

Archaeological Evaluation

**Land at Dunwich Quarry,
Dunwich Forest,
Suffolk**

**ASE Project No: 180782
Site Code: DUN173**

ASE Report No: 2019157



May 2019

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Planning Ref: n/a

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Abstract

This report presents the results of an archaeological evaluation carried out by Archaeology South-East at Land at Dunwich Quarry, Dunwich Forrest, Suffolk, between 13/05/19 and 16/05/19. The fieldwork was commissioned by AGB Ltd on behalf of Forestry England and was undertaken in advance of the expansion of an existing quarry.

Earthworks of up to four low linear mounds, possibly artificial rabbit warrens (known as pillow mounds) of medieval or later date, had been previously observed to occupy the land immediately north of the late 19th–20th century quarry.

An archaeological Desk-based Assessment and a topographic survey preceded the archaeological fieldwork and have been reported on separately. These confirmed the presence of the mound-like linear earthwork features within the site.

The archaeological evaluation consisted of seven 30m-long trenches positioned to sample both the earthworks and surrounding areas of the 0.73 ha available site area north of the extant quarry.

The four linear mounds to the north of the extant quarry have been demonstrated to be characteristic of storage of modern (late 19th to 20th century) quarry spoil and not to constitute remains of medieval or later pillow mounds. No pre-modern archaeological remains were encountered in the trenches targeted upon the linear mounds, nor in the other trenches to their north and west.

It is judged that the site has no or negligible potential for the presence of significant archaeological remains and that the expansion of the quarry will have negligible impact on the below-ground heritage resource of this vicinity of Dunwich.

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1.0 INTRODUCTION

1.1 Site Background

1.1.1 Archaeology South-East, the contracting arm of the University of London Institute of Archaeology's Centre for Applied Archaeology was commissioned by AGB Environmental Ltd, on behalf of Forestry England, to undertake an archaeological evaluation by trial trenching at Dunwich Quarry, Dunwich Forrest, England.

1.1.2 This archaeological work was undertaken to inform Forestry England's proposals to re-open and enlarge an old sand and gravel quarry that occupies part of the site.

1.2 Location, Topography and Geology

1.2.1 The site is situated within Dunwich Forrest, an area of coniferous and broadleaf woodland, west of Dunwich village, in Suffolk Coastal District (Fig. 1; NGR TM 45437 71615).

1.2.2 The overall site is a 1.25ha triangular area, the south-eastern part of which is occupied by a small, disused quarry that has been in intermittent use since the late 19th century (Fig. 2). The northern part of the site available for investigation is a roughly rectangular, 0.73ha area surrounded by tree plantations to north, east and west.

1.2.3 Until recently, the northern part of the site was similarly covered by trees, removed to facilitate the investigation. This former woodland/scrubland is relatively level, but with some variations including a number of long low earthwork mounds. The site contained intermittent tree stumps, although none restricted archaeological work; as the ground was soft and sandy these were easily extractable by machine, with minimal disturbance to the surrounding area.

1.2.4 The geology of the site according, to the British Geological Survey, is alluvial fan deposits, of sand and gravel, resting on bedrock of uncertain form, age and origin.

1.3 Planning Background

1.3.1 Development proposals seek to re-open and extend the existing quarry site. The works will be undertaken under Permitted Development on the basis that it is Forestry England land and excavated material will be utilised on Forestry England roads.

1.3.2 Regardless of this permitted status, Forestry England practices require prior assessment of such proposals in line with National Planning Policy Framework (NPPF 2012).

1.3.3 An archaeological desk-based assessment (ASE 2018) and a topographic survey (ASE 2019a) of the site were undertaken prior to intrusive evaluation works.

- 1.3.4 On being commissioned to undertake the archaeological evaluation, ASE produced a Written Scheme of Investigation (WSI) for a trial-trench evaluation of the available site area (ASE 2019b).

1.4 Scope of Report

- 1.4.1 This report presents the results of an archaeological evaluation by trial trenching at Land at Dunwich Quarry, Dunwich Forrest, Suffolk. It describes and interprets the features and deposits encountered within the site and seeks to consider their significance. The potential for further archaeological remains to be present across the wider site is also considered.
- 1.4.2 The report has been prepared for the information and use of Forestry England.

2.0 ARCHAEOLOGICAL BACKGROUND

2.1 Introduction

2.1.1 The following archaeological background information mostly derives from the Desk-Based Assessment (ASE 2019a) and is mainly focused on the site and its vicinity.

2.1.2 No intrusive archaeological investigations have previously been carried out within the site area or its immediate vicinity.

2.2 Prehistoric

2.2.1 No Palaeolithic, Mesolithic or Neolithic sites and findspots are known within the general vicinity of the site.

2.2.2 A possible barrow cemetery, identified from Lidar imagery, is located to the north of the site. This comprises the remains of four mounds, but their archaeological origin has not yet been confirmed (SHER WLN 068).

2.2.3 A scatter of probably prehistoric flintwork is recorded to the north-east of the site (WNL 016).

2.3 Roman

2.3.1 There are no known remains of Romano-British date within the vicinity of the site. Despite the suggestion that Dunwich may have been a significant Roman settlement and even a port, Roman finds are scarce in the vicinity of the village (Good and Plouviez 2007).

2.4 Anglo-Saxon and medieval

2.4.1 The parish of Westleton, within which the site lies, derives its name from a Viking called Vestli. There has been a standing church in Westleton since at least 1086.

2.4.2 The adjacent coastal town of Dunwich was a significant settlement by the 10th century, by which time it was minting its own coins and thus may have been a small defended town. In 1086 it had some 236 burgesses and three churches. For some time, it was a thriving medieval port, although it began to decline thereafter, following the loss of its port when storms blocked its harbour in 1287. The majority of Dunwich since then has been lost to coastal erosion.

2.4.3 The wider landscape surrounding the site during the medieval period is likely to have consisted of common and heathland, with dispersed settlements around its edges. The dry sandy heaths, like the landscape in which the archaeological site is located, remained largely unenclosed, typically used for grazing and rabbit warrens.

2.4.4 The HER records the visible mounds (of potential medieval date) within the quarry extension and speculates that they are rabbit warrens (SHER WLN 007) They are described as follows:

“Four long, low mounds, parallel to each other, running SE-NW. Rabbit warrens. All slightly damaged by Forestry Commission machinery - to be put on FC restraint maps. Sketch plans on maps in (S1), dimensions:- Mound 1, circa 50m long, 4.5m wide, 1.2m high; Mound 2, circa 30m long, 4.5m wide, 1.2 high, 0.8m high; Mound 3, circa 55m long, 5m wide, 1.4m high; Mound 4, circa 40m long, 6m wide, 1.2m high (S1). Adjoins former extraction pit!”.

