



Duckpool, Morwenstow, Cornwall
Archaeological Excavation 2017

Cornwall Archaeological Unit

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Archaeological Excavation 2017

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The excavations were carried out by Richard Hoskins, Charles Johns, Graeme Kirkham, Ryan Smith, Sean Taylor, and Carl Thorpe, assisted by volunteers Jim Parry, Richard Heard, Ian Maddock, Val Dawson and Pearl Myers. The site was re-turfed by a team of National Trust volunteers.

The finds were processed onsite by Carl Thorpe and catalogued by Steve Hebdige, assisted by two volunteers from Truro College, Jeni Woolcock and Heather Munroe. Laura Ratcliffe conserved the Roman coin(s). Mollusc shells were identified by Steve Hebdige

Jim Williams and Hayley McParland of Historic England advised on the feasibility of archaeomagnetic dating. Tim Young from Cardiff University advised on metallurgical implications.

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The Project Manager was Charles Johns.

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

Volunteers Val Dawson, Ian Maddock, Richard Heard and Pearl Myers working on the site (photo: Carl Thorpe)

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Abbreviations

CAU	Cornwall Archaeological Unit
CIfA	Chartered Institute for Archaeologists
HER	Cornwall and the Isles of Scilly Historic Environment Record
NGR	National Grid Reference
OD	Ordnance Datum – height above mean sea level at Newlyn
OS	Ordnance Survey

1 Summary

In January 2017 Cornwall Archaeological Unit (CAU) carried out an investigation of a Romano-British industrial site at Duckpool, Morwenstow (NGR SS 2010 11634) on behalf of the National Trust. The site, which had first been identified by Richard Heard in 1983, was partially excavated by CAU in 1992 (Ratcliffe 1995).

The 2017 work was undertaken because the site is in danger of being lost through coastal erosion. It has extended the area of activity known from previous investigations and confirmed the wealth of material present on the site and revealed previously unknown features. While it has not produced conclusive evidence for the industrial activity taking place on the site, the lack of metallurgical material itself suggests that this activity may be either more varied than previously suggested, or not directly associated with metalworking after all.

Six phases of activity were identified, the earliest undated but possibly pre-Roman, followed by Romano-British, Romano-British or early medieval, early medieval, medieval, and modern phases. The bulk of the activity on the site was concentrated around phases 2 (Romano-British) and 3 (Romano-British or early medieval).

The Roman-period occupation of the site takes the form of a pair of orthostats and a number of pits and stone-lined features at the eastern end of the trench, showing evidence for having been subjected to considerable temperatures. A small Roman coin (or two fused together) recovered from the surface of one of these is likely to date to the mid-fourth century AD. The phase is also roughly dated by sherds of South Devon ware belonging to the second to fourth centuries AD.

A rough stone floor may have linked (or separated) the heat-intensive phase 2 activity at the eastern end of the trench and another concentration of undated hearth-type features at the western end.

The main characteristic of phase 3 was a thick layer of greyish brown loose silty sand covering much of the trench. Finds recovered from this deposit included animal bone and teeth, charcoal, flint, insect remains, marine and land shells, an iron object, Romano-British potsherds and worked stone (including a pivot stone, rubbing stone, two whetstones, and a hammerstone).

Early medieval activity was represented by a hearth pit which had been excavated in 1992.

The medieval phase of activity on the site (phase 4) was represented by another extensive deposit which covered much of the site and contained South-western chert-tempered ware of the twelfth and thirteenth centuries AD.

The material recovered has considerable potential for further analysis and, as well as presenting a detailed account of the excavation results this report sets out a suggested programme for analysis and publication.

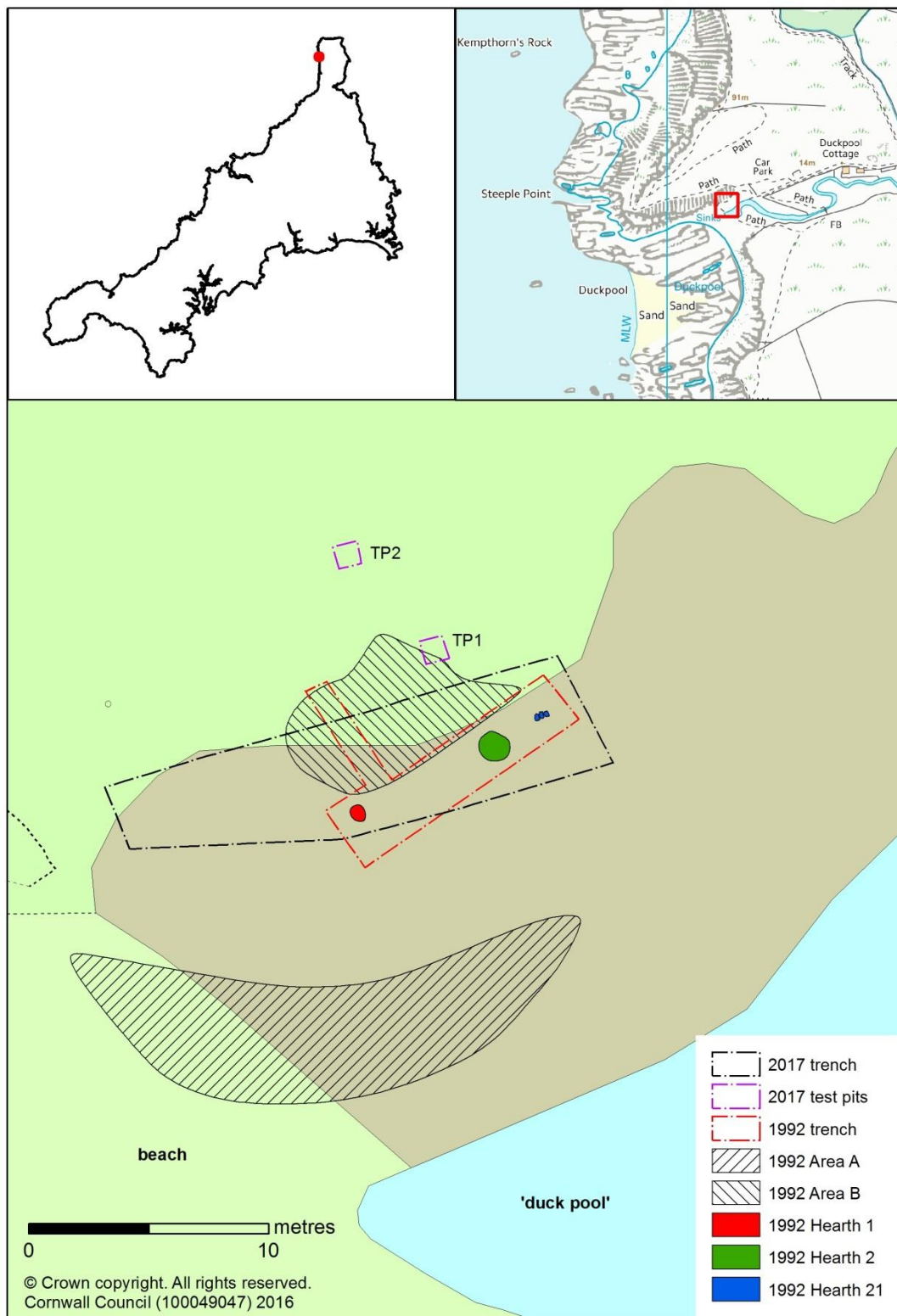


Fig 1 Location map.

2 Introduction

2.1 Project background

In November 2016 Cornwall Archaeological Unit (CAU) was commissioned by Jim Parry (Archaeologist, National Trust for Devon and Cornwall) to undertake the excavation of a Romano-British industrial site, located at Duckpool, Morwenstow, on the north Cornish coast. The work was required because site had been identified as being in danger of being lost through coastal erosion.

2.2 Aims and objectives

2.2.1 Aims

The aims of the project were set out in the project design (Appendix 10) and can be summarized as follows:

- To record archaeological features, layers and finds associated with the Romano-British industrial site.
- To establish the extent, condition, significance and character of the archaeological resource.
- To establish the presence/absence of archaeological remains.
- To identify any artefacts relating to the use of the site.
- The dissemination and publication of the results.
- The long-term conservation of the project archive in appropriate conditions.

2.2.2 Objectives

The specific objectives of the project were:

- To determine the extent of the Romano-British industrial site.
- To improve the known chronology of the site through the acquisition of dateable material for radiocarbon dating.
- To make a record of the site before it is eroded away by the sea.

3 Location and setting

Duckpool is located in the parish of Morwenstow on the exposed Atlantic coast of north Cornwall, centred at NGR SS 20095 11650 (Fig 1). The underlying geology is mudstones, siltstones, and sandstones of the Carboniferous culm formation that forms most of north Devon and north-east Cornwall. Overlying this are Pleistocene head deposits, probably the result of periglacial action although the U-shaped profile of the valley is suggestive of perhaps limited glaciation. The coast is characterised by its high vertical or steeply sloping cliffs which form the seaward edge of a plateau that is bisected by steep-sided valleys. The plateau is windswept and largely treeless whilst the sheltered valleys support mixed deciduous woodland.

Duckpool lies at the mouth of the Coombe Valley, which is steep-sided with a large stream meandering along its flat bottom. The stream runs through the shingle bank that forms the top of Duckpool Beach, flowing across shingle and sand to the sea. The upper part of the valley has wooded sides in contrast to the seaward end where the valley sides are covered in unimproved or partially improved grassland, bracken, and scrub. This is not a sheltered location, being exposed to the prevailing westerly winds which drive any bad weather in over the beach and funnel them up the valley (Buck *et al* 2016).

The site lies at the base of the northern mouth of the valley, the side of which has eroded to form a steeply sloping surface down to the stream bank at the top of the

beach. The lower slopes are less steep and here a number of small enclosures were constructed that are likely to have been bays for storing sea sand and stone from quarries on the south side of the stream, although there are documentary references to rifle butts here from the nineteenth century (Buck *et al* 2016).

The place-name is first recorded in the sixteenth century as *Duck Poole* (Norden 1728) and is an English coastal name whose meaning is self-explanatory as wild ducks are still seen in the pool behind the shingle bank at the top of the beach.

4 Previous work

The site was first discovered by Cornwall Archaeological Society member Richard Heard in 1983. During the summer of 1984 he recorded a bank of clay and silt exposed at the top of the beach together with a patch of rock burnt red and patches of charcoal. There were also layers of limpet and whelk shells and two lines of stones forming a V-shaped setting. These cultural deposits were confined to two discrete areas (A and B in Fig 1, bottom). David Thackray of the National Trust also reported that much slag had been found here (Ratcliffe 1995).

The threat to the site posed by coastal erosion and use of the area as car park led to an excavation by CAU in 1992 which identified a series of broadly contemporary hearths and a flue (Fig 1, bottom), and layers containing industrial and domestic debris. During the later Romano-British period (third to mid-fourth centuries BC) the site appeared to have been a specialist settlement involved in secondary metalworking, including the casting of lead, pewter and possibly copper alloy objects. In addition the much more unusual process of extracting dye — known as Tyrian purple — from dog whelks may have taken place here (Ratcliffe 1995).

Duckpool may also have had a more general function as a small harbour serving its immediate hinterland and there may have been other industries or processes associated with this role as well as metal working and dye extraction (Ratcliffe 1995).

Radiocarbon dates and artefactual evidence indicate that the beach-head continued to be used as an industrial site between the seventh and twelfth centuries AD, although metalworking had ceased and the nature of activities taking place is unknown. It has also been suggested that Duckpool may have functioned as a harbour for the prosperous early medieval manor of Kilkhampton (Ratcliffe 1995). It does not appear to have developed as a permanent harbour in later periods, although the beach may have continued to be used as landing place.

5 Methods

5.1 Excavation

The 2017 trench was laid out parallel to the stream, spanning glacial/periglacial head deposits at its lowest point to the south, rising up to *in situ* cultural deposits to the north (Figs 1 and 2). The trench was 20m long at its longest extent on the upslope side, and 5m wide at its widest extent on the inland side, to the east. The trench cut in on its western end since it covered an area of beach from which all cultural deposits had been eroded. The extent of the trench to the east was confined by a low bank, possibly an historical feature, and large boulders that had been placed to prevent vehicular access.

The trench included features visible as highly burnt areas on the surface to the west, whilst to the east the northern half of the trench was covered by colluvial deposits.

The trench encompassed much of the area that had been excavated in 1992, apart from a portion of it to the south west that had been eroded away and now lay under beach material. The alignment of the trench, west-south-west to east-north-east, differed from the 1992 trench, which had been aligned south-west to north-east.

The trench was de-turfed and excavated by hand. Two test pits further upslope from

the main trench were hand dug. These were excavated to enable an assessment of the depth and extent of the deposits and features located in the main trench.

The south-facing baulk section and sections through individual features were hand-drawn at a scale of 1:10. Phased plans were made of the trench at 1:20. A full photographic record was made of the excavations.

The majority of finds recovered during the excavation were recorded by context and their position plotted with a Leica CS10 GPS unit with sub-centimetre accuracy. The position of the trench and test pits, and that of the 1992 excavation trench where it was visible, was also plotted with the GPS.

On completion of the archaeological recording the trenches were backfilled by CAU and the site re-turfed by the National Trust.



Fig 2 View of the 2017 trench following de-turfing, prior to excavation, facing north east.

5.2 Post-fieldwork

Following the completion of the fieldwork, the artefacts and samples were processed and the field drawings scanned. Digital data (Small Find locations and survey data) was uploaded (Appendices 1, 2, 3, 4, 5, and 6). Land snails and marine molluscs were identified (Appendices 7 and 8) and a Roman coin was conserved (Appendix 9). A National Trust Project Recording form was also completed on completion of the project (Appendix 11).

