road, Truro, TR1 3AY.

English Heritage/ADS OASIS online reference: Cornwall2-204978

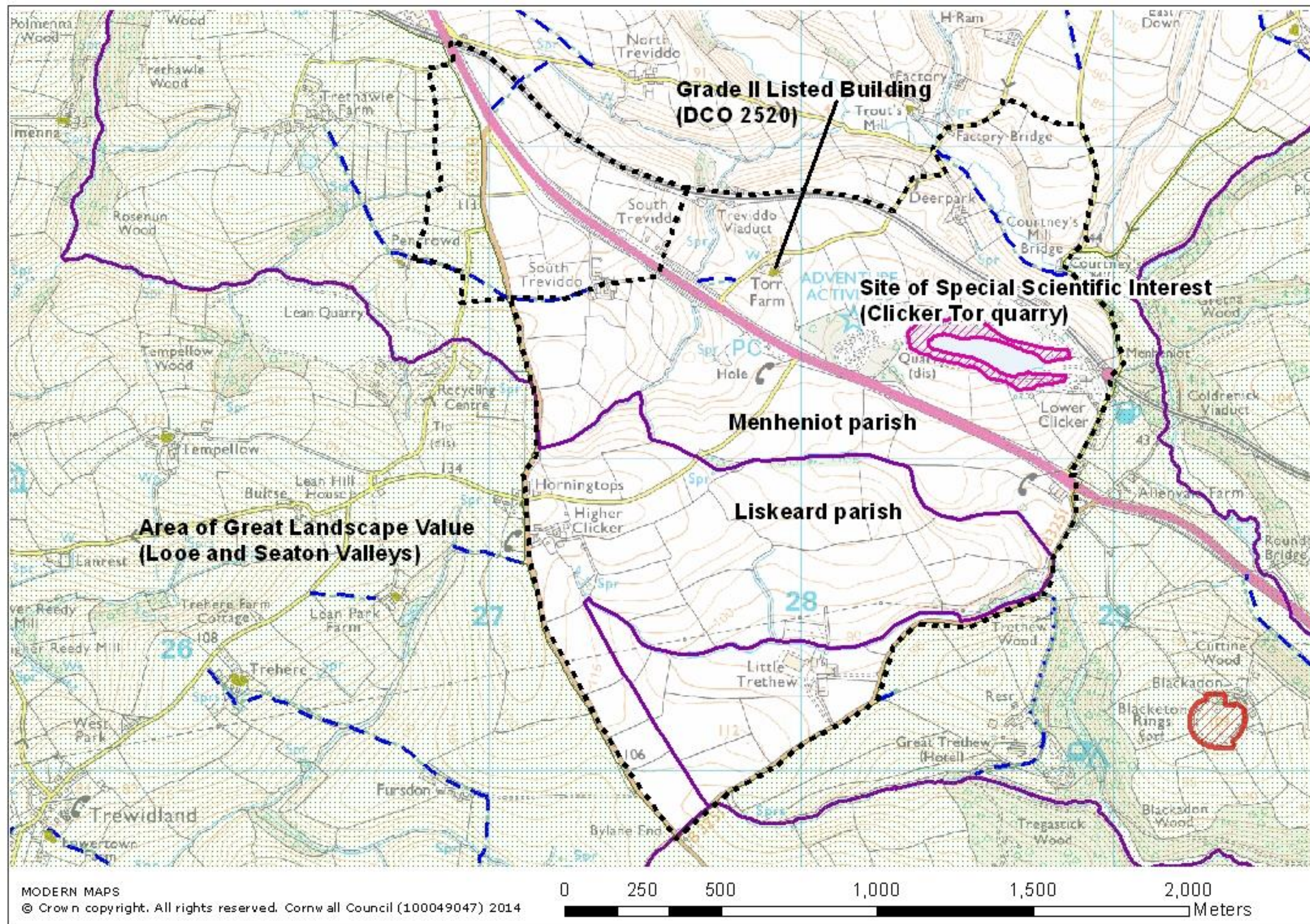


Fig 9 Ordnance Survey digital mapping showing all designations within and around the study area (2014). Public footpaths are shown as broken blue lines, and a single large Scheduled Monument (red line) lies to the south-east, beyond the study area.