- 2.4.5 The HER entry also notes that in 1990 they were already in poor condition. However, parts of these mounds are visible on digital elevation models, created as part of the DBA using Environment Agency Lidar data (ASE 2018, Fig. 2). The DBA observes that John Cary’s map of 1794 does not show any features within the Site.
- 2.4.6 Other recorded medieval remains within the vicinity of the site include scatters of medieval pottery sherds located to the north-east (SHER WLN 017, WLN 018), and possible trackways (SHER WLN 080) to the south.

2.5 Post-Medieval and Modern

- 2.5.1 In the post-medieval period the site was part of an extensive area of heath, criss-crossed by tracks. Historic maps of the site and its surrounding area show that it was situated on Burnt House Heath, which extended from what is now the edge of the woodland to the north and the vicinity of the Dunwich River to the south.
- 2.5.2 In the 1840s, the heath was under pasture, and the adjacent ‘walks’ were under arable cultivation.
- 2.5.3 The wider area surrounding the site underwent little change during the 19th and early 20th centuries. It remained largely rural and unpopulated, although some industry was being undertaken within the surrounding area, mostly brick-making.
- 2.5.4 As already mentioned, historic mapping does not show any mound-like features within the site area. An 1817 map and the 1840 tithe map and 1907 OS map all show the landscape much as it is today.
- 2.5.5 The quarry pit immediately south-east of the site was in use by 1884 and was probably being used intermittently for extraction of sand for brick-making, and gravel for metalling of tracks. Two of the local place names of that period were Brick Kiln Farm and Brick Kiln Heath.
- 2.5.6 In the 1920s, the newly established Forestry Commission acquired lands from the Dunwich and Westleton estates and began to establish a new coniferous forest. The track extended to the west of the site by 1945, although the site remained un-wooded during that time (ASE 2019a).
- 2.5.7 The quarry was reopened in the 1970s and probably reached its current extent during that period. Judging from aerial photographic mapping, the quarry edge in 1999 was seemingly c.20m further south than its current edge.

2.6 Preceding survey of the site

Walkover Survey

- 2.6.1 A walkover survey was undertaken in July 2018, as part of the DBA work (ASE 2018). As well as noting the general nature of the old quarry, this observed that the north face of the quarry comprised loose coarse sands lying at an angle of c.40 degrees. A flat 'platform' or ledge ran around towards the upper edge of the slope before rising again to be masked by a bracken-covered bank that separated the extant quarry from the proposed extension area. A possible earthwork was visible in at the quarry edge, but was poorly defined. This was speculated to be one of the four low mounds recorded on the HER, perhaps Mound C.
- 2.6.2 At the time of the walkover survey, the northward quarry extension area was a largely wooded, with bracken of varying thickness below the canopy. Ground visibility was limited, but a distinct linear low mound, presumed to be Mound B, was most clearly visible. A second fragmentary mound was also partly visible. Possibly the remains of mound C.

Topographic Survey

- 2.6.3 A topographic survey was carried out across the northern part of the site in April 2019 (ASE 2019a), after tree clearance had taken place. This identified and recorded the remains of four linear mounds (A to D) on the northern side of a spoil heap along the northern edge of the extant quarry (Fig. 2). The mounds were orientated on a north-west to south-east axis, broadly parallel to the extant forest track which runs along the east side of the quarry. The south-east ends of the earthworks were not defined as they appeared to extend under the spoil heap. A further shallow irregular earthwork (E) which ran on an approximate south-west to north-east axis, was also identified.
- 2.6.4 It was concluded that, on the basis of the survey, the surviving earthwork features were probably not a type of artificial rabbit warren known as 'pillow mounds', although this could not be entirely discounted. It was alternatively speculated that they were associated with the quarrying and forestry activities in the area. This was considered almost certainly the case for earthwork E, which has not been previously observed and thus was likely to post-date 1990.
- 2.6.5 An overview of the archaeology of rabbit farming is presented in the topographic survey report (ASE 2019a, section 2.3.13–21).

2.7 Project Aims and Objectives

- 2.7.1 The general aim of the archaeological investigation was to establish the location, extent, date, character and quality of preservation of surviving archaeological remains within the development area.
- 2.7.2 The objectives of the archaeological investigation were:

- To define, as far as reasonably practicable, the location, extent, date, character, condition, significance and quality of any archaeological remains.
- To establish the ecofactual and environmental potential of the archaeological deposits and features encountered.
- To enable the Forestry England's archaeologist to make an informed decision as to the requirement for any further archaeological work to mitigate the impact of the proposed quarry extension.

2.7.3 Because of the site's perceived archaeological potential, consideration was to be given to the form and function of the potential warrens. The regional research agenda for the East of England identifies that:

"synthesis of the medieval and post-medieval rabbit industry, which was extremely important in East Anglia, is needed. The scheduling or listing of good surviving examples of warrens should be considered" (Medlycott 2011, 71).

3.0 ARCHAEOLOGICAL METHODOLOGY

3.1 Fieldwork Methodology

- 3.1.1 The archaeological evaluation of the site consisted of seven trenches, each measuring 30 x 1.8m, representing a 5% sample of the 7,356² area not previously impacted the quarry. The trenches set out to achieve a largely random sample of the site, but also targeted some of the ridges and mounds that had been identified and recorded by the topographic survey.
- 3.1.2 All seven trenches were able to be positioned in their intended locations. The striping of each trench was archaeologically supervised and was undertaken by a tracked excavator equipped with a 1.8m-wide toothless ditching bucket. All trenches were stripped down to the top of the natural deposit.
- 3.1.3 Some of the trenches targeted specific earthworks. Trenches 4, 5 and 7 targeted an ill-defined branching linear earthwork (A), and Trenches 4 and 7 additionally investigated parallel linear mounds B, C and D.
- 3.1.4 Where necessary, hand-cleaning of the trench base and sections was undertaken and any potential archaeological features or deposits excavated by hand.
- 3.1.5 Details of each trench and context were recorded on pro-forma sheets. Section drawings were drawn by hand at a scale of 1:20. Up to 9m-long representative sections were drawn; no individual trench face was recorded in its entirety.
- 3.1.6 Digital photographs were taken of each trench, of selected trench sections and of work in progress.
- 3.1.7 A Digital Global Positioning System (DGPS) and a DGPS Total Station (Leica 1205 R100 Total Station, Leica System 1200 GPS) were used to accurately locate and record each trench and its recorded sections.
- 3.1.8 Where present, all archaeological artefacts were collected and retained for specialist identification and study.
- 3.1.9 Bulk soil samples were collected from deposits considered to have the potential for the recovery of environmental remains and/or small artefacts.