The site archive has been collated for this archive level report.

6 Excavation results

The trench was located to cover features that were visible as areas of heat-scorched material on the surface at the seaward end and to cut into the hillside to the north east in order to evaluate the survival and extent of more stratified deposits and features. Each individual context was given a unique number, 1 to 92. Two test pits, TP1 and TP2 (Fig 1), were excavated upslope, to the north, of the main trench. Context numbers for these were assigned 101 to 108 and 201 to 205 respectively. Context numbers for cut features are given in square brackets, for instance [30], those for layers and fills are given in rounded brackets, for instance (31). Unbracketed numbers are used for structural elements, for instance 25. Some stratigraphic units have been grouped

together to form lettered features, for instance hearth B. Features identified and recorded during the 1992 excavation are prefaced with the site code and context number, for instance DKP92/21.

An attempt has been made to phase the stratigraphic units. Without absolute dating evidence from deposits and fills this phasing must be considered provisional. The stratigraphy was complicated by the fact that units of what appeared to be the same stratigraphy had in places been heat-oxidised to differing degrees giving striking colour changes to what was essentially the same material.

6.1 Phase 1: Pre-Roman activity?

Deposits (36), (71), and (74)

Two deposits were identified that appeared to predate the main occupation/use of the site. Deposit (71) lay beneath Romano-British deposit (56) and was only identified at the base of a sondage cut through this reddish brown material and stone floor 47 towards the centre of the trench. It was not excavated but it was noted that the deposit did contain mottled charcoal. It's identification as pre-Roman remains tenuous since no material suitable for dating was recovered from it but it does pre-date all other activity on the site.

At the eastern end of the trench a light yellowish brown deposit, (74), was cut by pits [25], [55], and [75]. This deposit was not excavated. In places what appeared to be the same material had been heat-scorched to a reddish colour and this was recorded as (36) (Figs 3 and 5). Although the event(s) that caused this colouring belong to a later phase, stratigraphically the material belongs to this phase.



Fig 3 Burnt layer (36), facing north west.

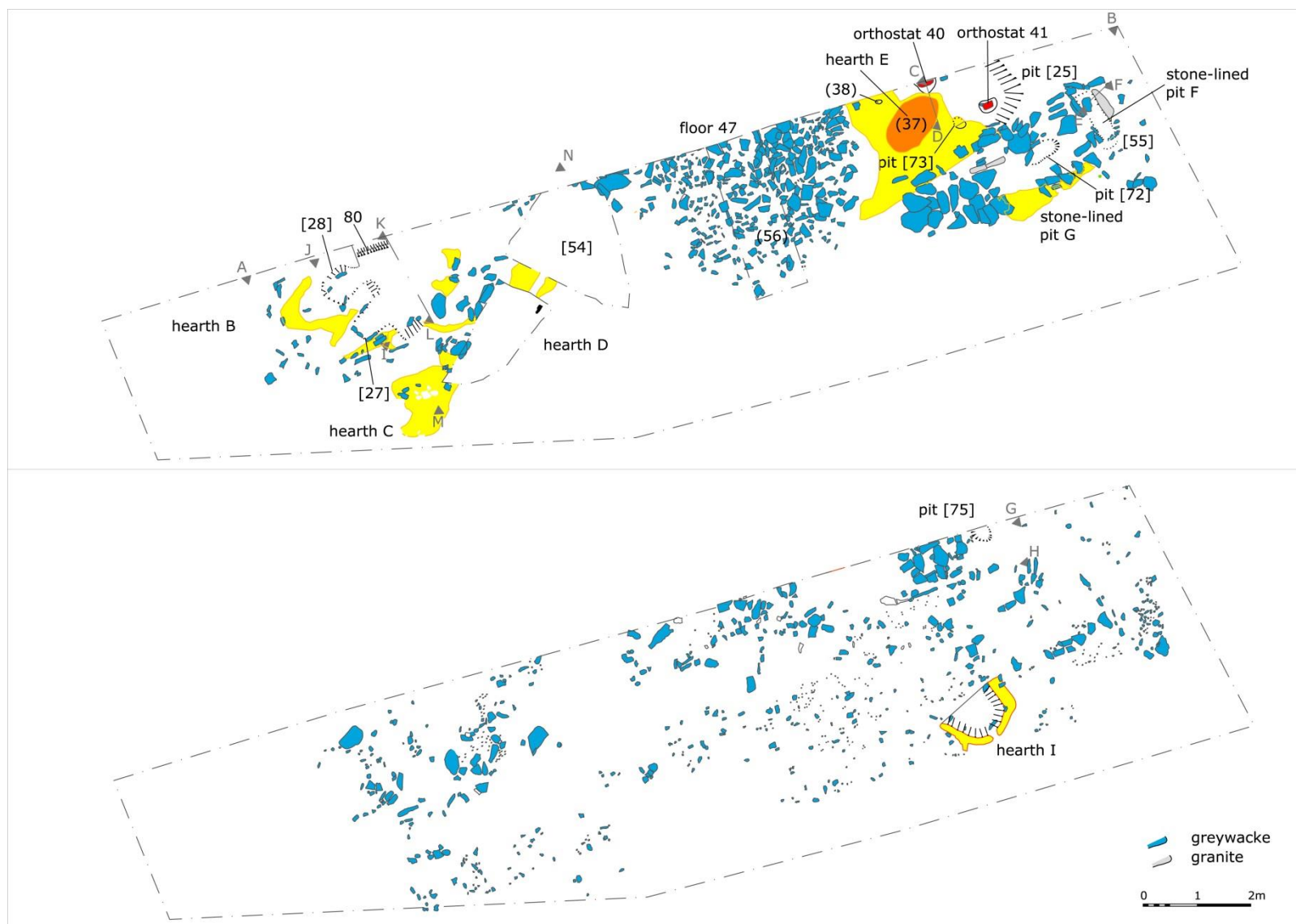


Fig 4 Plan of phases 2 (top) and 3 (bottom).

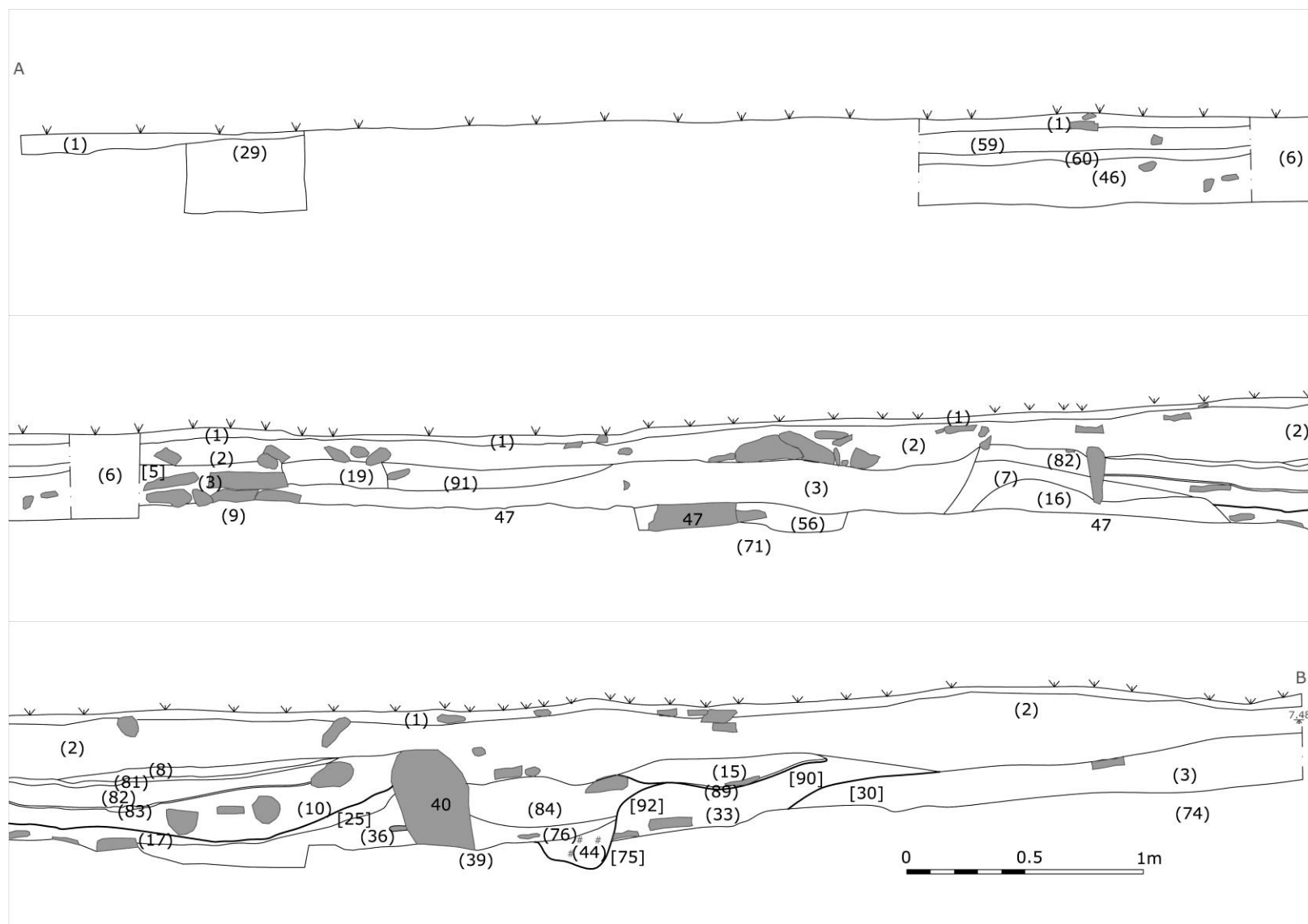


Fig 5 Main baulk section, A-B.

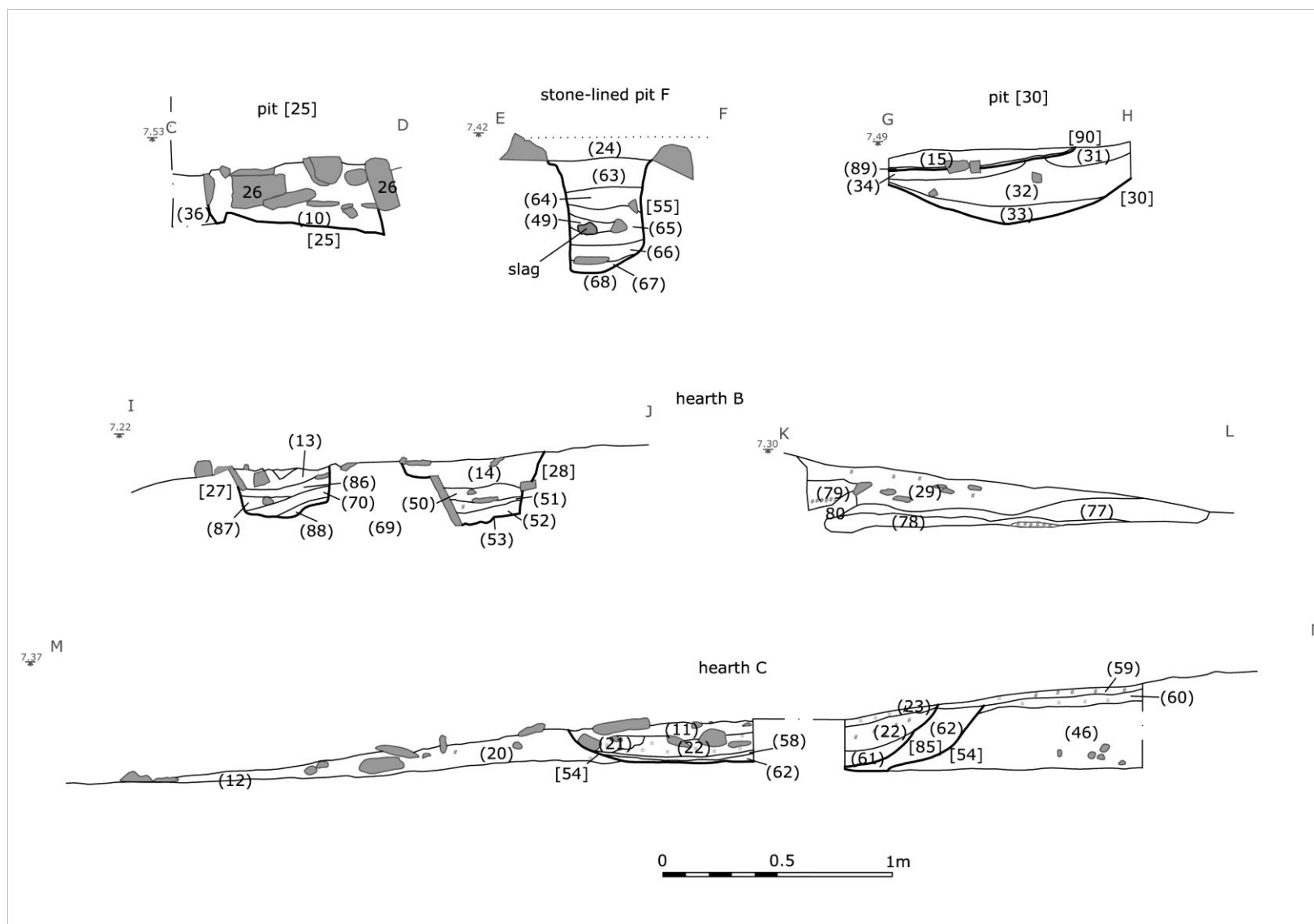


Fig 6 Sections C-D, E-F, G-H, I-J, K-L, M-N.