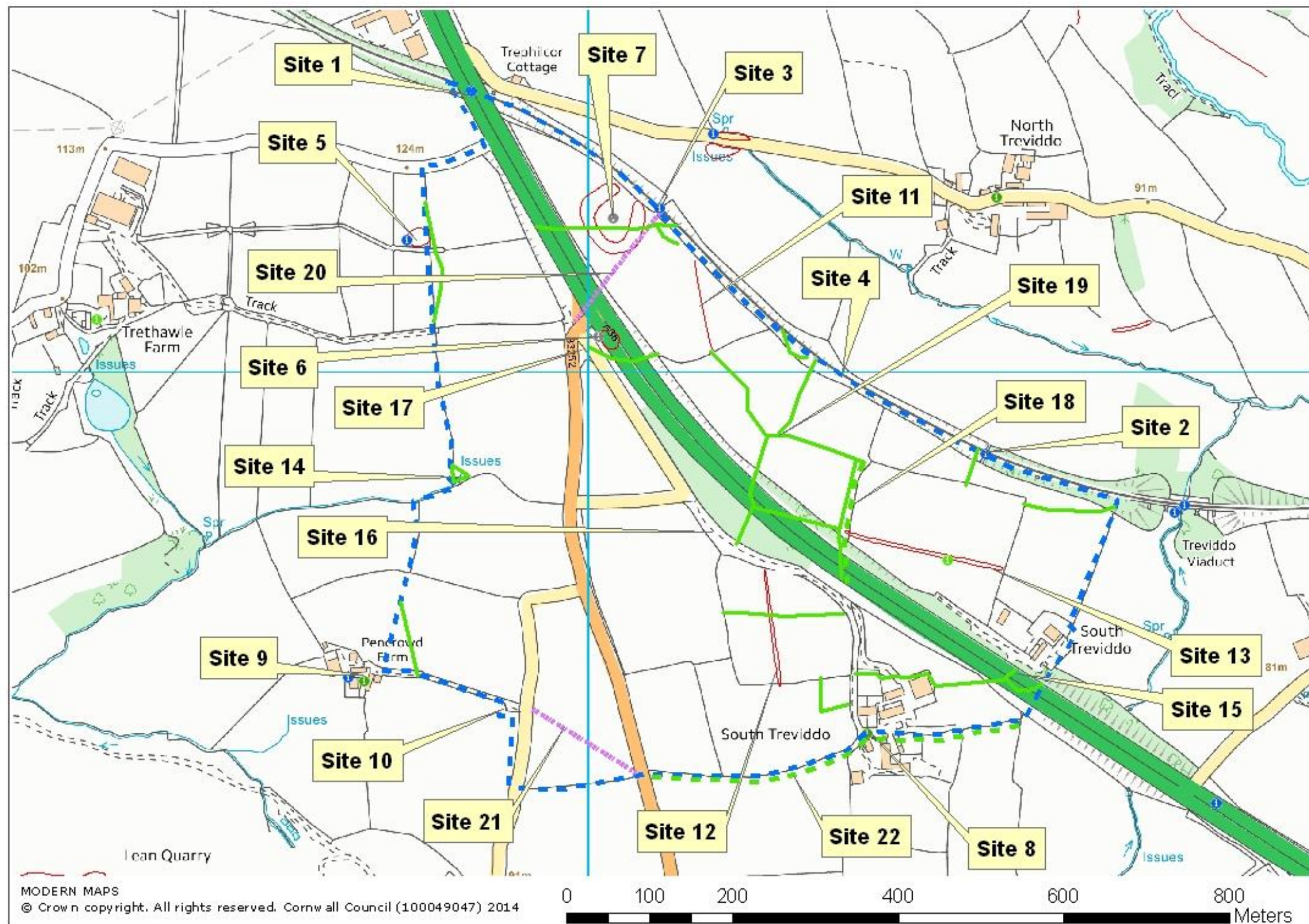


Fig 10 Ordnance Survey digital mapping showing all sites within the original study area (2014).