3.3 Archive

- 3.3.1 The site archive is currently held at the Essex office of ASE, but will be deposited at the Suffolk County Council archaeological store in due course. The contents of the archive are summarised below (Tables 1 and 2).

Context sheets	10
Section sheets	5
Plans sheets	0
Colour photographs	0
B&W photos	0
Digital photos	40
Context register	0
Drawing register	0
Watching brief forms	0
Trench Record forms	7

Table 1: Quantification of site paper archive

Bulk finds (quantity e.g. 1 bag, 1 box, 0.5 box 0.5 of a box)	0
Registered finds (number of)	0
Flots and environmental remains from bulk samples	0
Palaeoenvironmental specialists sample samples (e.g. columns, prepared slides)	0
Waterlogged wood	0
Wet sieved environmental remains from bulk samples	0

Table 2: Quantification of artefact and environmental samples

4.0 RESULTS

4.1 Introduction

4.1.1 The seven trenches, each measuring 30m x 1.8m, were excavated in their intended positions, as per the WSI (Fig. 3).

4.1.2 These revealed relatively simple deposit sequences of topsoil over subsoil over natural deposits to be present across much of the site. The topsoil was a loose grey slightly silty sand with infrequent small pebbles that varied in thickness up to 0.45m. All of the trenches are recorded to have subsoil, although it was not always easy to identify as its colour varied from trench to trench, ranging from light grey and brownish-orange to dark blackish brown, although this could be due to misidentification. The natural deposit beneath it was more consistent and largely of compacted orange sand, with occasional small dark grey/ purple irregular patches; the patches became more frequent towards the north, for reasons unknown.

4.1.3 Trenches 4, 5 and 7 specifically targeted branching linear earthwork A and Trenches 4 and 7 additionally investigated parallel linear earthworks B, C and D. The results of these trenches are described in sections 4.2-4.4.

3.1.4 Trenches 1, 2 and 6 revealed typical sequences of topsoil, subsoil and natural, but no deposits or features of archaeological significance. These are given summary description in section 4.5, with further details presented in Appendix 1.

4.2 Trench 4

Context	Type	Interpretation	Length m	Width m	Depth m	Height m AOD
4/001	Layer	Topsoil	>30	>1.8	0.20	21.83-22.07
4/002	Layer	Subsoil	>30	>1.8	0.2-0.36	
4/003	Layer	Natural	>30	>1.8	-	
4/004	Deposit	Spoil-heap	>1.8	6.0	0.44	
4/005	Layer	Turf-line	>1.8	6.0	0.02	
4/006	Layer	Buried topsoil	>1.8	6.0	0.2-0.36	

Table 3: Trench 4 list of recorded contexts

4.2.1 Trench 4 was positioned to cross the northern part of NNE/SSW linear mound D (Fig. 3).

4.2.2 A regular sequence of topsoil over subsoil over natural deposits extended across the trench extents. The orange natural sand [4/003] was overlain by a layer of light grey sand [4/002] which could have been subsoil or base of topsoil. Grey silty sand topsoil [4/006] overlay the subsoil.

4.2.3 Located in the approximate middle of the trench was a sequence of further deposits that overlay the basic sequence described above (Fig. 4, section 1). A thin turf line [4/005], c.6m wide, overlay topsoil [4/006] and constituted a

remnant of the former land surface. Overlying this was a mounded deposit of mid grey sand mixed with subsoil, [4/004], with a maximum thickness of 0.44m. A sealing layer of re-deposited grey silty sand topsoil [4/001] covered the mounded deposit and extended beyond it, merging into topsoil [4/006]. Overall, the mound stood 0.6m high from existing ground level and was c.6m wide at its base where excavated. Its location corresponded with that of the surveyed location of linear mound D.

4.2.4 No archaeological artefacts were retrieved from any of the deposits encountered in this trench.

4.3 Trench 5

Context	Type	Interpretation	Length m	Width m	Depth m	Height m AOD
5/001	Layer	Natural	>30	>1.8	-	
5/002	Layer	Topsoil	>30	>1.8	0.30-0.35	21.80-22.02
5/003	Deposit	Spoil heap	>1.8	>6	0.80	
5/004	Layer	Topsoil	>1.8	9.0	<0.05	
5/006	Deposit	Spoil heap	>1.8	4.40	0.50	
5/007	Deposit	Spoil heap	>1.8	4.60	0.60	

Table 4: Trench 5 list of recorded contexts

4.3.1 Trench 5 was positioned to cross the northern parts of earthworks A and B (Fig. 3).

4.3.2 The general deposit sequence of here consisted of dark brownish grey silty sand topsoil [5/002], overlying orange sand natural [5/001]. The topsoil was 0.30 to 0.35m thick.

4.3.3 Two narrower and lower linear mounds crossed the north-east end of the trench both on a NW/SE alignment. Westerly mound [5/006] comprised a deposit of mid-grey loose friable slightly silty/dirty sand, c.4.4m wide and 0.5m high. Easterly mound [5/007] was a similar deposit, c.4.6m wide and 0.6m high. Both overlay topsoil [5/002], with no old turf line in between, and were also patchily covered by a thin layer of redeposited topsoil [5/004]. Both mounds showed signs of modern tree root disturbance and modern animal burrows. Together, these mound deposits constitute what was previously surveyed as the bifurcated northern end of linear mound A.

4.3.4 A large mounded deposit of mid grey loose friable sand [5/003] overlay the topsoil at the south-west end of the trench (Fig. 4, section 2). No intervening turf line was identified in this trench. The deposit was in excess of 6m wide and c.0.8m high. It had gradually sloping sides, particularly to the south-west, where its edge appeared to extend beyond the trench limit – possibly due to spreading as the ground fell away here. No re-deposited topsoil was identified to overlie the mounded [5/003] deposit here. The location of deposit [5/003] corresponded with that of the surveyed location of linear mound B.