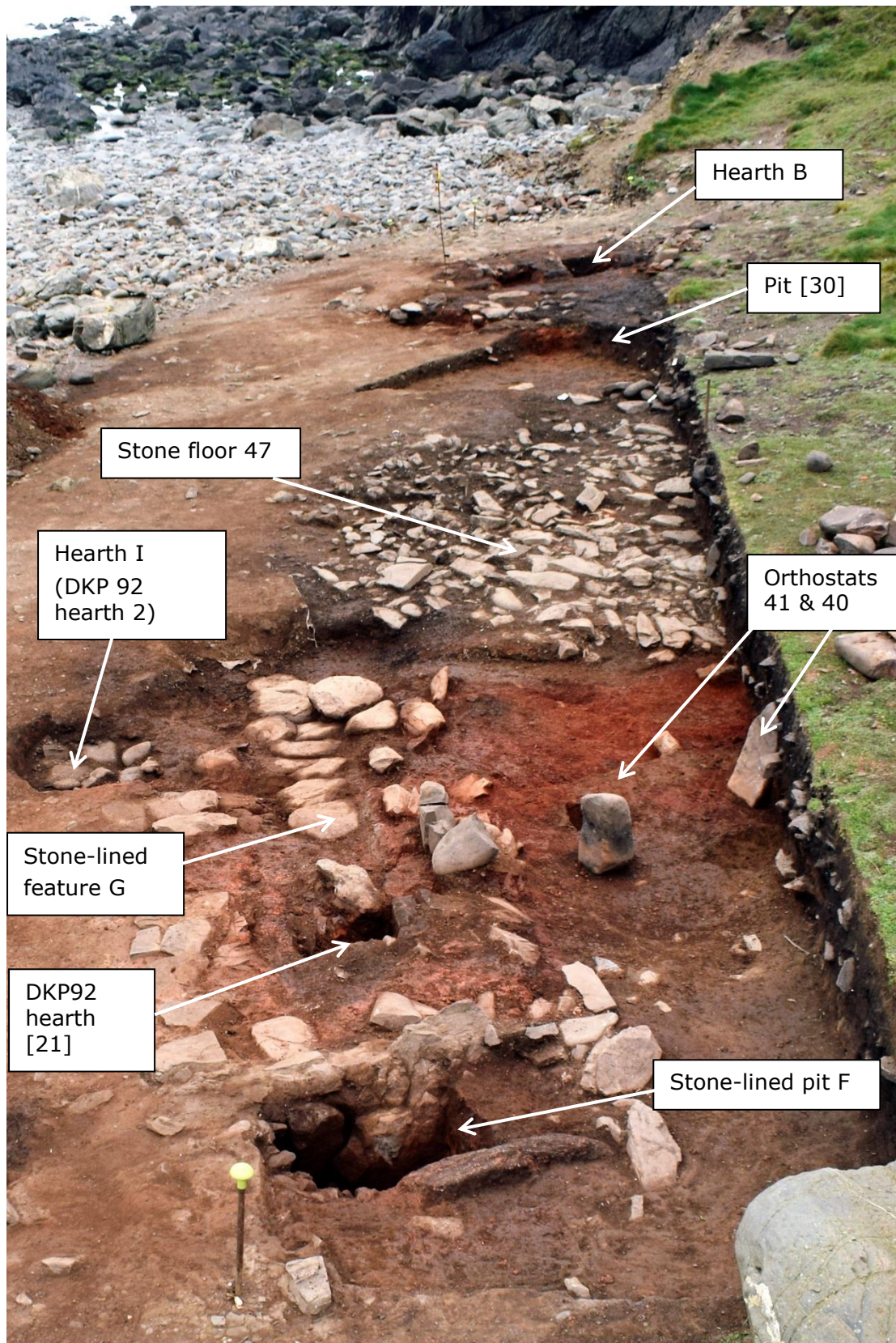


Fig 7 Overview of the site looking south-west.

6.2 Phase 2: Romano-British activity (Fig 4, top)

The bulk of the activity on site belonged to the Roman period. An attempt has been made to sub-divide this phase by stratigraphy but it must be emphasised that all such phasing is provisional.

6.2.1 Sub-phase 2(i)

The earliest Romano-British phase identified on the site comprised two orthostats, 40 and 41, the base of a hearth pit E, two stone-lined hearth pits F and G and a rough stone floor, 47.

Orthostats 40 and 41 (Fig 7 and 8)

At the eastern end of the trench two orthostats, 40 and 41, were set into sockets cut into deposit (74), parts of which were heat-scorched. The stones were not removed and their socket fills, (39) and (42) respectively, were not excavated. These fills were both dark greyish brown soft silty clays. The socket for 40 measured 0.4m by 0.23m but extended into the baulk section and was therefore wider than this in total. The socket for 41 measured 0.33m by 0.23m.

The visible part of stone 40 was 0.45m high and 0.22m wide, and it protruded from the baulk for 0.07m. The stone leant to the north west and therefore the top of it was hidden beneath the baulk. Stone 41 was completely exposed and was 0.2m long by 0.12m wide and 0.39m high. It leant to the south west. It may have been roughly dressed on the south-west and south-east faces and the top of the stone was worn smooth, perhaps through use for grinding and/or polishing. This is likely to have occurred *in situ*, although it may have been a reused piece. The two stones were set 1.2m apart.



Fig 8 Orthostats 40 (left) and 41 (right), facing north west.

Pit [73]

A small pit, measuring 0.34m long by 0.28m wide by 0.1m deep, was cut into deposit (36) 0.6m to the west of orthostat 41. The pit had steep straight sides and a concave base and contained a single fill, (43), a yellowish brown friable sandy clay 0.1m thick, with occasional stone. Finds recovered from this deposit included charcoal, insect remains, and terrestrial shell (pointed snail).

Fill (38)

Lying 1.57m to the west of pit [73], an unexcavated cut feature was filled by deposit (38), a light reddish brown compact silty clay 0.4m by 0.1m.

Truncated hearth E

A small sub-oval area of ashy material, (37), was identified at the eastern end of the trench, immediately to the north of stone-lined pit G (Fig 9). This was a light yellowish brown compact silty sand, 1m long, 0.5m wide, and 0.06m thick, containing occasional flat stones and shell fragments. It appeared to mark the base of a feature that was sub-oval in plan, perhaps a kiln, oven, or furnace. Some pieces of degraded pottery, or more likely burnt clay (Carl Thorpe, pers comm), and a single shell of pointed snail, a terrestrial mollusc, were recovered from this material. Orthostats 40 and 41 were immediately to the north east and are likely to be associated with it.



Fig 9 Hearth E (deposit 37) facing south west.

Stone-lined pit F (Figs 4, 6, 7 and 10)

This stone-lined pit was located at the eastern end of the trench, on the end of the linear, stone-lined pit G. The cut, [55], was 1.4m long externally (1.06m internally), 0.8m wide externally (0.39m internally), and 0.56m deep, with vertical sides and a flat base at the southeast, sloping up to the north west. Below the pit the stony natural (68) had been scorched pink in places.

Pit F was lined with large stones, the majority greywacke but with one large piece of granite on the north-eastern side. Smaller stone was used in the lining to the south east. The pit cut deposit (74) and natural (68) in its base. It contained six fills, in order of deposition, (67), (66), (65), (64), (63), and (24), and a lens, (49), within fill (65). Primary fill (67) was a dark blackish grey friable silty clay 0.04m thick containing

occasional pebbles, broken stone, and frequent mottled charcoal. Secondary fill (66) was a brown soft silty clay, 0.07m thick, laid on a series of flat stones. Tertiary fill (65) was a reddish pink soft silty clay, 0.17m thick within which was a lens, (49), of brownish green soft silty clay 0.07m thick containing occasional lumps of broken stone and slag and animal bone. Above (65) was fill (64), a greenish brown soft sandy clay, 0.1m thick, which contained pieces of burnt clay at its northern end and from which charcoal and a single terrestrial shell of pointed snail was recovered. The fifth fill of the pit was (63), a brown soft silty clay, 0.12m thick. The upper fill of the pit was deposit (24), a dark greyish brown compact sandy clay 0.12m thick containing some heat-fractured stone and moderate quantities of mottled charcoal. This deposit filled the top of [55] and spread around it. Finds recovered from this deposit included animal bone, daub/clay, pottery, and a fragment of a gritstone disc.



Fig 10 Section 14 through stone-lined pit F (cut 55) facing south west.

Stone-lined feature G (Figs 4, 7 and 11)

This large, linear, stone-lined feature (structure 48) was situated at the eastern end of the trench. It comprised sections of what appeared to be stone walling although, since these remained unexcavated, it was not possible to ascertain the total height of the wall or depth of the pit. The feature appears to be associated with and is possibly part of the same structure as stone-lined pit F.

In total the feature measured approximately 3m by 1.8m. The northern section of walling had been identified in 1992 as stone structure DKP92/57. The length and form of the feature suggest that it may have been some sort of furnace or stoke-hole associated with pit F. The eastern end had been partly excavated on the last day of the 1992 excavation as DPK92 hearth (21). Towards its unexcavated bottom was dark yellowish ash overlain by a powdery red clay, DPK92 (55). These layers were apparently below a compacted hard layer of burnt and unburnt clay which may have

represented collapsed hearth structure. This in turn was overlain by a very sandy clay (DPK92 (22)) containing occasional charcoal flecks, burnt stone and clay, pockets of ash animal bone and copper alloy object which was identified as a fingernail or toenail cleaner. This upper fill almost certainly accumulated after the feature went out of use (Ratcliffe 1995, 100-1; fig 19).

The bulk of the stone was local greywacke but two pieces of soft granite had been used along the internal northern edge. The material on the surface of, and around, the pit was heat-scorched, similar to deposit (24) in pit F (see above).

A small Roman coin, or possibly two coins fused together, was found embedded in the surface of pit G. This coin is likely to be similar to the six Roman coins (two fused together) found during the 1992 excavations which were of bronze issue and form a tight chronological group, having been manufactured in the mid-fourth century AD (340s to 360s) (Ratcliffe 1992, 108). This coin provides an effective *terminus post quem* for activity associated with stone-lined feature G and, by inference, pit F.



Fig 11 Stone-lined feature G (structure 48) facing south east.

Floor 47 (Fig 7) / deposit (56) (Figs 4, 7 and 12)

Deposit (56) was a dark greyish brown friable silty clay from which Romano-British potsherds, animal bone and teeth, charcoal, two square-headed iron nails, a piece of metal slag, a quartz crystal, and marine and terrestrial molluscs were recovered. The animal bone included material from at least one pig jawbone. The marine shell included a fragment of warty venus, flat periwinkle, mussel, and a broken limpet, all edible species. The terrestrial shell comprised three shells of brown-lipped snail, a gregarious species found in a range of habitats, and pointed snail, a coastal species.

Floor surface 47 was set within, and above, this deposit. It was composed largely of sub-angular local greywacke stone, of various sizes, covering an area of 3.4m by 2.5m protruding southwards from the baulk section. It was unclear whether the southern extent of the surface was original or whether it had been truncated, with the latter seeming more likely. The western edge had been truncated by part of the 1992 excavation trench, [5], whilst the eastern edge appeared to be abutted by burnt deposit (36). Finds recovered from this deposit included Romano-British pottery, worked stone (a whetstone and a hammerstone), a human tooth, animal bones and teeth, daub/clay, and marine shell. The animal bone and teeth included material from

at least one pig jawbone and a cattle tooth. The marine shell included flat periwinkle, limpet, mussel, great and variegated scallops, dog whelk, all edible species, and thick topshell, which is unlikely to have been consumed.

Although interpreted as a floor, the surface was uneven and there was no sign of smoothing caused by repeated use. However, it did have a clearly defined surface and it is unlikely to represent dumped rubble. It may have been short-lived or little used and its position suggests that it may have linked (or separated) the heat-intensive sub-phase 2.1 activity at the eastern and the undated sub-phase 2.(ii) activity at the western end of the trench.



Fig 12 Floor surface 47, facing north west.

6.2.2 Sub-phase 2(ii)

This tentative sub-phase includes a number of features that were not related stratigraphically and did not contain dateable artefacts. It includes a concentration of hearth-type features at the western end of the trench that were exposed on the ground surface and which may have been connected to the sub-phase 2.1 activity at the eastern end of the trench by floor 47.

Hearth B (Figs 6 and 13)

This comprised two features, located next to each other at the far western end of the trench. They formed a pair of near identical interlinked pits which are likely to have been contemporary. The natural stony layer (69) below these pits had been scorched by heat.

The larger of the two pits, [28], lay to the north west. It was a sub-rectangular pit, 0.75m long by 0.5m wide by 0.28m deep. The north-western, south-western, and south-eastern sides were almost vertical, the north-eastern side open. It had a bowl-shaped base. It was partially stone-lined and followed a south-west to north-east orientation. It cut natural deposit (69) and was filled by, in order of deposition, (53), (52), (51), (50), and (14). Deposit (53) was a layer of ashy slag from base of the pit. Finds recovered from environmental sampling included charcoal, daub/clay, insect remains, possible furnace material (including a large piece of quartz that may have been structural), and a small amount of possible hammerscale (recovered using a magnet). Fill (52) was a dark greyish brown friable silty clay, 0.05m thick. Above this (51) was a yellowish brown loose silty clay 0.05m thick, possibly with a high ash content. Fill (50) was a pinkish red friable silty clay 0.07m thick. Upper fill (14) was a grey compact sandy clay 0.12m thick containing some sub-angular stone, patches of

redeposited yellowish brown material, and frequent mottled charcoal. Finds from this deposit included animal bone, marine shell, and a rubbing stone.