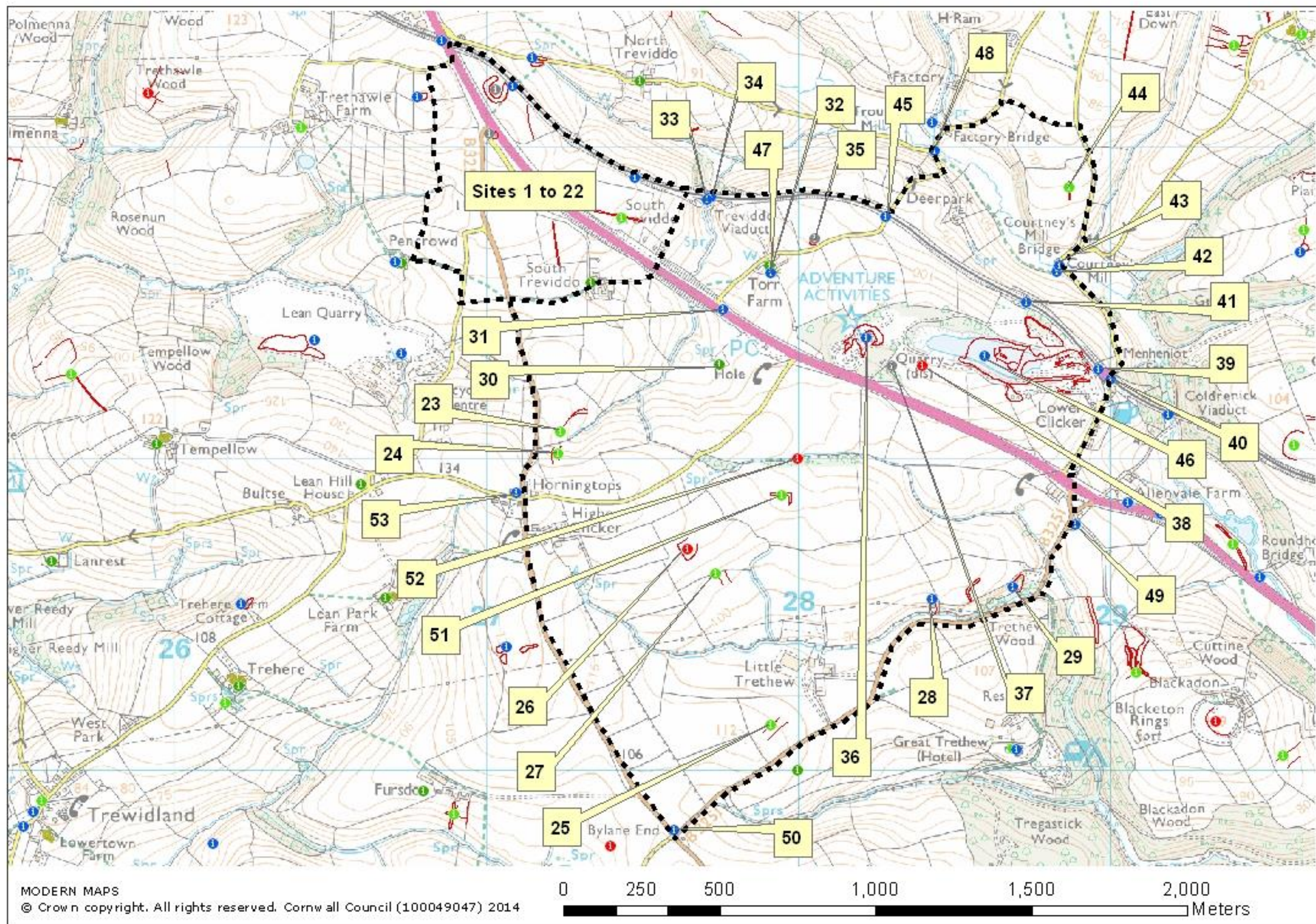


Fig 11 Ordnance Survey digital mapping showing all HER sites within the revised study area (2014).