4.3.5 No archaeological artefacts were present in any of the deposits encountered in this trench.

4.4 Trench 7

Context	Type	Interpretation	Length m	Width m	Depth m	Height m AOD
7/001	Layer	Topsoil	>7.6	1.8	0.34	21.81-22.05
7/002	Layer	Subsoil	0.2	1.8	0.22-0.24	
7/003	Layer	Natural	>30	1.8	-	
7/004	Deposit	Spoil heap	>1.8	6	0.46	
7/005	Deposit	Turf-line	>1.8	6	0.02	
7/006	Layer	Buried topsoil	>1.8	6.6	0.12	
7/007	Deposit	Spoil heap	>1.8	3.5	0.3	
7/008	Layer	Turf-line	>1.8	3.5	0.02	
7/009	Layer	Buried topsoil	>1.8	>7.0	0.20	

Table 5: Trench 7 list of recorded contexts

- 4.4.1 Trench 7 was positioned to investigate the southern part of linear mound B and middle of mound C (Fig. 3).
- 4.4.2 Trench 7 revealed a general sequence of a layer of dark grey sandy natural [7/003], beneath a light grey subsoil [7/002] that was overlain by mid grey topsoil [7/006 / 7/009]. The subsoil was c.0.16m thick and the topsoil c.0.3m thick. These extended across the trench extents.
- 4.4.3 At the north-east end of the trench further deposits overlay the sequence described above (Fig. 5, section 3). A 0.01m-thick compressed band of brown silty sand containing roots and other organic material [7/005] overlay topsoil [7/006 / 7/009], and was probably a turf line constituting a former land surface. This turf line was overlain by a mounded deposit of redeposited natural sand, [7/004], c.5.5m wide and a maximum of 0.5m thick. The mound deposit was in turn covered by a layer of re-deposited topsoil [7/001] that also extended beyond and merged with topsoil [7/006]. The location of deposit [7/005] corresponded with that of the surveyed location of linear mound B.
- 4.4.4 At the south-west end of Trench 7, the basic deposit sequence of natural/subsoil/topsoil was overlain by a similar sequence of further deposits (Fig. 5, section 4). A thin turf layer, c.3.5m wide, overlay topsoil [7/009], again indicating the height of the former ground surface. This was itself overlain by mounded sand deposit [7/007] and was a maximum of 0.36m thickness. The mound deposit was in turn covered by re-deposited topsoil [7/001] that extended beyond it and merged with topsoil [7/009]. The location of deposit [7/007] corresponded with that of the surveyed location of linear mound C.
- 4.4.5 No archaeological artefacts were retrieved from any of the deposits encountered in this trench.

4.5 Trenches 1, 2 3 and 6

- 4.5.1 Trenches 1, 2 3 and 6 revealed no archaeological remains or other deposits of potential interest. All, except 6, lay at relative distance from the quarry face, to the north of the known linear mound remains. Trench 6 lay to the west of the mounds, nearer the quarry edge.

- 4.5.2 These trenches contained the same basic deposit sequences as seen in the others; grey silty sand topsoil over a probable pale grey sand subsoil over orange sand natural. It was noted that the natural deposit contained small dark grey/purple irregular patches that increased in frequency northwards in Trenches 1-3. These patches were sample excavated in Trenches 1, 2 and 3 and determined to be of natural origin. These were probably the result of root disturbance from the tree cover.
- 4.5.3 Further details of the deposit sequences recorded in these trenches can be found in appendix 1. Photographic views of each are presented in Figure 6.

5.0 FINDS AND ENVIRONMENTAL REMAINS

5.1 Finds

5.1.1 The archaeological trial trenching recovered no archaeological finds from the various deposits investigated.

5.2 Environmental Remains

5.2.1 No bulk samples were collected from the site, as no deposits judged suitable for the survival/recovery of plant macrofossils were identified.

6.0 DISCUSSION AND CONCLUSIONS

6.1 Overview of stratigraphic sequence

- 6.1.1 The general deposit sequence recorded within the evaluation trenches consists of natural deposits overlain by a probable subsoil which is in turn overlain by topsoil. This appears to extend across the northern part of the site, where not impacted by the quarry works.
- 6.1.2 No archaeological features, deposits or artefacts were discovered within or below the subsoil and topsoil deposits.
- 6.1.3 The four linear mounds A–D, recorded in Trenches 4, 5 and 7, comprise humanly-constructed mounded deposits of re-deposited silty/dirty sand. No complexity to their structure was encountered. These mounds were created directly on the unmodified contemporary land surface, as indicated by the preservation of remnant turf lines beneath some of them. These turf lines do not extend beyond the mound footprints, suggesting that the surrounding open ground has been subject to a greater degree of disturbance and/or reworking. The sloping profiles of the mounds indicates some degree of slipping and spread has probably taken place. At some stage, all of the mounds have, at least partially, been covered with a layer of re-deposited topsoil – presumably deliberately. No evidence of trees having been planted directly on any of the mounds was encountered within the investigated trenches, though some root disturbance was noted.
- 6.1.4 Beyond the parallel linear mounds, to their north and west, the site does not appear to have been disturbed by quarrying activity or to have had further mounded materials deposited on it.

6.2 Deposit survival and existing impacts

- 6.2.1 The most significant impact upon the site has been the quarry. This has totally removed surface deposits from across the southern half of the site, to a depth of as much as 11m below the ground surface.
- 6.2.2 Within the evaluated area of the site, the major impact is that of the modern tree planting which until recently covered it. Tree root disturbance was noted in all trenches and is obvious across the rest of the site in the form of stumps left *in situ*. A degree of tree root disturbance to the four linear mounds was evident. However, the mounds do not appear to have had trees directly planted upon them and, other than some lateral spreading, they survive reasonably well – particularly where covered by significant thicknesses of redeposited topsoil.

6.3 Discussion of archaeological remains

- 6.3.1 No archaeological features or deposits were encountered in evaluation Trenches 1–3 and 6. Parts of all four linear of the previously identified earthworks, mounds A–D, were variously recorded in Trenches 4, 5 and 7. No other archaeological remains were present in these trenches.

- 6.3.2 Given the simplicity of the construction of the linear mounds and the absence of obvious burrowing inside of them, it is unlikely that they represent the remains of rabbit warrens of the type known as 'pillow mounds'. No medieval or earlier post-medieval features (e.g. ditches, fences, etc) or artefacts have been found in association with the mounds or indeed elsewhere within the wider site. Indeed, no dating evidence at all was obtained for the mound deposits.
- 6.3.3 The survival of a relatively well-preserved buried turf line below at least some of the mounds suggests that they have been placed on the land surface in the post-medieval period. Their general uniformity in terms of orientation, size and composition strongly suggest that they constitute linear heaps of spoil deriving from, and stored alongside, the quarry workings. The mounds are therefore likely to be of late 19th- or earlier 20th-century date. It is perhaps notable that their southern ends have been encroached upon / covered by what seems to be a bank or bund along the northern edge of the quarry. Although untested by the archaeological evaluation, it is possible that this was a relatively recent (post-1999?, as indicated by map regression) modification to the quarry along with the creation of a platform/ledge immediately south of it on the upper slope of the quarry edge.
- 6.3.4 It is further speculated that the redeposited topsoil covering the mounds was placed over them as part of the creation of the forestry plantation in the mid-20th century.