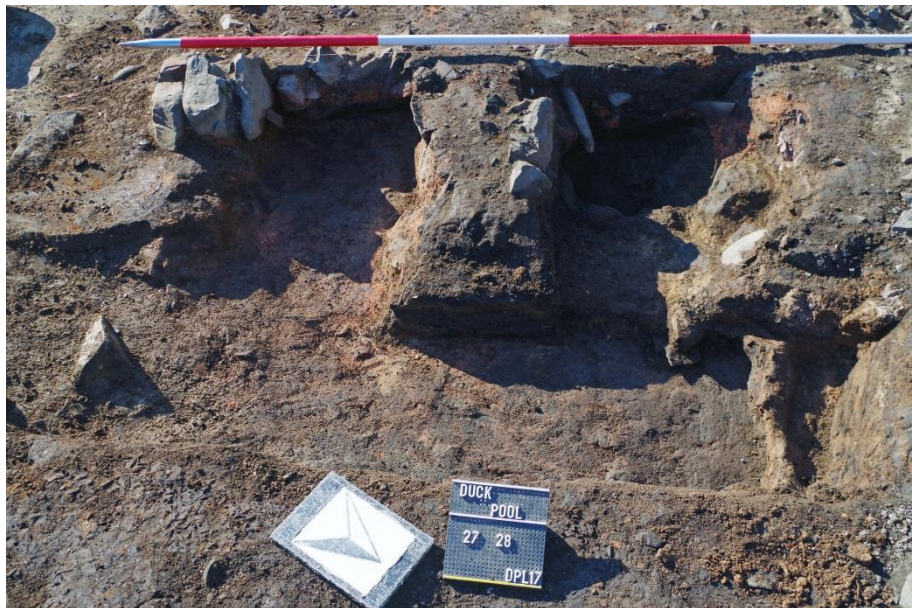


Fig 13 Section through Hearth B (cut 27, left, and 28, right) facing south west.

The second pit, [27], lay 0.36m to the south east of [28]. It was 0.85m long by 0.45m wide by 0.21m deep. The north-western, south-western, and south-eastern sides were almost vertical, the north-eastern side open. It had a bowl-shaped base. It was partially stone-lined and followed a south-west to north-east orientation. It cut natural deposit (69) and was filled by, in order of deposition, (88), (70), (87), (86), and (13). Deposit (88) was the same as (52), 0.04m thick. Above this fill (70) was a dark greyish black friable silty clay 0.05m thick containing frequent charcoal and flecks of material that were similar to the overlying fill, (87). This deposit was the same as (51), 0.06m thick. Above this, deposit (86) was the same as (50), 0.05m thick. Sealing the pit was fill (13), a brownish grey compact sandy clay containing frequent charcoal. Finds from this deposit included marine shell, a saddle quern, and a whetstone or pestle.

The two pits were open to the north east, merging into an area 1.83m long by 0.56m wide. The base of this area was lined with a dark greyish brown greasy silty clay 0.04m-0.07m thick, thinning to the south east. This may be the same material as the primary fills of the pits, (52)/(88). Above this was a deposit of friable silty clay, (77), mottled light greyish yellow to dark reddish brown and 0.04m to 0.1m thick. This material may have derived from a baked clay superstructure, 80, the remains of which, protruded 0.2m from the northern baulk section. This material varied in colour but was predominantly a pinkish red compact clay 0.06m thick with some stone incorporated. This material was overlain by (79), a dark reddish brown friable silty clay 0.1m thick incorporating a thin lens of charcoal at its base.

The eastern edge of this pit appeared to cut deposit (29), which probably the same as (20)/(3)/(46) to the east.

Hearth C (Fig 6)

This feature comprised heat-oxidised material that was identified prior to excavation as the base of a truncated furnace/kiln, confined within an apparent stone-lining in a sub-rectangular area measuring 0.6m by 0.55m. Within this lining was a dark yellowish brown friable sandy clay, (12), 0.04m thick containing frequent stone. All the feature was part sectioned there was little depth or structure to it and its truncated nature was confirmed. It did, however, appear to cut deposit (20), which may be the same as (29) into which hearth B was cut.

Hearth D

Deposit (60) was a layer at the western end of the trench. A dark reddish brown firm sandy clay 0.05m thick containing charcoal, it was cut by [54] of hearth D and sealed by layer (59). Pit [54] was sub-circular in plan, 1.86m across, and 0.25m deep, with concave sides and a flat base. The pit was divided into quadrants and the two adjacent quadrants facing south east were excavated leaving a thin baulk between them. The pit contained a single fill, (62), a dark brownish red ashy sandy clay up to 0.25m thick. Some charcoal, insect remains, and a terrestrial mollusc (pointed snail), were recovered from this deposit. This was sealed by layer (59), a burnt dark greyish black charcoal-rich deposit that extended into the trench for 0.91m from the north. This was cut by pit re-cut [85].

The re-cut was 1.62m long, aligned south-west to north-east, and 0.2m deep. It was filled by, in order of deposition, (58)/ (61), (22), (21), and (11)/ (23). Primary fill (61) in the north-eastern half of the feature was a dark reddish brown compact sandy clay up to 0.06m thick. In the south-western quadrant it was replaced by a thinner deposit, (58), a very dark greyish brown sandy clay 0.02m thick. Above these two deposits was fill (22), a light yellowish red compact sandy clay 0.11m thick containing frequent mottled charcoal. This material is highly heat-oxidised and probably represents the base of a furnace or kiln. Deposit (21) lay at the same level as (22) and may represent the same material but less scorched. It was a light greyish yellow compact sandy clay 0.03m thick. The pit was sealed by deposit (11), also recorded as (23), a dark brownish black charcoal-rich fill 0.08m thick. Finds recovered from this deposit include animal bone, daub/clay, flint, marine shell, and two whetstones.

Pit [30] (Figs 6 and 7)

This sub-circular concave pit was located at the eastern end of the trench. It was greater than 1.05m in diameter and 0.32m deep, with a convex eastern edge, a gently sloping flat base, and poor edge definition. It contained three to four fills, in order of deposition (33), (32), and (31)/ (34). Primary fill (33) was a brown silty clay, 0.08m thick, second fill (32) was a dark reddish brown silty clay, up to 0.2m thick, and upper fill (31) was a pale yellowish brown silty clay, 0.08m thick and (34) was a pale pinkish brown silty clay, 0.04m thick. All of the fills were cut by pit [90].

6.2.3 Sub-phase 2(iii)

Bank A

Lying over stone floor 47 a bank, A, was identified in the baulk section (Fig 5). This feature was not identified during excavation and its full extent is therefore unknown: it may have terminated on the edge of the trench. It comprised two deposits. Layer (16) formed its base, a light brownish grey friable sandy clay, 0.05m-0.14m thick, rising steeply to the west, dipping down in the middle before rising slightly again, then falling steeply to the east. Above this was layer (7), grey friable sandy clay, 0.06m-0.2m thick. The overall dimensions of the bank were 2m across at its base and 0.27m high, with the steeper western face of the bank overlain by deposit (3) and the more gently sloping eastern face overlain by deposit (17), subsequently cut by pit [25], which also cut into the upper part of the bank.

6.2.4 Sub-phase 2(iv)

Deposit (17)

This deposit was confined by bank A to the west, orthostat 40 to the east, and stone-lined pit G to the south, covering an area of 1.75m east to west and extending into the trench for around 2m. It was a dark purplish red loose silty sand up to 0.08m thick overlying deposit (36). It lay beneath deposit (3) and was cut by pit [25].

6.2.5 Sub-phase 2(v)

Pit [25] (Fig 6)

This pit cut deposit (17) between bank A to the west and orthostat 40 to the east. It measured 2.17m east to west and extended into the trench from the baulk section for

around 2m. It is possible that, rather than a cut feature, it just represents deposition within a confined area between the bank and the orthostat. It appeared to be confined on its southern side by a stone lining, 26, comprising two courses of local greywacke that appeared to have been heated. A sequence of five fills or deposits was identified, in order of deposition, (10), (83), (82), (81), and (8). Primary fill (10) was a greyish brown friable sandy clay, 0.2m thick, containing mottled charcoal and with large stones on its surface. It is probably the same material as (82), separated by charcoal lens (83). The latter lay above (10) and was a dark greyish black charcoal-rich soft silty clay 0.01m-0.03m thick. Deposit (82) was a dark greyish brown sandy clay, up to 0.1m thick, sandwiched between charcoal-rich lenses (81) and (83). Lens (81) was identical in colour and texture to (83) and was 0.01m-0.05m thick. The upper fill of the pit, (8), was a scorched light reddish brown friable silty clay, 0.04m thick, containing occasional stone and mottled charcoal, and fragments of shell.

6.3 Phase 3: Roman or early medieval (Fig 4, bottom)

This phase is marked by the deposition of layer (3) over the site and subsequent activity on the site. This phase is thus far undated and could relate to either the Roman or the early medieval activity on the site.

6.3.1 Sub-phase 3(i)

Deposit (3)

This thick deposit, recorded at the western end as (46), covered much of the trench. A greyish brown loose silty sand, up to 0.2m thick, it contained frequent fragments of shell and charcoal. Finds recovered from this deposit included animal bone and teeth, charcoal, flint, insect remains, an iron object, Romano-British potsherds, marine shells including flat periwinkle, limpet, mussel, edible periwinkle, dog whelk, dog cockle, all edible species, and thick topshell, *Rissoa parva*, *Alvanio canallata*, and *Paludestrina jenkinsi* which are unlikely to have been consumed (the latter is an invasive species from New Zealand known in Europe only from 1859 - Wikipedia), terrestrial shell (pointed snail), and worked stone (including a rubbing stone, two whetstones, and a hammerstone). The layer also included an elliptical pivot stone, with a large tapered hole measuring 34.13mm by 15.3mm, and a smaller depression next to it, not quite central. This was set into a concentration of stone within the deposit, only recorded in the section. This may represent a section of walling that did not quite extend into the trench.

This deposit sealed floor 47 and covered the western face of bank H. It was cut by pit [30] at the eastern end of the trench. At the western end of the trench it was sealed by layer (60); elsewhere in the trench it was sealed by layer (2).

Darker deposits (20) and (29), recorded at the western end of the trench, may be the same material. Layer (29) was a dark reddish brown friable silty clay, 0.3m+ thick, containing infrequent water-rounded stone inclusions and frequent charcoal. Finds from this deposit included a rubbing stone, a whetstone, animal bone and teeth, and marine shell, the latter including mussel, limpet and edible periwinkle. It was cut by hearth B. Layer (20) was a dark reddish brown sandy clay 0.1m thick and was cut by hearth C. Both deposits may be the same material as (3) / (46), darker and redder where it has been exposed by truncation and/or due to the proximity of the burnt hearths.

6.3.2 Sub-phase 3(iii)

Deposit (59)

A burnt spread sealing pit fill (62) but cut by pit re-cut [85], both of hearth D. A dark greyish black charcoal-rich deposit. Layer extended into the trench for 0.91m from the north.

Pit [75]

This small pit at the eastern end of the trench cut the fills of pit [30]. It was sub-circular and concave. It protruded into the trench for 0.3m and was 0.32m at its widest point. It contained a single fill, (44), a dark blackish grey soft sandy clay, 0.13m thick,

containing frequent charcoal. Charcoal and terrestrial shell (pointed snail) were recovered from this deposit. This had been cut by pit [92].

6.3.3 Sub-phase 3(iv)

Pit [92]

This pit at the eastern end of the trench cut the fill of pits [30] and [75] and was situated against the eastern face of orthostat 40. It was concave, 0.92m across, and 0.28m deep. It was filled by, in order of deposition, (76) and (84). Primary fill (76) was a reddish brown soft sandy clay 0.15m thick whilst upper fill (84) was a yellowish brown friable sandy clay, 0.21m thick.

6.3.4 Sub-phase 3(v)

Pit [90]

This small pit at the eastern end of the trench cut into the top of pits [30] and [92]. It was 0.87m across and 0.13m deep, with concave base and convex sides. Its shape in plan was uncertain since it was only recognised in section. It was filled by, in order of deposition, (89) and (15). Primary fill (89) was a charcoal-rich layer 0.01m thick whilst upper fill (15) was a dark greyish brown soft sandy clay, 0.08m thick, containing broken slate fragments, frequent mottled charcoal, shell and a possible whetstone.

Deposits (19) and (91)

Two deposits were identified overlying layer (3) in the centre of the trench. Deposit (19) was a concentrated deposit of shells that also contained some animal bone. Lying adjacent to this to the east was deposit (91), a brownish red friable sandy clay 0.1m thick containing moderate quantities of mottled charcoal. This deposit was similar to the upper fill of pit [90], (89), and may also fill a shallow unrecorded cut. Both deposits were sealed by layer (2).

6.4 Phase 4 Early medieval

Hearth 1

This stone-lined hearth was excavated in 1992 as Hearth 2. No further work was undertaken on this feature during the current project other than to clean around it and its relationship with the other stratigraphy could not be determined. Two radiocarbon dates from fill DKP92/44 were obtained during the earlier project. These were medieval: cal AD 970-1170 (OxA-5065; 975±50) from gorse/broom charcoal and cal AD 960-1160 (OxA-5066; 1005±45) from hazel charcoal (Ratcliffe *et al* 1995).

6.5 Phase 5: medieval

The site was sealed by an extensive deposit, (2), that covered much of the trench, except for the truncated area at its western end. The deposit was a dark greyish brown friable sandy clay, 0.15m-0.3m thick, lying below the topsoil. Finds recovered from this deposit included South-western chert-tempered ware dating to the twelfth to thirteenth centuries AD, animal bone, charcoal, daub/clay, a natural flint pebble, worked stone, including a spindle whorl, and a wooden point. Marine shell included limpet, mussel, thick topshell, dog whelk, and flat periwinkle, all edible species. Terrestrial shell included pointed snail, *Cochlicopa lubricella*, two toothed door snail, and rotund disc. This deposit is likely to be the equivalent of DKP92/12.