10 Site inventory

Site No.	HER REF. (if any)	Site Type / Name	NGR easting (NGRs have SX suffix)	NGR westing	Period	Significance	Description and Documentation
ORIGINAL 2014 ASSESSMENT SITES – see Figure 10							
Site 1	MCO55124	Railway Bridge	SX 26857	62339	Post-medieval (1859)	Regional	Bridge crossing the Great Western Railway line carrying the A38. Located at the extreme northern end of the project area, close to Trepilcor Cottage. Extant.
Site 2	MCO55126	Railway Bridge	SX 27477	61903	Post-medieval (1859)	Local	Bridge carrying a farm access track across the Great Western Railway line located towards the southern end of the eastern edge of the study area. Extant.
Site 3	MCO55125	Railway Bridge	SX 27082	62199	Post-Medieval (1859)	Local	Bridge carrying the line of the Great Western Railway over a footpath, located close to Site 7. Extant.
Site 4	-	Rail line	SX 26842 (north) SX 27638 (south)	62350 61855	Post-medieval (1859)	Regional	Initially The Cornwall Railway, and subsequently part of The Great Western Railway (Stengelhofen 1988, 13 and 18), this site forms the eastern edge of the study area and includes component Sites 1-3 . The Cornwall Railway is recorded as having had significant problems in terms of economics and geography, with particular reference to the number of bridges and viaducts required. The line was finally opened in 1959, linking Truro to Plymouth (Thomas 1988, 143-149) and amalgamated with GWR in 1876. The Tithe Map pre-dates the railway's construction, showing an essentially intact Medieval field system along its route. The 1880 OS map (Figure 6) shows the rail line in position and slicing through the former fields regardless.
Site 5	MCO43024	Quarry	SX 26793 centred	62165	Post-medieval	Local	Remains of a possible quarry were plotted as part of the NMP from 1946 RAF aerial photographs of the area. The NMP plot shows the extreme eastern edge of the quarry as running up to and perhaps in to the north-western edge of the study area. Sub surface remains will exist.
Site 6	MCO43028	Mound?	SX 27014 remaining part	62043	Unknown date	Local/Regional	An approximate 25m diameter mound, of uncertain date, height or condition, was plotted as a part of the NMP using 1946 RAF air photographs of the area. Uncertain range, character or quality of sub surface remains.
Site 7	MCO43025	Enclosure	SX 27027 centred	62189	Unknown date	Local/Regional	Crop mark enclosure site of uncertain date. Sub surface circular with an east-north-east facing entrance opening on to the rail line. Of uncertain date, height or condition. Plotted as a 45m by 46m bank as part of the NMP using 1946 RAF air photographs of the area). Uncertain range, character or quality of sub surface remains possible.
Site 8	MCO53001	South Treviddo settlement	SX 27336 edge of study area	61567	Medieval (1278)	Regional	Medieval settlement first recorded in 1278 (Gover 1948, 196). Site spanning the south-eastern edge of the study area. The name is Cornish, containing the element 'tre' meaning estate or farmstead' and an unknown element (Padel 1985, 223). It is not known which of the South Treviddo settlements shown on the Tithe Map and 1880 OS map (at the south-eastern edge of the study area) is the earlier (see Sites 8 and 15). Modern mapping shows the addition of 20 th century buildings to the south and north of the settlement. Historic mapping shows an enclosure to the immediate north-west (west of the access road), which has since been removed but was recorded in the Tithe Apportions as a 'garden', the enclosed ground to the east is recorded as an 'Orchard', while the 'House, Courtlage (and Road)' shown on the 1840 Tithe map as the northern block of buildings was removed prior to 1880. In the 1840s the house was occupied by George Raby, and owned

							by Hugh Snell. The house may have left sub-surface buildings, cut features, surfaces and domestic artefact scatters. The area appears to be a blank space on modern mapping.