6.4 Potential impact on archaeological remains

- 6.4.1 Given the identification of the linear mounds as spoil heap features associated with the modern quarry works, and the absence of any features, deposits or finds to their north and west, it is likely that no significant pre-modern archaeological remains are present within the site.

6.5 Consideration of research aims

- 6.5.1 The results of the archaeological evaluation appears to corroborate the conclusion of the desk-based assessment and topographic survey reports that the linear mounds do not constitute the remains of medieval or later rabbit warrens. As such, the site has no potential to address the stated aim of contributing to the understanding of the form and function of medieval rabbit warrens.

6.6 Conclusions

- 6.6.1 The extant quarry works within the south of the site intrude sufficiently below ground to have entirely removed any archaeological remains that may have formerly been present here.
- 6.6.2 The linear mounds to the north of the quarry, A–D, have been demonstrated to be characteristic of storage of modern (late 19th to 20th century) quarry spoil and not to constitute remains of medieval or later rabbit warrens known as 'pillow mounds'.

- 6.6.3 No pre-modern archaeological remains were encountered in the trenches targeted upon the linear mounds, nor in the other trenches to their north and west.
- 6.6.4 It is judged that the site has no or negligible potential for the presence of significant archaeological remains and that the expansion of the quarry will have negligible impact on the below-ground heritage resource of this vicinity of Dunwich.

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ACKNOWLEDGEMENTS

ASE would like to thank AGB Environmental for commissioning the work on behalf of Forestry England and for their assistance throughout the project. The evaluation was supervised by Mark Germany, assisted by Cai Brockley. Site survey was undertaken by Natalie Gonzalez. Andy Leonard project-managed the fieldwork and the post-excavation process managed by Mark Atkinson.

Appendix 1: Archaeologically negative trenches: list of recorded contexts

Trench	Context	Type	Interpretation	Depth m	Height m AOD
1	1/001	Layer	Topsoil	0.25-0.40	21.42-21.88
1	1/002	Layer	Subsoil	0.2-0.29	
1	1/003	Layer	Natural	Not exc.	
2	2/001	Layer	Topsoil	0.38-0.45	21.75-22.09
2	2/002	Layer	Subsoil	0.18-0.35	
2	2/001	Layer	Natural	Not exc.	
3	3/001	Layer	Topsoil	0.36-0.36	21.66-21.89
3	3/002	Layer	Subsoil	0.26-0.35	
3	3/003	Layer	Natural	Not exc.	
6	6/001	Layer	Topsoil	0.27-0.35	21.63-22.22
6	6/001	Layer	Subsoil	0.20-0.29	
6	6/003	Layer	Natural	Not exc.	

Appendix 2: HER Summary

Site name/Address: Land at Dunwich Quarry, Dunwich Forest, Suffolk, IP17 3EE	
Parish: Dunwich	District: Suffolk Coast and Heaths
NGR: TM 45437 71615	Site Code: DUN 173
Type of Work: Trial-trench evaluation	Site Director/Group: Mark Germany, Archaeology South-East
Date of Work: 13-16 May 2019	Size of Area Investigated: 0.73ha
Location of Finds/Curating Museum: Suffolk archaeol depository	Funding source: Client
Further Seasons Anticipated?: No	Related HER No's: WLN 007
Final Report: ADS grey lit library	OASIS No: 352522
Periods Represented: Modern	
Previous Summaries/Reports: <p>Archaeological evaluation was carried out in advance of the expansion of an existing quarry. Earthworks of up to four low linear mounds, possibly artificial rabbit warrens (known as pillow mounds) of medieval or later date, had been previously observed to occupy the land immediately north of the late 19th–20th century quarry and recorded by the SHER.</p> <p>An archaeological Desk-based Assessment and a topographic survey preceded the archaeological fieldwork and have been reported on separately. These confirmed the presence of the mound-like linear earthwork features within the site.</p> <p>Seven 30m-long trenches were positioned to sample both the earthworks and surrounding areas of the 0.73 ha available site area north of the extant quarry. The four linear mounds were demonstrated to be characteristic of storage of modern (late 19th to 20th century) quarry spoil and not to constitute remains of medieval or later pillow mounds.</p> <p>No pre-modern archaeological remains were encountered in the trenches targeted upon the linear mounds, nor in the other trenches to their north and west.</p>	
Author of Summary: M. Germany	Date of Summary: 30/05/2019

Appendix 3: OASIS Form

OASIS ID: archaeol6-352522

Project details

Project name	Dunwich Quarry, Dunwich
Short description of the project	Archaeological evaluation was carried out in advance of the expansion of an existing quarry. Earthworks of up to four low linear mounds, possibly artificial rabbit warrens (known as pillow mounds) of medieval or later date, had been recorded here. Preceding archaeological Desk-based Assessment and topographic survey confirmed the presence of the mound-like linear earthwork features within the site. The four linear mounds were demonstrated to be characteristic of storage of modern (late 19th to 20th century) quarry spoil and not to constitute remains of medieval or later pillow mounds. No pre-modern archaeological remains were encountered elsewhere in the site.
Project dates	Start: 13-05-2019 End: 16-05-2019
Previous/future work	Yes / No
Associated project reference codes	DUN173 - Sitecode 180782 - Contracting Unit No.
Type of project	Field evaluation
Site status	None
Current Land uses	Grassland Heathland 1 - Heathland Woodland 4 - Coniferous plantation
Monument type	QUARRY SPOIL Modern
Significant Finds	NONE None
Methods & techniques	"Sample Trenches", "Targeted Trenches"
Development type	Mineral extraction (e.g. sand, gravel, stone, coal, ore, etc.)
Prompt	Voluntary/self-interest
Position in the planning process	Not known / Not recorded

Project location

Country	England
Site location	SUFFOLK SUFFOLK COASTAL DUNWICH Dunwich Quarry, Dunwich Forest
Postcode	IP17 3EE
Study area	0.73 Hectares
Site coordinates	TM 45437 71615 52.287159118483 1.599194831737 52 17 13 N 001 35 57 E Point
Height OD / Depth	Min: 21m Max: 21m