The topsoil, (1), a dark brown loose sandy clay, 0.05m thick, also contained South-western chert tempered ware, and animal bone (including a bone point), flint, slag, and a possible whetstone.

6.6 Phase 6: modern

The outline of the 1992 excavation trench was identified during the current project. An extension of this trench cut the baulk section and here it was given a number, [5]. It contained two backfill deposits, in order of deposition, (6) and (4). The former was backfill from the excavation from which a number of Romano-British potsherds, animal bone, marine shell, and worked stone, including a muller and whetstones, were

recovered. Above this was a gravelly material, (4), which presumably represented a car park surface.

6.7 Test pits

Two test pits were excavated upslope to the north of excavated area: test pit 1 approximately 1m to north and test pit 2 approximately 6m. Layers probably equivalent to site layer (2) were uncovered at depth of 0.19m in test pit 1 and 0.73m in test pit 2.

7 Discussion

The 2017 excavation at Duckpool has extended the area of activity known from previous investigations. It has confirmed the wealth of material present on the site and revealed previously unknown features. Whilst it has not produced conclusive evidence for the activity taking place on the site, the dearth of metallurgical material itself suggests that this activity may be either more varied than previously suggested, or not directly associated with metalworking after all.

The earliest activity on the site may pre-date the Romano-British occupation but since deposits associated with this phase of activity (phase 1) were not excavated the origins of the site remain obscure.

The earliest dated Roman-period occupation of the site (phase 2) takes the form of a pair of orthostats and a number of pits at the eastern end of the trench showing evidence for having been subjected to considerable temperatures. One of these pits, stone-lined pit F, contained a quantity of slag and/or burnt clay that may be suitable for archaeometallurgical analysis. A fragment of a gritstone disc may also give more information on the process(es) being undertaken in this feature. A similar feature excavated on Anglesey, also some distance from known ore deposits, has been interpreted as a possibly salt- or lye-making feature, or associated with dyeing (Tim Young, pers comm). It is, however, unlikely that the Duckpool site was associated with salt-making as there is no briquetage present.

It is possible that the orthostats held a large vat or cauldron over a heat source and that the lead fragments recovered from an unstratified context derived from this vessel rather than representing metalworking. Larger spreads of heat-altered material may represent the unconfined burning of seaweed for lye production. Slag derived from seaweed burning may be fairly diagnostic and therefore archaeometallurgical analysis is recommended. The large number of marine molluscs on the site may also represent this activity, since large numbers of shells may be incorporated within the seaweed. Whilst the majority of shells were common edible varieties, some inedible species were present.

A small Roman coin, or possibly two coins fused together, was found embedded in the surface of linear, stone-lined pit G which may have been a flue or channel associated with pit F. This coin is likely to be similar to the six Roman coins (two fused together) found during the 1992 excavations which were of bronze issue and form a tight chronological group, having been manufactured in the mid-fourth century AD (340s to 360s) (Ratcliffe 1992, 108). This coin provides an effective *terminus post quem* for activity associated with pit G and, by inference, pit F.

A rough stone floor 47 may have linked (or separated) the phase 2 activity at the eastern end of the trench and a concentration of undated hearth-type features at the western end that had been exposed on the ground surface.

The phase is also roughly dated by sherds of South Devon ware belonging to the second to fourth centuries AD from the floor, some of which had traces of residue that may be suitable for radiocarbon dating. Stone-lined pit F also contained a sherd of this material.

More South Devon ware was recovered from the subsequent phase 4, predominately from deposit (46), which covered stone paving floor 47. A number of pit features at the truncated western end of the site may belong to this phase, including hearths B, C, and D. No closely dateable objects were recovered from the pit features, which contained a collection of daub/clay, marine shells, and worked stone, typical of many of the other hearth features on the site.

No early medieval hearth features comparable to Hearth 2 from the 1992 excavations were encountered, unless the truncated features at the western end of the site date to this phase.

The medieval phase of activity on the site (phase 4) was represented by an extensive layer (2) covering much of the site and interpreted as a midden deposit. This layer containing South-western chert-tempered ware of the twelfth and thirteenth centuries AD as well as animal bone and shell and is the same as the 'dark spread' identified by Ratcliffe (1992, fig 16).

8 Recommendations for further work

8.1 Analysis

8.1.1 Artefactual

Seven categories of artefact were recovered from the site that will require further study: ceramics, a Roman coin(s), daub/clay, metal objects (iron and lead), slag/archaeometallurgical residues, and worked stone.

Coin(s)

- The Roman coin (or coins) represents a key artefact with which to fix the chronology of the site and the identification of it will supplement the existing chronology established by the 1992 excavation (AD 340s to 360s). The fact that the find may be two coins fused together is of note since the two of the six coins from 1992 were also fused together.
- This identification will be undertaken by Anna Tyacke.

Daub/clay

- A small collection of material identified as daub or burnt clay was recovered. Further analysis will confirm whether this identification is correct and whether there is any information about the site's function to be derived from it.
- This analysis will be undertaken by Henrietta Quinnell.

Metalwork (iron)

- Five iron objects and a quantity of what appears to be hammerscale were recovered from key contexts. Two of the objects have been identified as square-headed nails but the function of the other three remains unknown. Further analysis may reveal their nature and function.
- This analysis will be undertaken by Henrietta Quinnell.

Metalwork (lead)

- Three pieces of unstratified lead were recovered. Further analysis of these may identify their source and nature.
- This analysis will be undertaken by Oliver Jessop.

Pottery

- Pottery was recovered from a number of key contexts. The majority of identified Romano-British wares were South Devon ware of the second to fourth centuries AD but a number of sherds from these contexts remain unidentified.

- Study of these ceramics will enable the petrology of the vessels to be identified, as well as their use history (for example, old or new, well-made or poorly fired, etc.). The range of vessels represented may shed light on the function and use of the site.
- The identification of medieval pottery from layers overlying the site, and post-dating the early medieval hearth identified during the 1992 excavation, is of interest. It suggests that the longevity of the site is greater than previously acknowledged (although unstratified material of this type was collected previously). The range of vessels represented may shed light on the function and use of the site in this period.
- The analysis of Romano-British material will be undertaken by Henrietta Quinnell, the medieval sherds by Carl Thorpe. It is anticipated that this will include analysis of the potential residues suitable for radiocarbon dating

Worked stone

- The assemblage comprises 32 items including hammerstones, a pivot stone, rubbing stones, and whetstones. Further study of these artefacts has the potential to reveal their source, their use history, and the character of activity taking place on the site.
- Nearly 100 additional pieces of unworked stone were also collected and analysis may reveal more information on sources and possible uses.
- This analysis will be undertaken by Henrietta Quinnell.

8.1.2 Other

Other categories of material present and suitable for further study include the following:

Archaeometallurgical residues

- A small assemblage of slag and other possible archaeometallurgical material was recovered from hearth E, the fills of pits [28] and [55], and layer (56). Further analysis may shed light on the activity being undertaken on the site.
- This analysis will be undertaken by Tim Young.

Bone/teeth (animal)

- Over 500 pieces of animal bones, some bearing butchery marks, were recovered. Further analysis will shed light on species present and on whether this adds to the evidence for domestic use or whether there may be an industrial activity represented by at least some of it.
- This analysis will be undertaken by Claire Ingrem.

Charcoal

- Charcoal, unidentified at this stage, was recovered from a number of key contexts, including layers (3), (46), and (56) and the fills of pits [25], [54], [55], [73], and [75]. Further analysis will allow identification to species level and this will help to shed light on use (fuel etc) and the local environment.
- Analysis will also assist with the selection of material for radiocarbon dating.
- This analysis will be undertaken by Dana Challinor.

Insect remains

- A small number of insect remains were identified from deposits (3), (46), and from fills of pits [28], [54], and [73]. Analysis may shed light on the environment at this time.
- This analysis will be undertaken by A N Other.

Shell (marine)

- A large assemblage of marine mollusc shell was recovered from a number of key contexts including floor 47, layers (3), (29), (46), and (56), and fills of pits [25], [27], [28], [30], and [85].
- This analysis will be undertaken by Jan Light or Matt Law.

Shell (terrestrial)

- A small assemblage of terrestrial mollusc shell was recovered from a number of key contexts including layers (3), (46), and (56), and fills of hearth E and pits [54], [55], [73], and [75]. Further analysis may shed light on the environment at this time.
- This analysis will be undertaken by Matt Law.

Tooth (human)

- A single human tooth has been identified, from floor 47. Further analysis may identify age and origin.
- This analysis will be undertaken by Jo Higgins.

8.1.3 Radiocarbon dating

The phasing of the site, particularly of those truncated elements at the western end of the site, is in need of refining. Material suitable for radiocarbon dating, in the form of residue from pottery and/or charcoal should be selected for dating.

8.2 Recommendations for further excavation

The 2017 excavation added to the information gleaned in 1992 but did not define the extent of the surviving elements of this important and vulnerable site. It is recommended that further evaluation is undertaken to establish the northward extent (towards the cliff face) of the site and the survival of the buried resource.

The 2017 excavation did not reach the base of the cultural deposits and therefore the origin of the site could not be inferred. It is recommended that further works involves the reopening of the 2017 trench and its continued excavation.

8.3 Recommendations for publication

The results from the analysis of this programme of work, and from the recommended subsequent evaluation, should be combined and published in *Cornish Archaeology*.

9 References

9.1 Primary sources

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

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9.2 Publications

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9.3 Websites

<http://www.heritagegateway.org.uk/gateway/> Online database of Sites and Monuments Records, and Listed Buildings

10 Project archive

The CAU project number is **146550**

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

Electronic data is stored in the following location:

\\CAU\Archive\Sites D\Duckpool NT 2016 146550

Historic England/ADS OASIS online reference: cornwall2-287530

Appendix 1: Table of contexts

Context Number	Cut Number	Feature	Same as	Type (Cut/Deposit/Build)	Feature	Phase	Sub-phase	Description
1				D	Topsoil	6	*	Dark brown loose sandy clay, 0.05m thick, cleared by spade. Turfline. Finds: animal bone (including a bone point), flint, medieval pottery (South-western chert tempered ware, 12th to 13th centuries AD), slag, worked stone (possible whetstone).
2				D	Layer	5	*	Dark greyish brown midden material, 0.15m-0.3m thick, below topsoil. Finds: animal bone, flint pebble, medieval pottery (South-western chert tempered ware, 12th to 13th centuries AD), marine shell, worked stone (including a spindle whorl), and a wooden point.
3			46	D	Layer	4	(i)	Mid greyish brown loose silty sand, up to 0.2m thick, containing frequent shell fragments and charcoal. Same as (46). Finds: animal bone, flint, marine shell, terrestrial shell, worked stone (including a pivot stone and a whetstone).
4	5			D	Fill	6		Light green gravel upper fill of [5]. Probably represents material from car park resurfacing following the 1992 excavation.
5	5			C	Trench	6		Cut of 1992 NW-SE excavation trench, 0.3m wide and 0.35m deep.
6	5			D	Fill	6		Backfill of [5]. Finds: animal bone, Romano-British pottery (South Devon ware, 2nd to 4th centuries AD), marine shell, worked stone (including a muller and whetstones).
7		A		D	Layer	3	(ii)	Appears to be the upper deposit in a bank over stone floor 47. A mid grey friable sandy clay, 0.06m-0.2m thick, lying over (16).
8	25			D	Layer	3	(iv)	Burnt earth layer below (2) and above (81). A light reddish brown friable silty clay, 0.04m thick, containing occasional stone and mottled charcoal, and shell fragments. Covered an area of 0.78m by 0.47m to the west of the 4m point on the grid. Seemed to be the upper fill of a pit, [25].
9			56	D	Layer	3	(i)	An area of dark greyish brown friable clayey sand surrounded by large stones and frequent shell. The stones appeared to be arranged as post-packing covering a stone-free oval area 2m by 1m within floor 47. A sondage excavated through this deposit showed that it was the layer underlying 47, recorded elsewhere as (56).

Context Number	Cut Number	Feature	Same as	Type (Cut/Deposit/Build)	Feature	Phase	Sub-phase	Description
10	25			D	Layer	3	(iv)	Layer confined by stone lining 26 in pit [25] to the south and orthostat 40 to the east. A mid greyish brown friable sandy clay, 0.2m thick, containing mottled charcoal. Deposit sits above burnt deposit (36). Large stones on surface. Probably the same material as (82), separated by charcoal layer (83). Seemed to be the primary fill of a pit, [25]. Finds: animal bone and teeth, daub/burnt clay, flint, iron object, marine shell, worked stone (including a cobble used for grinding and pecking and a smoothing stone).
11	85	D		D	Fill	4	(ii)	Burnt upper fill of pit re-cut [85]. Dark brownish black charcoal-rich fill 0.08m thick. Same as (23). Finds: animal bone, daub/clay, flint, marine shell, worked stone (two whetstones).
12	*	C		D	Fill	4	(ii)	Dark yellowish brown friable sandy clay 0.04m thick containing frequent stone. This heat-oxidised material was identified prior to excavation as the base of a truncated furnace/kiln, confined within an apparent stone-lining in an area measuring 0.6m by 0.55m.
13	27	B		D	Fill	4	(ii)	Upper fill in pit [27]. A mid brownish grey compact sandy clay 0.08m thick containing moderate sub-angular stone and frequent mottled charcoal. Finds: marine shell, worked stone (a saddle quern and a whetstone/pestle).
14	28	B		D	Fill	4	(ii)	Upper fill of pit [28]. A mid grey compact sandy clay 0.12m thick containing moderate sub-angular stone, patches of redeposited yellowish brown material, and frequent mottled charcoal. Finds: animal bone, marine shell, worked stone (a rubbing stone).
15	30			D	Fill	4	(v)	Upper fill of pit [90]. Dark greyish brown soft sandy clay, 0.08m thick, containing broken slate fragments, frequent mottled charcoal, shell and a possible whetstone. The bottom of this deposit is marked by a 0.01m charcoal-rich layer, (89). Finds: marine shell and worked stone (a whetstone).
16		A		D	Layer	3	(ii)	Appears to be a bank lying over stone floor 47, identified during the baulk section recording. A light brownish grey friable sandy clay, 0.05m-0.14m thick. Rises steeply to the west, dips down in the middle before rising slightly again, then falling steeply to the east. It is possible that the colour variation between this and surrounding deposits is caused by better drainage over the stone floor and that the effect of a bank is illusionary. No feature was identified during the excavation.