Site 9	MCO16070	Pencrowd Farm settlement	SX 26728 centred	61638	Medieval (1327)	Regional	<p>Medieval settlement first recorded in 1327 (Gover 1948, 194). Close peripheral site to the study area which may have associated below ground medieval remains. It is shown as a house and property in its own right on Martyn's Map of 1748 (Figure 3), and listed in the Tithe Apportions as being occupied by Thomas Kelly and owned by John Littlejohn. The name is Cornish meaning 'top, head or end' (pen) of 'hut or cottage' (krow-jy) (see Padel 1985, 73, 177). Two 20th century buildings are shown on the mapping on the north-western side of the settlement.</p> <p>Associated post-medieval bee boles (MCO56023), dated to 1825 are built into the wall of the original north-western dwelling.</p> <p>Outlying features associated with Pencrowd, but which have not been shown on the historic mapping may extend in to the study area. These might include the remains of buildings, cut features, surfaces and domestic artefact scatters.</p>
Site 10	-	Enclosure	SX 26907 centred	61599	Pre 1840	Local	<p>A small angular enclosure extant in 1840 and shown as open with Pencrowd's access lane, suggesting that it was used as an animal corralling or waiting space. Two probable gate posts (opposing dot on the mapping) suggest substantial gateposts.</p> <p>This site is still extant and may have associated surfacing or corralling features.</p>
Site 11	-	Removed Boundary	SX 27133 centred	62082	Medieval / early medieval Pre-1840	Local	<p>Shown on the 1840 Tithe map, but removed by 1880. Runs approximately north to south. It represents a northern extension of field system Site 19 removed boundaries, and was plotted by the NMP.</p> <p>It is likely that this site will have surviving subsurface remains.</p>
Site 12	-	Removed Boundary	SX 27220 centred	61690	Medieval / early medieval Pre-1840	Local	<p>Pre dates the 1840s Tithe map. It was identified by the NMP as a linear north to south running former boundary, forming a component part of the extant field system Site 19. Located in the southern half of the study area.</p> <p>It is likely that this site will have surviving subsurface remains.</p>
Site 13	MCO43029	Removed Boundary	SX 27396 centred	61786	Medieval / early medieval Pre-1840	Local	<p>Pre dates the 1840s Tithe map. It was identified by the NMP as a linear east to west running former boundary, forming a component part of the extant field system Site 19. The western end of Site 13 links in to a boundary, which is clearly shown on the Tithe map as slightly curvilinear and flanked by a track Site 18.</p> <p>It is likely that this site will have surviving subsurface remains.</p>
Site 14	-	Spring and small enclosure	SX 26840 edge of study area	61870	Pre-1840 enclosure	Local	<p>Marked on all mapping as a boundary junction, with an attached small angular enclosure, clearly shown on the Tithe map and described as 'Waste'. The stream itself is not referred to until modern mapping – when it is shown as 'Issues', although earlier mapping does depict a double boundary defined course running west from the spring (beyond the study area), which encloses a possibly seasonal stream. Interestingly the stream is clearly shown on the 1748 Martyn's map.</p> <p>This site may have associated waterlogged deposits and/or water management related works, as well as subsurface evidence for a changing enclosure shape.</p>
Site 15	-	Site of former South Treviddo (east)	SX 27516 centred – beneath A30	61636	Site of settlement Pre 1840	No longer extant	<p>Site of a former settlement or possibly an outlying agricultural building positioned within a small boundary-defined enclosure (now underlying the A38 – see Figure 11). Shown on the Tithe Map and 1880 as having a centrally located building, which by 1907 had been replaced by a differently aligned structure on its northern side. Shared the same name as Site 8 and has an unknown date of origin. No-longer extant, and sealed beneath the A38. Subsurface remains pre-dating the Tithe map could possibly extend beyond the current A38 in to the study area. Remains might include building foot prints, cut features, surfaces and domestic artefact scatters.</p>
Site 16	-	Road transport links - original A38, B3252 and other roads.	SX 27513 centred	61634	Pre 1748 and later	Regional	<p>The A38 has seen very significant expansion since 1907 – compare historic mapping with modern mapping. Its expansion has resulted in many components of the Medieval field system (as shown on the Tithe Map) being removed and overlaid (these are shown on Figure 11). The original A38 road is shown on Martyn's 1748 map (Figure 3), as is the B3252 and the lesser, distinctively angular road linking Pencrowd Farm's drive to the</p>

							B3252.