Project creators

Name of Organisation	Archaeology South East
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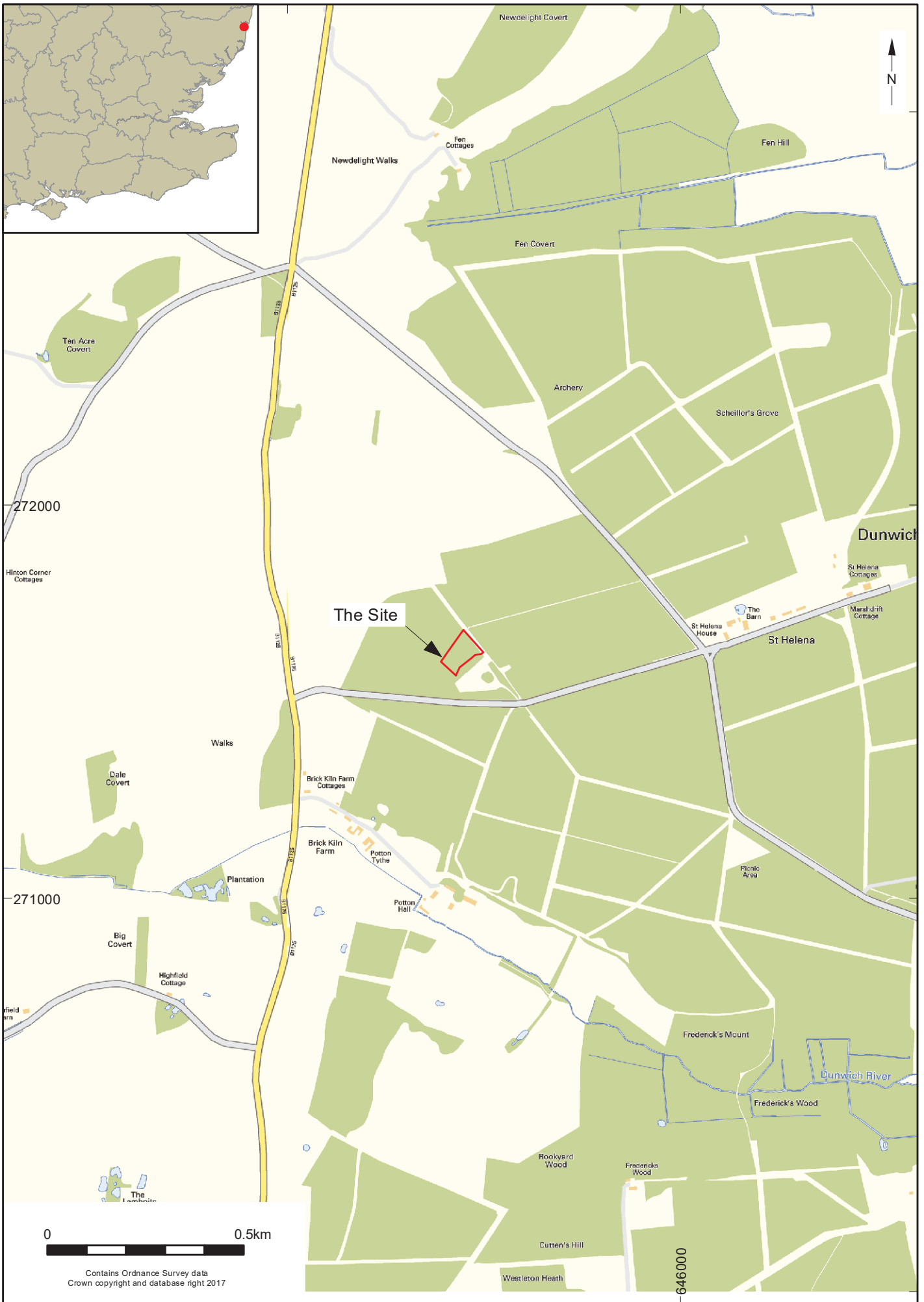
Project brief originator	no brief
Project design originator	Archaeology South-East
Project director/manager	Andy Leonard
Project supervisor	Mark Germany
Type of sponsor/funding body	Developer

Project archives

Physical Archive Exists?	No
Physical Archive recipient	n/a
Digital Archive recipient	Suffolk County Council Archive Store
Digital Contents	"Stratigraphic", "Survey"
Digital Media available	"Images raster / digital photography", "Text"
Paper Archive recipient	TBC
Paper Contents	"Stratigraphic", "Survey"
Paper Media available	"Context sheet", "Miscellaneous Material", "Plan", "Report", "Section"