Context Number	Cut Number	Feature	Same as	Type (Cut/Deposit/Build)	Feature	Phase	Sub-phase	Description
17				D	Layer	3	(iii)	Dark purplish red loose silty sand up to 0.08m thick. Protrudes south into the trench for around 2m at the western end of the trench, east of stone floor 47. It appears to be identical in texture to (3) but is heat-oxidized. There was an outlying circular patch of the same material to the east. Lies below (10) and above (36). Confined by bank H to the west, orthostat 40 to the east, and stone-lined pit G to the south.
18		G	48	B	Lining	3	(i)	Large stones laid in a linear arrangement previously recorded as DKP92/57. These were sealed with plastic. Area covered at least 2m in length and joined onto a hearth to the east (DKP92/21). Ratcliffe (1995) implies that the western side was a bowl shaped pit (DKP92/60). Same as 48. In total forms a rectangular feature approximately 3m by 1.8m, possibly a stone-lined pit. Finds: worked stone (a large block with a circular depression at one end).
19				D	Shell deposit	4	(v)	Concentrated deposit of shells above deposit (3). It was 0.44m wide in the baulk section, extending into the trench for approximately 0.8m, and 0.11m thick. Finds: animal bone.
20				D	Layer	4	(i)	A layer to the south of pit [54]. A dark reddish brown sandy clay 0.1m thick. This material was cut by pit [54], and probably by hearth C. Probably the same as (3)/(46).
21	85	D		D	Fill	4	(ii)	Fill of pit re-cut [85]. A light greyish yellow compact sandy clay 0.03m thick.
22	85	D		D	Fill	4	(ii)	Fill of pit re-cut [85]. A light yellowish red compact sandy clay 0.11m thick containing frequent mottled charcoal. This material is highly heat-oxidised and probably represents the base of a furnace or kiln.
23	85	D	11	D	Fill	4	(ii)	Burnt upper fill of pit re-cut [85]. Dark brownish black charcoal-rich fill 0.08m thick. Same as (11). Finds: animal bone, daub/clay, flint, marine shell, worked stone.
24	55	F		D	Fill	3	(i)	Upper fill of stone-lined pit [55]. A dark greyish brown compact sandy clay 0.12m thick containing some fractured stone and moderate mottled charcoal. The deposit filled the top of [55] and spread around it. Finds: animal bone, daub/clay, Romano-British pottery (granitic), and worked stone (a gritstone disc fragment).
25	25			C	Pit	3	(iv)	Cut of large pit, shallow graduated sides, flat base, moderate edge definition. 2.17m wide and extends into the trench for 2m. Contains, in order of deposition, (10), (83), (82), (81), and (8). Cuts deposits (36) and (17).

Context Number	Cut Number	Feature	Same as	Type (Cut/Deposit/Build)	Feature	Phase	Sub-phase	Description
26	25			B	Lining	3	(iv)	Stone lining 0.18m high on the southern side of pit [25]. It includes one waterworn boulder set upright with smaller stones at the western end where there are two courses of local greywacke (probably heated).
27	27	B		C	Pit (hearth)	2	(ii)	Cut of sub-rectangular pit, 0.85m long, 0.45m wide, and 0.21m deep. North and south sides were steep, almost vertical, east side was less steep, with a near-flat base. South-west to north-east orientation. Filled by, in order of deposition, (88), (70), (87), (86), and (13). Cuts natural deposit (69).
28	28	B		C	Pit (hearth)	2	(ii)	Cut of sub-rectangular pit, 0.75m long, 0.5m wide, and 0.28m deep. Vertically-sided to the southwest with a shallow bowl-shaped base. Stone-lined. South-west to north-east orientation. Filled by, in order of deposition, (52), (51), (50), and (14). Cuts natural deposit (69).
29		B	46?	D	Layer	2	(i)	A dark reddish brown friable silty clay, 0.3m+ thick, containing infrequent water-rounded stone inclusions, frequent charcoal inclusions, shell, and bone fragments. This deposit is confined to the western end of the trench. Finds: animal bone and teeth, daub/clay, flint, marine shell, worked stone (a whetstone), and a piece of possibly fossilised wood.
30	30			C	Pit	2	(ii)	Sub-circular concave pit, >1.05m in diameter and 0.32m deep, with poor edge definition. Cut by [90]. Filled by, in order of deposition, (33), (32), and (31)/(34). Cuts (3).
31	30			D	Fill	2	(ii)	Upper fill of pit [30]. Pale yellowish brown silty clay, 0.08m thick, with occasional broken slate. Cut by pit [90]. Possibly fills a shallow re-cut at the northern edge of the pit.
32	30			D	Fill	2	(ii)	Second fill of pit [30]. Dark reddish brown silty clay, up to 0.2m thick, containing moderate stone inclusions. Below (31) & (34).
33	30			D	Fill	2	(ii)	Primary fill of pit [30]. Mid brown silty clay, 0.08m thick, with moderate stone inclusions. Lies below (32).
34	30			D	Fill	2	(ii)	Upper fill of pit [30]. Pale pinkish brown silty clay, 0.04m thick, containing medium stone inclusions. Soft to excavate. Cut by pit [90]. Possibly fills a shallow re-cut at the southern edge of the pit.

Context Number	Cut Number	Feature	Same as	Type (Cut/Deposit/Build)	Feature	Phase	Sub-phase	Description
35		B		D	Layer	4	(i)	Thin layer of variable light reddish brown/yellowish grey plastic silty clay, 0.05m-0.1m thick, containing some small stone inclusions. Found on the north-east side of [27] and [28], underlying (29), but encroaching on, and lying over the east side of, [27]. Possibly collapsed superstructure material. Same as (77). Lies above (78).
36				D	Deposit	2	*	Burnt deposit 2m long, 1.5m wide, and 0.13m+ thick lying underneath and adjacent to (17). Mid brownish red plastic sandy silt containing occasional stone inclusions, much redder around the base of a kiln/oven/furnace (37). Confined (or cut) by orthostat 40 to the north east, stone floor 47 to the south west, and stone lining 48 to the south. Finds: animal bone and teeth and an iron object. Not fully excavated. Probably the same as (74) but heat-scorched.
37	*	E		D	Fill	2	(i)	Deposit at the north-eastern end of the trench. A light yellowish brown compact silty sand, 1m long, 0.5m wide, and 0.06m thick, containing occasional flat stones and shell fragments. Appeared to mark the base of a feature that was sub-oval in plan, perhaps a kiln/oven/furnace. Orthostats 40 and 41 are immediately to the north east and are likely to be associated. Finds: slag and worked stone (a whetstone).
38	*			D	Fill	2	(i)	Deposit at the north-eastern end of the trench. A light reddish brown compact silty clay 0.4m by 0.1m. Unexcavated pit fill lying below deposit (10) to the west of (37).
39	*			D	Fill	2	(i)	Unexcavated fill of socket containing orthostat 40. A dark greyish brown soft silty clay 0.4m long and 0.23m wide containing moderate mottled charcoal.
40				B	Orthostat	2	(i)	Upright orthostat of local beach stone 0.22m long, 0.07m wide, and 0.45m high. It sits within an unexcavated socket at the north-western edge of the trench within the baulk section. Forms a pair with orthostat 41 and lies approximately 1.2m from its partner to the south-east. It marks a distinct boundary within the stratigraphy with pits [25] and [75] and their fills to the northeast and a set of different stratified deposits to the south west.

Context Number	Cut Number	Feature	Same as	Type (Cut/Deposit/Build)	Feature	Phase	Sub-phase	Description
41				B	Orthostat	2	(i)	Upright orthostat of local beach stone, appears to have been dressed on the south-west and south-east faces, worn on top, possibly used for polishing or grinding surface, possibly <i>in situ</i> or re-used. The stone is 0.2m long, 0.12m wide, and 0.39m high. It sits within an unexcavated socket of unknown depth. Forms a pair with orthostat 40 and lies approximately 1.2m from its partner to the north west.
42	*			D	Fill	2	(i)	Unexcavated fill of socket containing orthostat 41. A dark greyish brown soft silty clay, 0.33m long and 0.23m wide.
43	73			D	Fill	2	(i)	Fill of pit [73]. A mid yellowish brown friable sandy clay 0.1m thick, with occasional stone and charcoal inclusions, some shell fragments.
44	75			D	Fill	4	(iii)	Fill of pit [75]. A dark blackish grey soft sandy clay, 0.13m thick, containing frequent charcoal.
45				D	Layer	4	(i)	A dark greyish brown friable silty clay, containing frequent mottled charcoal. Located outside north-east end of [27] and [28]. Finds: worked stone (a whetstone). Same as (29).
46				D	Layer	2	(i)	Deposit recorded in a sondage at the south-western end of the trench to the west of a 1992 trench, [5]. A mid greyish brown firm sandy clay at least 0.27m thick lying beneath deposit (60). Cut by pit [54]. Finds: Romano-British pottery (?South Devon ware, 2nd to 4th centuries AD), marine shell, and worked stone (a rubbing stone). Same as (3).
47				B	Floor	2	(i)	Large expanse of largely greywacke stones, sub-angular, covering an area of at least 3.4m by 2.5m protruding from the edge of excavation. The stones are sat on top of, and within, deposit (56). They may have formed a floor although the surface was fairly uneven. Truncated to the south east. Finds: animal bones and teeth, human tooth, daub/clay, Romano-British pottery (?South Devon ware, 2nd to 4th centuries AD), marine shell, worked stone (including a whetstone).

Context Number	Cut Number	Feature	Same as	Type (Cut/Deposit/Build)	Feature	Phase	Sub-phase	Description
48		G		B	Lining	2	(i)	Linear arrangement of largely greywacke stones covering an area of at least 1.9m by 1.25m at the north- eastern end of the trench. The same feature may extend to the north east for another 2m (following a 0.63m-wide gap) up to the edge of pit [55]. This feature is probably the same as stone structure DKP92/57 and forms a rectangular feature approximately 3m by 1.8m, possibly a stone-lined pit, flue or channel associated with pit F. Same as 18. Finds: animal bone, Roman coin, daub/clay.
49	55	F		D	Fill	2	(i)	A lens of material within (65) in pit [55]. A mid brownish green soft silty clay 0.4m long, 0.25m wide, and 0.07m thick containing occasional lumps of broken stone and slag, Finds: animal bone and slag/clay.
50	28	B		D	Fill	2	(ii)	Fill of pit [28]. Mid pinkish red friable silty clay 0.07m thick.
51	28	B		D	Fill	2	(ii)	Fill of pit [28]. Mid yellowish brown loose silty clay 0.05m thick, possibly with a high ash content.
52	28	B		D	Fill	2	(ii)	Primary fill of pit [28]. A dark greyish brown friable silty clay, 0.05m thick.
53	28	B		D	Fill	2	(ii)	Ashy slag from base of pit [28]. It was unclear whether this formed a distinct primary fill or represents material collected from (52).
54	54	D		C	Pit (hearth)	2	(ii)	Cut of a pit recorded in section within a sondage at the south-western end of the trench. It was sub-circular in plan, 1.86m across, and 0.25m deep, with concave sides and a flat base. It contained a single fill, (62), that had subsequently been re-cut by [85]. It cut deposit (60) and its fill was sealed by deposit (59).
55	55	F		C	Pit (stone-lined)	2	(i)	A sub-rectangular stone-lined pit with vertical sides and a flat base at the southeast, sloping up to the north west. It was 1.4m long externally (1.06m internally), 0.8m wide externally (0.39m internally), and 0.56m deep. Lined by large stones, the majority greywacke but with one large piece of granite on the north-eastern side. Smaller stone was used in the lining to the south east. The pit contained six fills, in order of deposition, (67), (66), (65), (64), (63), and (24). A lens, (49), was contained within fill (65). The pit was 'lined' with heat-oxidised deposit (68). There was a possible outlet to the south east which may lead into another as yet unexcavated feature. This was filled by (65). Cuts deposit (74) and natural (68).