Site 17	-	Guide Post	SX 26990	62025	Post-medieval Post-1840	Local (if extant)	Shown on the 1880 and the 1907 OS maps as Guide Post (or GP), and located at the junction between the old A38 and the B3252 road. It is not shown on current mapping. It is uncertain whether this site survives.
Site 18	-	Removed trackway	SX 27312	61840	Medieval / early medieval Pre-1809	Local	Shown as extant on the 1809 and the 1880 OS maps and the 1840 Tithe maps (Figures 4, 5 and 6). The 1809 OS map shows it as connecting the settlements of North Treviddo to South Treviddo (Site 8). The 1840s Tithe Map suggests that the western side of the lane was not defined by a boundary along its central section. Within the study area the eastern side has been preserved as an extant field boundary. The lane/track formed part of the surrounding field system (component Sites 11, 13 and 19). It is likely that this site will have surviving sub surface remains.
Site 19	-	Removed boundaries of a formerly more complex medieval field system.	SX 27234	61927	Medieval / early medieval Pre-1840	Local Note Hedgerow Regulations	Shown as solid pale green lines on Figure 11. A series of field boundaries were identified on the 1840s Tithe map, which have since been removed. Although now the study area consists of fifteen fields, the same area in 1840 comprised thirty fields. The vast majority of these additional fields were in land listed in the Tithe Apportions as belonging to South Treviddo, occupied by George Raby and owned by Hugh Snell. The northern fields were recorded as belonging to Great Trethawle, occupied by Edmund Aunger and owned by Samuel Trehawke Kekewich Esq. Only one of these known removed boundaries (Site 11) has been plotted by NMP. A further two removed boundaries (Sites 12 and 13) plotted by NMP but removed prior to 1840 suggests that further field divisions associated with the South Treviddo medieval field system did exist. It is likely that some or all of these features relating to Site 19 will have surviving sub surface remains. <u>NOTE:</u> Many of the extant boundaries of this field system will be affected by Hedgerow Regulations.
Site 20	-	Footpath	SX 27048 centred	62145	Post-medieval / modern Post-1840	Local	A footpath shown on the 1880 and 1907 OS maps linking Trethawle in the west to the road running west from Treviddo at a point where there is a spring and small quarry shown on the mapping. This footpath runs across the enclosure Site 7 , and although not shown on modern mapping is included on Figure 10 as a public footpath. May leave an ephemeral subsurface impression.
Site 21	-	Footpath	SX 26984 cornered	61559	Post-medieval / modern Post-1840	Local	A footpath linking Pencrowd with South Treviddo using trackway Site 22 . It is not shown on the Tithe Map, but is shown on both the 1880 and 1907 OS maps, and is still used as a public footpath (see Figure 10). May leave an ephemeral subsurface impression.
Site 22	-	Trackway	SX 27301 centred	61530	Medieval / post-medieval Pre-1840	Local	A trackway with a surviving northern boundary and a possibly open southern side (as shown on the Tithe map, 1880 and 1907 OS maps). It forms part of a linking track/footpath between Pencrowd Farm and South Treviddo (and includes Site 21). Site 22 does not exist as a trackway on modern mapping for its western half, although the eastern half is partially shown as a track and does feature on Figure 10 as a public footpath. The periphery of the study area appears to lie along the northern edge of this site, and as such the probable trackway surfacing, drainage ditches, wheel ruts, etc may not be affected.