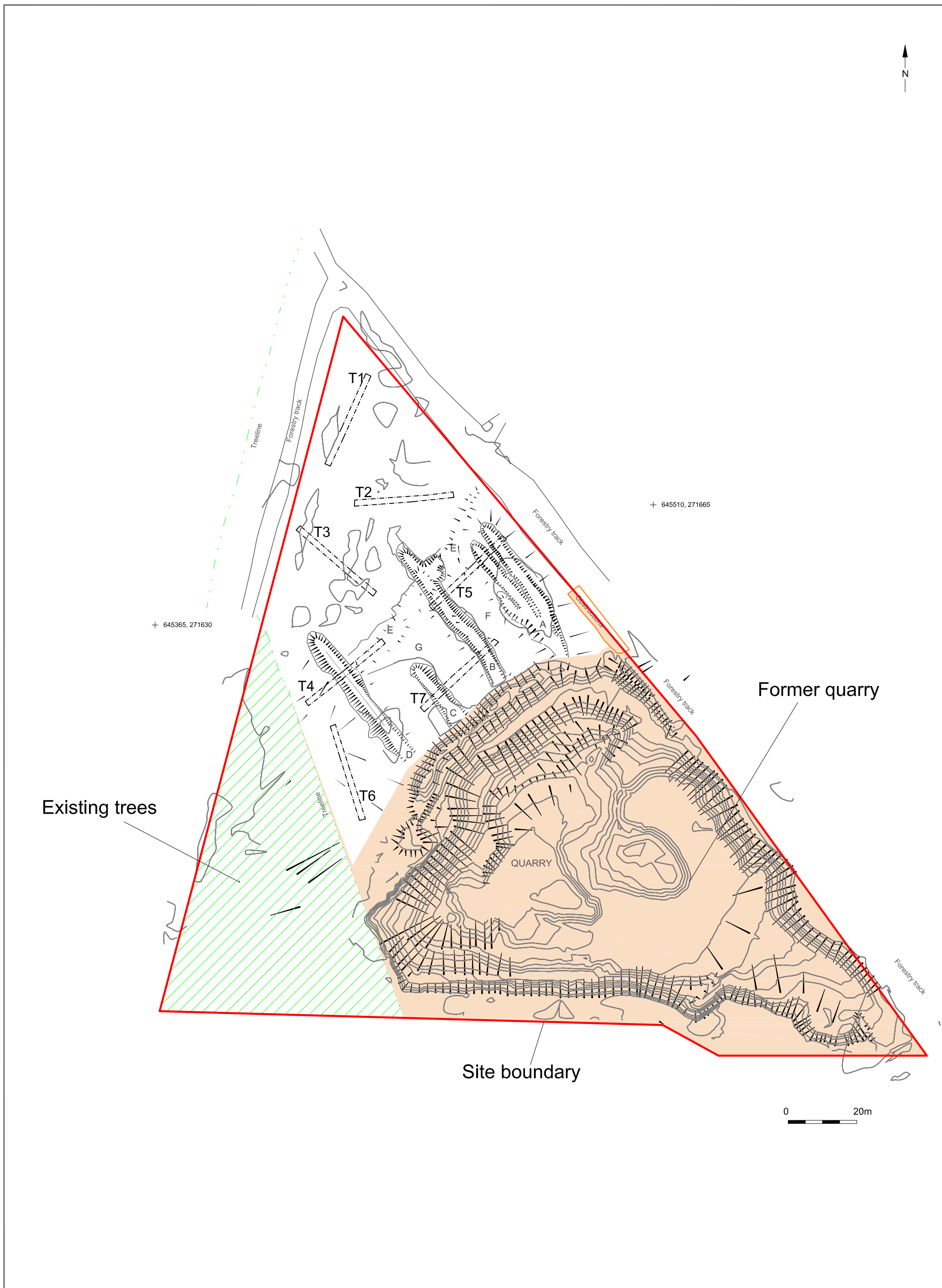
Project bibliography

Publication type	Grey literature (unpublished document/manuscript)
Title	Archaeological Evaluation. Land at Dunwich Quarry, Dunwich Forest, Suffolk
Author(s)/Editor(s)	Germany, M.
Other bibliographic details	ASE rep. 2019157
Date	2019
Issuer or publisher	Archaeology South-East
Place of issue or publication	Witham
Description	A4 pdf. Approx 30 pages, inc. text, tables and figures