Context Number	Cut Number	Feature	Same as	Type (Cut/Deposit/Build)	Feature	Phase	Sub-phase	Description
56				D	Layer	2	(i)	A dark greyish brown friable clayey sand, 0.08m thick, containing moderate sub-angular and occasional sub-rounded stone, and occasional mottled charcoal. Forms the matrix for stone surface 47 and lies above layer (71) and below (layer (3). Finds: animal bone and teeth, Romano-British pottery (?South Devon ware, 2nd to 4th centuries AD), marine shell, and terrestrial shell.
57				B	Superstructure	2	(ii)	Same as 80.
58	85	D		D	Fill	2	(ii)	Very dark greyish brown sandy clay 0.02m thick, forming a fill of either pit [54] or re-cut [85].
59				D	Layer	2	(iii)	Burnt spread sealing pit fill (62) but cut by pit re-cut [85]. A dark greyish black charcoal-rich deposit. Layer extended into the trench for 0.91m from the north.
60				D	Layer	2	(ii)	Layer at south-western end of the trench. A dark reddish brown firm sandy clay 0.05m thick containing charcoal. Lies below (59). Cut by pit [54].
61	85	D		D	Fill	2	(ii)	Primary fill of pit re-cut [85] in north-eastern half of the feature. Dark reddish brown compact sandy clay up to 0.06m thick.
62	54	D		D	Fill	2	(ii)	Primary fill of pit [54]. A dark brownish red ashy sandy clay up to 0.25m thick. Thicker on the north-eastern side of the pit. Cut by pit re-cut [85].
63	55	F		D	Fill	2	(i)	Fifth fill of pit [55]. A mid brown soft silty clay, 0.12m thick, containing occasional broken stones and pieces of charcoal.
64	55	F		D	Fill	2	(i)	Fourth fill of pit [55]. A mid greenish brown soft sandy clay, 0.1m thick. Contained pieces of burnt clay at its northern end.
65	55	F		D	Fill	2	(i)	Third fill of pit [55]. A mid reddish pink soft silty clay, 0.17m thick. Contains within it lens (49).
66	55	F		D	Fill	2	(i)	Second fill of pit [55]. A mid brown soft silty clay, 0.07m thick, with no inclusions. The base of the layer is partially covered by a series of thin flat stones.
67	55	F		D	Fill	2	(i)	Primary fill of pit [55]. A dark blackish grey friable silty clay 0.04m thick containing occasional pebbles, broken stone, and frequent charcoal inclusions.
68	55			D	Layer (natural)	-	-	A light brownish yellow greasy compact clay, containing occasional small sub-rounded pebbles, not excavated. Found in the base of pit [55]. Partly scorched pink in places. Represents heat-oxidised natural material at the base of [55].

Context Number	Cut Number	Feature	Same as	Type (Cut/Deposit/Build)	Feature	Phase	Sub-phase	Description
69				D	Layer (natural)	-	-	Burnt natural at the base of pits [27] and [28]. A mid pinkish red friable silty clay containing frequent small angular stones (probably heat fractured).
70	27	B		D	Fill	2	(ii)	Fill of pit [27]. A dark greyish black friable silty clay 0.05m thick containing frequent charcoal inclusions and flecks of material similar to (87).
71				D	Layer	2	*	Layer beneath (56). A mid reddish brown friable sandy clay containing sub-angular stones and occasional mottled charcoal. Not excavated.
72	72	G		C	Pit (hearth)	2	(i)	Cut of pit (DKP92/21). Sub-oval in plan, 0.6m long, 0.43m wide, 0.3m deep, with almost vertical sides and an uneven base. The sides had been subject to high temperatures and were heat-oxidised a dark red. The pit had not been fully excavated in 1992 and was not subject to further investigation in 2017. Cuts (74).
73	73			C	Pit	2	(i)	Cut of pit, 0.34m long, 0.28m wide, and 0.1m deep, steep straight sides, concave base, filled by (43). Cuts burnt surface (36) at the eastern end of the trench close to orthostat 41.
74				D	Layer	2	*	Deposit at northeastern end of trench. A light yellowish brown plastic silty clay. This deposit lay below (36) and was cut by pits [25], [55], and [75]. It may be the same material as (36) but not heat-oxidised.
75	75			C	Pit	2	(iii)	Cut of sub-circular concave pit, visible at the north-eastern end of the baulk section. Protrudes into the trench for 0.3m and is 0.32m at its widest point. Filled by (44). Cuts deposit (74).
76	92			D	Fill	2	(iv)	Primary fill of pit [92]. A mid reddish brown soft sandy clay 0.15m thick.
77		B	35	D	Layer	2	(ii)	Friable silty clay of varying colours from light greyish yellow to dark reddish brown 0.04m-0.1m, thinning to the north west. Same as (35).
78		B		D	Layer	2	(ii)	Dark greyish brown greasy silty clay 0.04m-0.07m thick, thinning to south east. Contained some mottled charcoal on the upper surface.
79		B		D	Layer	2	(ii)	Dark reddish brown friable silty clay 0.1m thick with charcoal lens at the base of it.
80		B		B	Superstructure	2	(ii)	Clay superstructure. Varies in colour but predominantly mid pinkish red compact clay 0.06m thick with some stone incorporated. Confined to within 0.2m of the baulk section. It dipped downwards into the section. It appeared to represent part of a fired clay superstructure, later truncated or broken, that may have covered an oven, furnace, or kiln.

Context Number	Cut Number	Feature	Same as	Type (Cut/Deposit/Build)	Feature	Phase	Sub-phase	Description
81	25			D	Layer	2	(iv)	Lens of charcoal 0.01m-0.05m thick above (82). Confined to a small area (4m to 6m mark on the baulk section). Varies in thickness but does not exceed 0.05m. Dark greyish black soft silty clay. Seemed to be the fill of a pit, [25].
82	25		10	D	Layer	2	(iv)	A dark greyish brown sandy clay, up to 0.1m thick, sandwiched between charcoal lenses (81) and (83). Contained moderate small sub-rounded stones. Probably the same material as (10). Seemed to be the fill of a pit, [25].
83	25			D	Layer	2	(iv)	Lens of charcoal. Similar to (81), but below (82). Dark greyish black soft silty clay 0.01m-0.03m thick. Seemed to be the fill of a pit, [25].
84	92			D	Fill	2	(iv)	Upper fill of pit [92], to the east of orthostat 40. A mid yellowish brown friable sandy clay, 0.21m thick.
85	85	D		C	Pit (re-cut)	2	(ii)	Re-cut of pit [54]. Cuts layer (59) and pit fill (62). Re-cut is 1.62m SW-NE and 0.2m deep. Filled by, in order of deposition, (58)/(61), (22), (21), and (23).
86	27	B	50	D	Fill	2	(ii)	Fill of pit [27]. Mid pinkish red friable silty clay 0.05m thick. Same as (50).
87	27	B	51	D	Fill	2	(ii)	Fill of pit [27]. Mid yellowish brown loose silty clay 0.06m thick, possibly with a high ash content. Same as (51).
88	27	B	52	D	Fill	2	(ii)	Primary fill of pit [27]. A dark greyish brown friable silty clay, 0.04m thick. Same as (52).
89	30			D	Fill	2	(v)	Primary fill of small pit [90]. Charcoal-rich layer 0.01m thick.
90	90			C	Pit	2	(v)	Small pit, 0.87m across and 0.13m deep, with concave base and convex sides, cut into the top of pits [30] and [92]. Shape in plan uncertain since it was only recognised in section. Filled by, in order of deposition, (89) and (15).
91				D	Layer	2	(v)	Layer between (2) and (3) in the middle of the trench. A mid brownish red friable sandy clay 0.1m thick and 0.93m wide in the baulk section, containing moderate mottled charcoal. Appears to be burnt. Similar to (84).
92	92			C	Pit	2	(iv)	Cut of pit to east of orthostat 40. Concave, 0.92m across (in baulk section) and 0.28m deep. Filled by, in order of deposition, (76) and (84). Truncates pit [75] and cuts pit fill (33).

Context Number	Cut Number	Feature	Same as	Type (Cut/Deposit/Build)	Feature	Phase	Sub-phase	Description
Test pit contexts								
101				D	Topsoil	*	*	Dark grey brown friable sandy loam, very small rounded pebble inclusions, 0.06m thick.
102				D	Layer	*	*	A pale yellow sand, moderate medium sized pebbles 0.13m thick.
103				D	Layer	*	*	Medium to dark greyish brown sand, occasional lumps of slate and sandstone 0.2m thick.
104			103	D	Layer	*	*	Same as (103). Lies in the north-western half of the pit. Cut by [107]. Not excavated.
105				D	Layer	*	*	Mid greyish brown sandy clay mottled with frequent pink and red burnt clay and very occasional charcoal flecks. Fill of [108]?
106				D	Layer	*	*	Dark greyish brown friable sandy clay, moderate charcoal, moderate lumps of broken slate. Fill of [107]?
107	107			C	Pit	*	*	Cut of possible rectangular pit, 1m long, 0.5m wide, (not excavated).
108	108			C	Pit	*	*	Cut of possible pit, 0.55m long, 0.25m wide (not excavated).
201				D	Topsoil	*	*	Dark brown sandy loam, easy to trowel, few stone inclusions, 0.2m thick, rounded pebbles, very rooty.
202				D	Layer	*	*	Mid yellowish brown loose sand, very rooty, sparse stone inclusions, 0.13m thick.
203				D	Layer	*	*	Dark brown compact loamy clay, common stone inclusions and larger stones, 0.2m thick.
204				D	Layer	*	*	As (203) but slightly darker in colour, 0.2m thick.
205				D	Layer	*	*	Dark greyish black sandy burnt layer, occasional fragments of charcoal, shell fragments, some stones but not common. Layer was not bottomed.

Appendix 2: Table of samples and flots

Sample no	Context No	Quantity (Bags / Litres)	Context description	Material	Number of items	Description	Weight (g)
1	*	*	NOT USED	*	*	*	*
2	2	4 tubs	Midden material	Bone (animal)	1	Unknown	0.8
2	2			Bone (animal)	1	Cattle tooth	2.5
2	2			Bone (animal)	4	2 large plus 2 tiny fragments	0.8
2	2			Charcoal	*	Unidentified	12.2
2	2			Organic	*	Insect abdomen / thorax and heads plus possible seeds	2
2	2			Organic (roots)	*	Matted roots (not weighed)	*
2	2			Pottery	2	Rim sherds R/B?	10
2	2			Shell (marine)	4	3 whole plus 1 broken Edible Periwinkle (<i>Littorina littorea</i>) - edible	11.7
2	2			Shell (marine)	1	Thick Topshell (<i>Monodonta lineata</i>) - edible?	4.7
2	2			Shell (marine)	*	Mussel (<i>Mytilus Edulis</i>) fragments	0.2
2	2			Shell (terrestrial)	*	<i>Cochlicella acuta</i>	19.7
2	2			Shell (terrestrial)	*	2 x <i>Cochlicopa lubricella</i> rather than <i>lubrica</i> , 1 x <i>Clausilia bidentata</i> , 3 x <i>Discus rotundatus</i> plus 3 immature, unknowns?	0.3
2	2			Stone (natural)	1	Natural stone	2.1
3	3	4 tubs	Layer: same as (46) but from NE end of trench	Bone (animal)	7	5 x animal bone, 2 x poss. Rodent (shrew) bones	1.9
3	3			Bone (animal)	1	Unknown	2
3	3			Bone (animal)	1	Rodent - shrew long bone	>0.1
3	3			Bone (animal)	2	Unknown	2.1
3	3			Charcoal	*	Unidentified	40
3	3			Charcoal	*	Unidentified	0.5
3	3			Charcoal	*	Unidentified	17.8
3	3			Organic	*	Insect abdomen / thorax (possible ground beetles) plus possible seeds	0.1
3	3			Organic	*	Insect abdomen / thorax (poss ground beetles) plus possible seeds	1.3
3	3			Organic (roots)	*	Matted roots contains flecks of charcoal and broken land snail shells	9.6
3	3			Shell (marine)	*	Mussel (<i>Mytilus Edulis</i>) shell fragments	95.7
3	3			Shell (marine)	*	1 x limpet (<i>Patella Vulgata</i>) shell and fragments	20.5
3	3			Shell (marine)	13	12 x mussel (<i>Mytilus Edulis</i>) shell fragments plus 1 limpet (<i>Patella Vulgata</i>) frag	0.7
3	3			Shell (terrestrial)	*	<i>Cochlicella acuta</i>	0.8
3	3			Shell (terrestrial)	*	Includes <i>Cochlicella acuta</i>	10.5
4	46	4 tubs	Layer: same as (3) but from SW end of trench	Bone (animal)	4	Unknown	5.2
4	46			Charcoal	*	Unidentified	2.7

Sample no	Context No	Quantity (Bags / Litres)	Context description	Material	Number of items	Description	Weight (g)
4	46			Daub/clay	1	*	8.7
4	46			Iron	1	Iron object	3.2
4	46			Organic	10	9 whole plus 1 broken insect abdomen / thorax	0.1
4	46			Pottery	1	Very small sherd - R/B?	0.9
4	46			Pottery	5	R/B?	14.3
4	46			Shell (marine)	1	Broken Thick Topshell (<i>Mondonta lineata</i>)	1.2
4	46			Shell (terrestrial)	*	<i>Cochlicella acuta</i>	1.2
4	46			Stone (natural)	1	Round black pebble	17.5
4	46			Tooth (animal)	1	Cattle tooth	4.9
5	53	1 tub	Ashy slag from base of [28]	Charcoal	*	Unidentified - very tiny pieces	0.1
6	56	4 tubs	Layer beneath floor (47)	Bone (animal)	8	7 bone plus 1 pig jaw with 3 teeth	21.4
6	56			Bone (animal)	4	Unknown	1.2
6	56			Bone (animal)	2	Unknown	5.1
6	56			Charcoal	*	Unidentified	7
6	56			Iron	1	Square-headed bent nail	0.7
6	56			Organic (roots)	*	Matted roots	3.9
6	56			Shell (terrestrial)	*	<i>Cochlicella acuta</i>	0.1
6	56			Stone (natural)	2	Waterworn iron-rich pebble plus 1 slate and quartz stone	10.5
6	56			Stone (natural)	1	Broken quartz pebble	66.8
7	37	1 tub	Base of a kiln/oven	Pottery	1	Degraded pottery	0.4
7	37			Shell (terrestrial)	1	<i>Cochlicella acuta</i>	<0.1
7	37			Stone (natural)	4	Pieces of quartz	1.2
8	43	1 tub	Fill of pit [73]	Charcoal	*	Unidentified	0.8
8	43			Organic	*	Insect abdomen / thorax (possible ground beetles) plus possible seeds	0.1
8	43			Shell (terrestrial)	*	<i>Cochlicella acuta</i>	0.2
8	43			Stone (natural)	4	Natural iron-rich friable stone	15
8	43			Stone (natural)	2	Natural stones	1.9
9	44	1 tub	Fill of pit [75]	Charcoal	*	Unidentified	6.1
9	44			Organic (roots)	*	Matted roots	0.1
9	44			Residue	*	Kept as it contains a lot of charcoal flecks	13.4
9	44			Shell (terrestrial)	*	<i>Cochlicella acuta</i> plus 1 other	0.2
10	62	1/2 tub	Fill of pit [54]	Charcoal	*	Unidentified	1
10	62			Organic	*	Insect abdomen / thorax (possible ground beetles) plus heads with antenna of ant/beetle plus a fly	0.3
10	62			Shell (terrestrial)	*	Very degraded <i>Cochlicella acuta</i>	0.2
11	64	1 tub	Fill of stone-lined pit [55]	Charcoal	*	Unidentified - very small pieces	0.1
11	64			Shell (terrestrial)	*	<i>Cochlicella acuta</i>	<0.1