Site No.	HER REF. (if any)	Site Type / Name	NGR easting (NGRs have SX suffix)	NGR westing	Period	Significance	Description and Documentation
ADDITIONAL REVISED 2015 ASSESSMENT SITES – see Figure 11							
Site 23	MCO43031	Boundary cropmark	SX 27236	61097	Early Med. /Med.	Local	Part of former field system at near Horningtops. A field boundary is visible in air photos and was plotted as part of the NMP. The boundary is sited within an area of Anciently Enclosed Land, and is likely to form part of a medieval field system.
Site 24	MCO42914	Boundary cropmark	SX 27211	61029	Early Med. /Med.	Local	Part of former field system at near Horningtops. The remains of a pair of parallel field boundaries are visible on air photos and were plotted as part of the NMP. The remains are sited within an area of Anciently Enclosed Land and are likely to be medieval in origin.
Site 25	MCO42973	Boundary cropmark	SX 27909	60147	Early Med. /Med.	Local	Part of former field system at Little Trethew. The remains of a pair of parallel field boundaries are visible on air photos and were plotted as part of the NMP. The remains are sited within an area of Anciently Enclosed Land and are likely to be medieval in origin.
Site 26	MCO42915	Enclosure / boundary cropmark	SX 27637	60718	Prehist. / Early Med.	Local	Part of former field system at Higher Clicker. A field boundary is visible as a cropmark ditch on aerial photographs and was plotted as part of the NMP. It is possible that the ditch is the remains of an enclosure, now fragmented, approximately 55m by 38m.
Site 27	MCO42959	Boundary cropmark	SX 27730	60633	Early Med. /Med.	Local	Part of former field system at Higher Clicker. The remains of two parallel field boundaries are visible on air photos and were plotted as part of the NMP. The remains are sited within an area of Anciently Enclosed Land and are likely to be medieval in origin.
Site 28	MCO42966	Quarry	SX 28425	60548	Post-Med.	Local	Lower Clicker quarry site. NMP identified. Shown on the 1880 OS map.
Site 29	MCO42969	Quarry	SX 28681	60599	Post-Med.	Local	Lower Clicker quarry site. NMP identified. Shown on the 1880 OS map.
Site 30	MCO15012	Settlement	SX 27743	61310	Med.	Regional	The settlement of Hole is first recorded in 1378. The name is English but the meaning is unknown. The settlement is named "Hall" on 1st Edition OS map c1880. Hole is recorded on the 2nd Edition OS map c1907 as a dwelling with two outhouses to the S and SE corner.
Site 31	MCO54199	Milestone	SX 27756	61494	Post-Med.	Local	The site of a milestone on the NE side of A38, SW of Torr Farm - Liskeard 2½ Torpoint 14. It is not recorded on the modern mapping, suggesting that it is lost.
Site 32	MCO52900 DCO2520	Listed Farmhouse	SX 27905	61609	Post-Med.	National	Grade II Listed Building. Torr farmhouse is approximately mid C18 and was extended in approximately the 1860s. It is rubblestone slate hung on the south front as well as on the left-hand gable end. Slate roof with gable ends. Brick stacks on south front slope on gable ends. Rear axial brick stack. 2-room and cross passage plan, extended to double depth in <i>circa</i> 1860s. Description adapted from EH LB Online 26/11/1985 description.
Site 33	MCO45809	Railway viaduct	SX 27722	61847	Post-Med.	Regional/Local	Masonry piers of the original Cornwall Railway timber viaduct of 1859. A Class A viaduct one mile (1.6 km) west of Menheniot. 101 feet (31 m) high, 486 feet (148 m) long on 7 piers; replaced by a new stone viaduct on 14 September 1898. Binding states that five original piers survive.
Site 34	MCO55235	Railway viaduct	SX 27722	61847	Post-Med.	Regional/Local	Treviddo Viaduct on the GWR main line replaced the original CR timber structure in 1898. Treviddo Viaduct on the GWR main line.
Site 35	MCO43032	Mound	SX 28050	61702	Un-dated	Un-known	The remains of a possible mound, visible as a positive cropmark on air photos was plotted

		cropmark					as part of the NMP. The feature has a diameter of c26m.