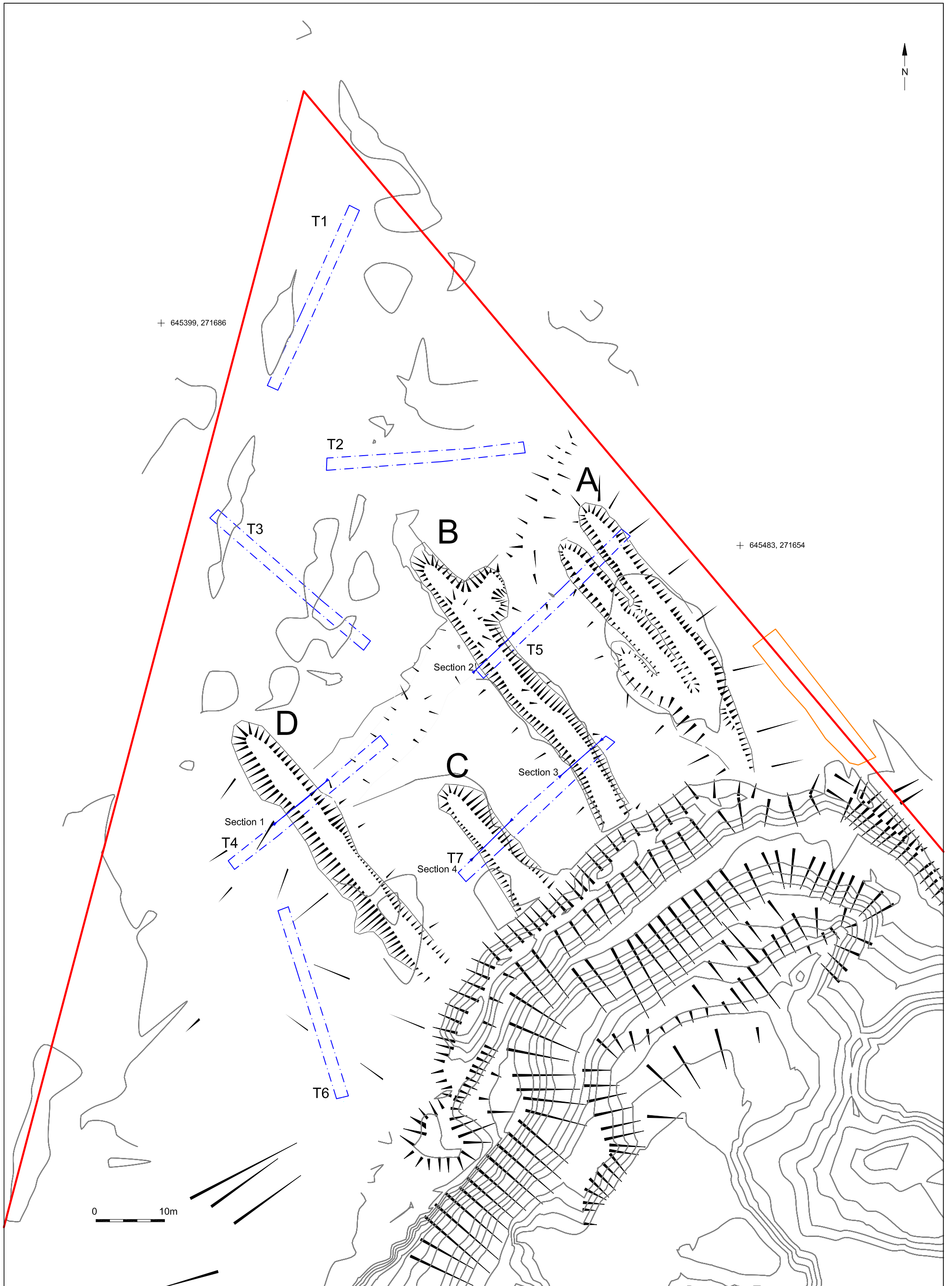


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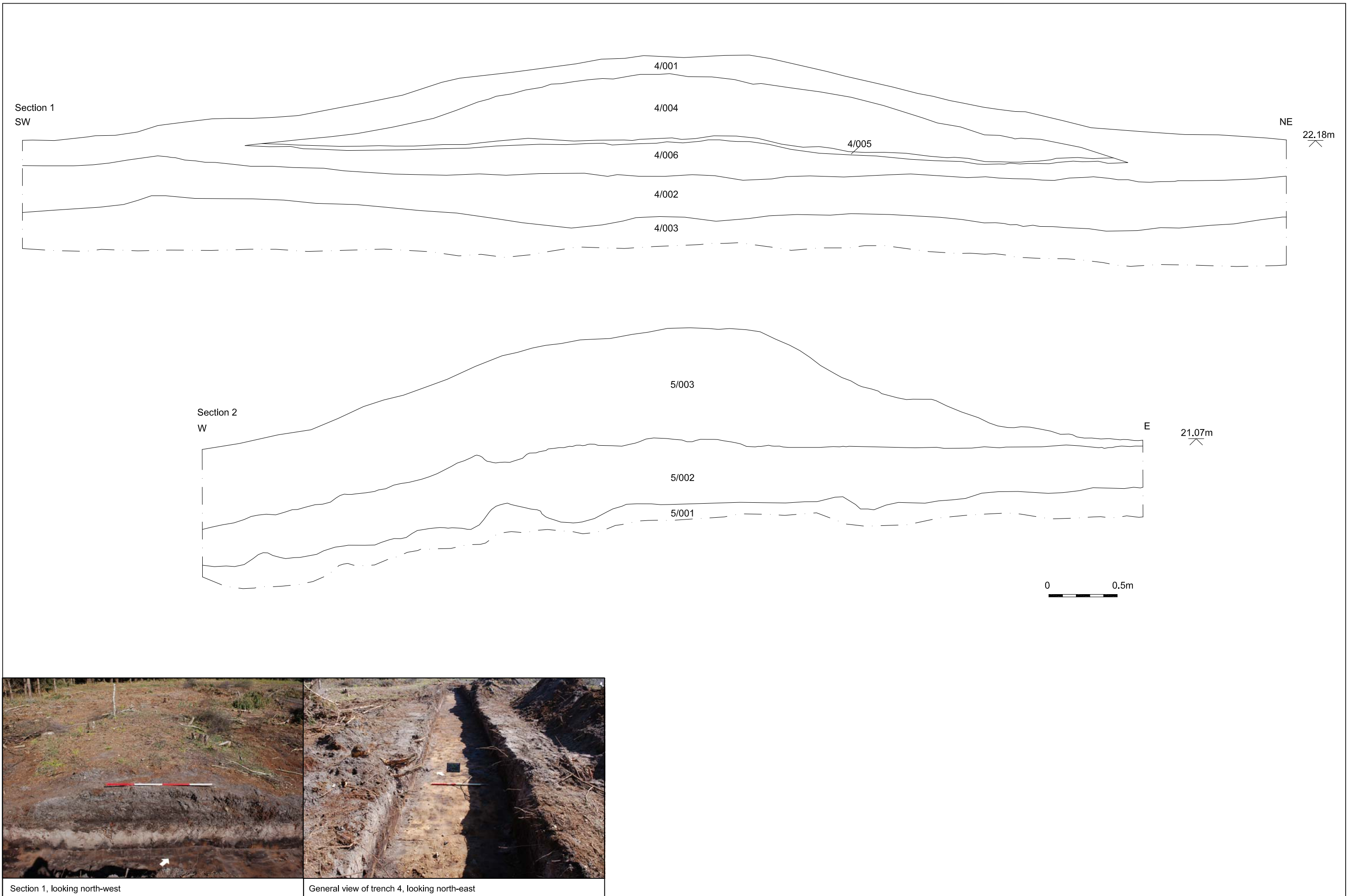
© Archaeology South-East		Dunwich Forest Quarry	Fig. 1
Project Ref: 180702	May 2019	Site location	
Report Ref: 2019108	Drawn by: NG/EH		

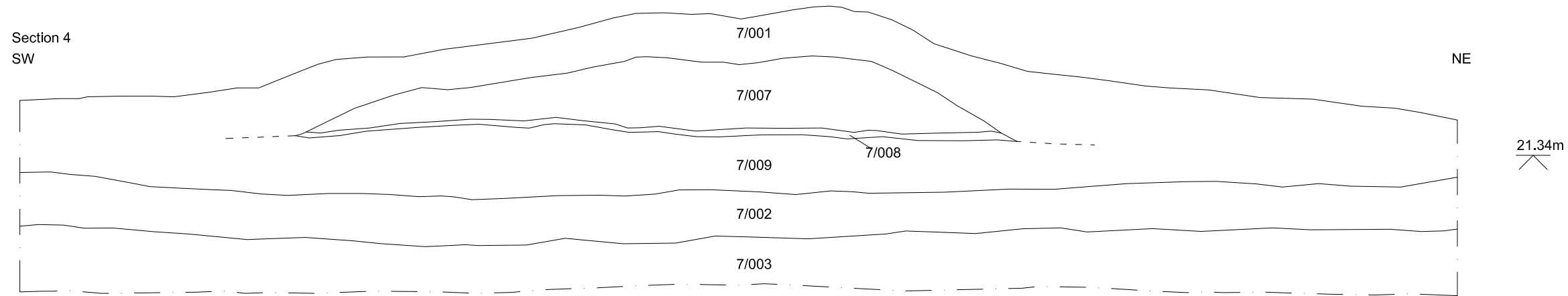
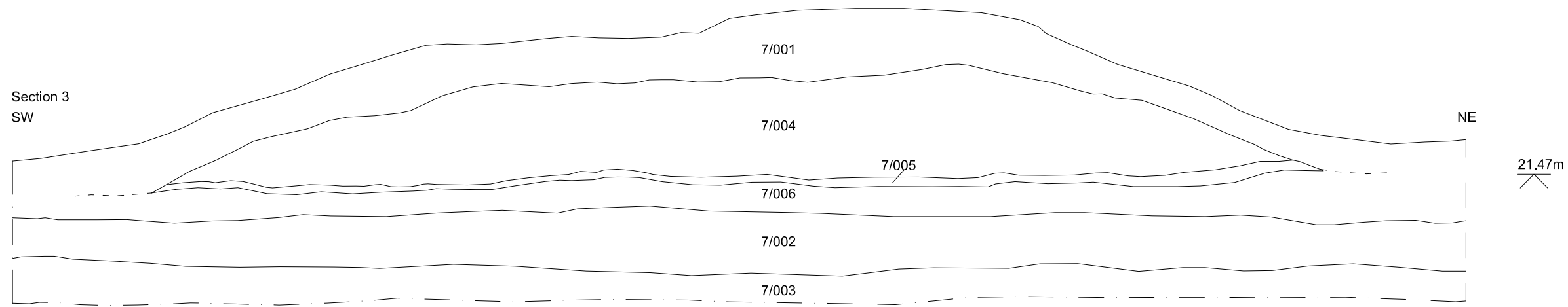


© Archaeology South-East		Dunwich Quarry, Dunwich Forest	Fig. 2
Project Ref: 180782	May 2019	Location of mitigation area within site boundary	
Report Ref:	Drawn by: SM		



© Archaeology South-East		Dunwich Quarry, Dunwich Forest	Fig. 3
Project Ref: 180782	May 2019	Trench locations in relation with topographic survey	
Report Ref: 2019157	Drawn by: SM		





Section 3, looking north-west

Section 4, looking north-west



General view trench 7, looking south-west



© Archaeology South-East		Dunwich Quarry, Dunwich Forest	Fig. 5
Project Ref: 180782	May 2019	Photographs of archaeologically negative trenches	
Report Ref: 2019157	Drawn by: SM		

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