Site 36	MCO29581	Quarry	SX 28216	61396	Post-Med.	Local	A quarry to the west of Clicker Tor quarry (42643) is marked on the c1840 Tithe map and the 1881 and 1963 OS maps. It is visible on air photos and was plotted as part of the NMP.
Site 37	MCO6627	Lithic scatter	SX 28297	61302	Prehist. (Neolithic)	Local/Regional	Flints and a greenstone hammerstones found during fieldwalking in 1994. Clicker Tor is a known greenstone outcrop. An axe of similar material has been found in the locality, but is now lost.
Site 38	MCO41708	Lithic scatter	SX 28395	61310	Neolithic	Local/Regional	Lithic scatter recovered by Geoff Walford during field walking of a 30m grid in 1994. 130 flints or more, including 8 cores, flakes and waste material. A return visit produced further quantities of similar flint including more cores and chert.
Site 39	MCO50194	Railway station	SX 28958	61293	Post-Med.	Regional	Menheniot Station was opened on 4th May 1859 as part of the Cornwall Railway, and was a small wayside station with two platforms. A later signal box closed in 1973 – now demolished. There was a small goods yard and sidings into the adjacent Clicker Tor Quarry – goods facilities closed in 1963 but the quarry siding lasted another ten years until removal in 1973. Only the up side station building survives, and it is amongst the very few remaining CR buildings from the opening of the line, built in Brunel's Italianate style.
Site 40	MCO55129	Railway bridge	SX 28996	61268	Post-Med.	Local	A bridge carrying the line of the Cornwall Railway over the public road at 261m 58c.
Site 41	MCO55128	Railway bridge	SX 28727	61511	Post-Med.	Local	A bridge carrying the line of the Cornwall Railway over a farm lane at 261m 76c.
Site 42	MCO29583	Corn Mill (site of)	SX 28821	61604	Post-Med.	Local	Courteney's Mill is recorded on the 1st Edition OS map, but is no longer extant.
Site 43	MCO9544	Bridge	SX 28842	61630	Post-Med.	Local	The Cornish Bridges Project states: "A C19 single centred round arch over a small stream, capped by a rough parapet with upright slab copings. In places the parapet and copings have been rendered to form a hogs-back form. Significant portions of the continuation of the spandrels beyond the bridge have been recently rebuilt."
Site 44	MCO43084	Boundary cropmark	SX 28868	61877	Early Med. /Med.	Local	Part of former field system near Menheniot. NMP identified.
Site 45	MCO55127	Railway bridge	SX 28276	61783	Post-Med.	Local	A bridge carrying the line of the Cornwall Railway over the public road at 262m 22c.
Site 46	MCO29582	Quarry	SX 28604	61327	Post-Med.	Local	Clicker Tor quarry is marked on the OS map of 1963. Spoil, buildings and the extent of quarrying were plotted during the NMP from 1946 RAF aerial photographs.
Site 47	MCO17045	Settlement	SX 27905	61630	Med.	Regional	The settlement of Tor, or Torr as it is spelt on the modern OS maps, is first recorded in 1378. It is still occupied. Additional 20th century farm buildings have been added to the north, north-west and north-east of the farmhouse.
Site 48	MCO9559	Bridge	SX 28433	61996	Post-Med.	Local	Factory bridge is marked on the OS map of 1963.
Site 49	MCO9157	Smithy	SX 28885	60799	Post-Med.	Local	An extant smithy site at Low Clicker is marked on the OS maps of 1881 and 1963.
Site 50	MCO54361	Non-conformist chapel	SX 27067	59819	Post-Med.	Local	Bylane End Wesleyan Methodist Chapel and attached Sunday School, C19. Recorded on the 1st and 2nd Editions of the 1:2500 1880 and 1907 OS maps. Still extant,
Site 52	MCO476	Find spot	SX 27990	61008	Prehistoric	Regional	A stone axe was found on clicker tor about 40years ago. The location of the axe is unknown. Flints have been found in the same area.
Site 53	MCO9112	Smithy	SX 27104	60897	Post-Med.	Local	A smithy at Horningtops is shown on the OS map of 1907. It does not appear on the OS edition of 1963.