Appendix 3: Graphics List

Drawing Number	Plan / Section	Description	Context Nos	Sheet No.
1	P	Test Pit 1	(104), (105), (106) [107], [108]	1
2	S	Test Pit 1	(101), (102), (103), [108]	1
3	S	Test Pit 2	(201), (202), (203), (204), (205)	2
4	P	Pre-excavation site	(2)	3
5	P	Pre-excavation site	(10), (15), (17)	4
6	P	Pre-excavation site	(10), (11), (12), (13), (14), (17)	5
7	P	Pre-excavation site		6
8	S	Section through pit [25]	(10), [25], 26	7
9	P	Mid-ex plan	[25], 26	8
10	S	East-facing section	(15), [30], (31), (32), (33), (34)	9
11	P	Mid-ex plan burnt floor	[25], (36), (37), (38), (39), 40, 41, (42), (43), (44)	10
12	S	Section though hearth 28	(13), (14), [27], [28], (50), (51), (52), (69), (70)	7
13	S	Site including cut [54]	(12), (20), (21), (22), (23), (46), [54], (58), (60), (61), (62)	11
14	S	Section of stone-lined tank	(24), (49), [55], (63), (64), (66), (67), (68),	12
15	P	Stones 5-17m	(8)	14
16	S	Clay structure & layers	(29), (77), (78), (79), (80)	7
17	P	Stones 0-5m	48 [75]	15
18	S	Baulk section 0 - 8m	(1) (2) (3) (36) (39) 40 47 (56) (74) (75) (81) (82) (83)	16
19	S	Baulk section 8 - 16m	(1) (2) (3) [5] (6) (9) (46) 47 (59) (60)	17

Appendix 4: Photographic register

Photo Number	Contexts	Description	Scale	Looking	Date Taken
5362		Test Pit 1 post-ex plan	1m	N	17-Jan-17
5363		Test Pit 1 section	1m	N	17-Jan-17
5365		Test Pit 2 post-ex plan	1m	N	17-Jan-17
5367		Test Pit 2 section	1m	N	17-Jan-17
5369	[5]	Post-ex 1992 trench [5]	1m	N	17-Jan-17
5370		Mid-ex plan fill (10)	1m	N	18-Jan-17
5371		Mid-ex plan deposit (17)	1m	N	18-Jan-17
5372		Mid-ex plan deposit (17)	1m	S	18-Jan-17
5373		Mid-ex plan fill (15)	1m	W	18-Jan-17
5374		Pre-ex plan (11)	1m	NW	18-Jan-17
5375		Pre-ex plan (12)	1m	N	18-Jan-17
5376		Pre-ex plan (13)	1m	NW	18-Jan-17
5377		Pre-ex plan (13) and (14)	1m	NE	18-Jan-17
5378		Pre-ex plan (14)	1m	SE	18-Jan-17
5394	(13)	Mid-ex plan (13)	0.5m	W	19-Jan-17
5395		Section 8, pit [25]	0.5m	E	19-Jan-17
5396	(28)	Mid-ex plan hearth [28]	0.5m	SW	19-Jan-17
5400		Section 10 pit [30]	0.5m	W	19-Jan-17
5401	41	Mid ex plan features at eastern end	1m	N	19-Jan-17
5402		Small find 15	0.25m	N	19-Jan-17
5411	(36)	Burnt area (36)	1m	N	20-Jan-17
5413		Small find 16	0.05m	SW	20-Jan-17
5414		Deposit (37)	0.5m	W	20-Jan-17
5415		Fill (38)	0.25m	N	20-Jan-17
5416		Orthostat 40 and fill (39)	0.25m	NW	20-Jan-17
5417		Orthostat 40 and fill (39)	0.25m	N	20-Jan-17
5418		Orthostat 41 and fill (42)	0.25m	NE	20-Jan-17
5419		Orthostat 41 and fill (42)	0.25m	NE	20-Jan-17
5420		Orthostats 40 and 41	0.5m	NE	20-Jan-17
5423		Pit fill (43)	0.25m	E	20-Jan-17
5424		Pit fill (45)	0.25m	NE	20-Jan-17
5429	[27] & [28]	Mid-ex pits [27] and [28]	2m	SW	20-Jan-17
5430	[28]	Section 12 pit [28]	0.25m	SW	20-Jan-17
5431	[28]	Section 12 pit [28]	0.25m	SW	20-Jan-17
5432		Stone lining 48	1m	NW	20-Jan-17
5437		Stone floor 47	1m	NW	21-Jan-17
5438		Stone floor 47	1m	NW	21-Jan-17
5439		Stone lining 48	1m	E	21-Jan-17
5440		Section 14 pit [55]	0.5m	N	21-Jan-17
5442		Mid ex pit [55]	0.5m	E	21-Jan-17
5443		Section 14 pit [55]	0.5m	N	21-Jan-17
5445		Small find 43	0.25m	N	21-Jan-17
5446		Section 12 pit [27]	0.25m	SW	21-Jan-17
5447		Post-ex plan pit [72] DKP92/21	0.5m	N	21-Jan-17

Photo Number	Contexts	Description	Scale	Looking	Date Taken
5448		Section 16, eastern end of pits [27] and [28]	1m	NE	21-Jan-17
5449		Section 16, eastern end of pits [27] and [28]. Detail of clay superstructure 80	1m and 0.25m	NE	21-Jan-17
5450		Post-ex stone-lined pit [55]	1m	W	21-Jan-17
5451		Post-ex stone-lined pit [55]	1m	E	21-Jan-17
5452		Post-ex stone-lined pit [55]	0.5m	S	21-Jan-17
5453		Post-ex stone-lined pit [55]	0.5m	N	21-Jan-17
5455		Section 18 western end	0.5m	NW	21-Jan-17
5456		Section 18 western end	2m and 0.5m	NW	21-Jan-17
5457		Section 18 middle	2m and 0.5m	NW	21-Jan-17
5458		Section 18 middle (over stone floor 47)	2m and 0.5m	NW	21-Jan-17
5459		Section 18 eastern end (over orthostat 40)	2m and 0.5m	NW	21-Jan-17
5460		Section 18 eastern end	2m and 0.5m	NW	21-Jan-17

Appendix 5: Table of finds

* includes results from wet-sieving (see Appendix 2)

Context No.	Cut No.	Recovered from samples	Small Finds No.	Material	No. of items	Description	Weight (g) unless stated
1				Bone (animal)	7	Animal bone, various	46.2
1				Bone (animal)	1	Bone point	2.8
1				Flint (natural)	1	Rounded flint pebble	116.1
1				Pottery	1	Medieval potsherd. South-western chert tempered ware, 12th to 13th centuries AD.	3.1
1				Slag	1	Metal slag	4.5
1				Stone (natural)	1	Broken stone, natural cobble fragment	219.5
1				Stone (worked)	1	Whetstone? Medium sized pebble possibly with some wear polish.	177.3
2				Bone (animal)	16	Animal bone, various	137.7
2				Bone (animal)	20	Animal butchered bone fragments	41.3
2				Bone (animal)	4	Animal bone	3.5
2		Y		Bone (animal)	1	Cattle tooth	2.5
2		Y		Bone (animal)	1		0.8
2		Y		Bone (animal)	4	2 large + 2 tiny frags	0.8
2		Y		Bone (animal)	4	Small pieces	0.6
2		Y		Daub/clay		Red clay fragments	3
2				Flint (natural)	1	Small unworked flint pebble	3.4
2		Y		Organic		Charcoal	12.2
2		Y		Organic		Insect abdomen / thorax and heads plus possible seeds	2
2		Y		Organic		Charcoal	0.5
2		Y		Organic (roots)		Matted roots (not weighed)	
2		Y		Pottery	2	2 basal angle sherds South-western chert tempered ware cooking vessel. 12th to 13th centuries AD	10
2				Pottery	1	Medieval potsherd. Sherd exterior is reddish, interior is slightly yellow slip. South-western chert tempered ware, 12th to 13th centuries AD.	9.7
2			2	Pottery	1	Medieval shoulder sherd South-western chert tempered ware cooking vessel. 12th to 13th centuries AD.	8.8
2			1	Pottery	1	Medieval potsherd, reddish. South-western chert tempered ware. 12th to 13th centuries AD.	2
2				Stone (natural)	1	Rounded pebble, natural.	36.8
2				Stone (natural)	1	Broken pebble with reddish inclusions, natural.	30
2		Y		Stone (natural)	1	Natural stone	2.1
2				Stone (worked)	1	Rounded pebble, possibly utilised as a rubbing stone?	260.3
2			3	Stone (worked)	1	Elongated pebble whetstone? Two striated surfaces	53.2
2				Stone (worked)	1	Broken pebble, possibly utilised?	40.9
2			6	Stone (worked)	1	Spindle whorl, quartzite? Lathe cut? Ground edges. Slight hour glass shaped perforation.	12.2
2				Wood	1	Wooden point	2.4
3		Y		Bone (animal)	1	Rodent /Shrew long bone	>0.1
3				Bone (animal)	47	Animal bone, various	255.6
3				Bone (animal)	22	Animal bone, various	145.2
3				Bone (animal)	10	9 bones + 1 tooth	79.1
3				Bone (animal)	1	Animal bone	2.3

Context No.	Cut No.	Recovered from samples	Small Finds No.	Material	No. of items	Description	Weight (g) unless stated
3		Y		Bone (animal)	2		2.1
3		Y		Bone (animal)	1		2
3		Y		Bone (animal)	7	5 x Animal bone 2x poss. Rodent/shrew bones	1.9
3				Flint	1	Flint with cortex, worked. Exhibits percussion marks typical of a 'Strike-a-light'.	36.8
3				Flint	1	Small flint pebble	6.2
3		Y		Organic		Charcoal	40
3		Y		Organic		Charcoal	17.8
3		Y		Organic		Insect abdomen / thorax poss ground beetles plus possible seeds	1.3
3		Y		Organic		Charcoal	0.5
3		Y		Organic		Insect abdomen / thorax poss ground beetles plus possible seeds	0.1
3		Y		Organic (roots)		Matted roots contains flecks of charcoal & broken land snail shells	9.6
3				Stone (natural)	1	Rounded, broken pebble, natural.	165.7
3				Stone (natural)	1	Broken elliptical pebble	100.6
3			15	Stone (worked)	1	Cobble utilised as a pivot stone. Large tapered hole 34.13mm x 15.3mm. Smaller depression next to it, not quite central. Possibly stone for use with bow drill to light fires.	1.5kg
3				Stone (worked)	1	Broken cobble whetstone with one distinct polished wear facet. Percussion marks on end and sides to provide finger grip.	729.6
3				Stone (worked)	1	Round quartz pebble. Percussion damage at one end suggests possible use as a hammerstone.	448.4
3				Stone (worked)	1	Elongated pebble utilised as a whetstone with one polished and striated wear surface.	156.5
3				Stone (worked)	1	Small elongated pebble, worked	13.1
6	5			Bone (animal)	2	Animal bone	37.3
6	5			Pottery	1	Potsherd, granitic fabric. South Devon ware. From shoulder of vessel (jar), 2nd to 4th centuries AD.	11.1
6	5			Stone (natural)	1	Rounded pebble	115.1
6	5			Stone (natural)	1	Pebble with quartz on the bottom	28.1
6	5			Stone (natural)	1	Sandstone fragment	11.1
6	5			Stone (worked)	1	Large elongated cobble with some polished areas and striated surfaces. Probable use as a whetstone.	904.4
6	5			Stone (worked)	1	Muller with one convex polished surface and roughening around edges to provide finger grip	808.7
6	5		4	Stone (worked)	1	Elongated cobble with wear facet showing polished and striated surface. Percussion of edges to provide finger grip. Whetstone.	334.7
6	5			Stone (worked)	1	Elongated pebble. Possibly utilised as a whetstone?	68.6
10	25			Bone (animal)	58	Animal bone	191.9
10	25			Bone (animal)	9	Animal bone	78.7
10	25			Bone (animal)	24	19 animal bone frags + 5 teeth	72.8
10	25		12	Bone (animal)	1	Animal bone	2.4
10	25			Bone (animal)	2	Animal bone	1.6
10	25			Bone (animal)	2	Animal bone	1.2
10	25			Daub/clay	1	Daub/burnt clay	56.7
10	25			Flint	1	Flint cortex	13.5

Context No.	Cut No.	Recovered from samples	Small Finds No.	Material	No. of items	Description	Weight (g) unless stated
10	25		9	Iron	1	Tapered one end, square the other. Taper 27.9mm to 24.4mm	226.9
10	25			Organic		Charcoal recovered from washed bone	0.5
10	25			Stone (natural)	1	Large broken, rounded-edged stone	768
10	25			Stone (natural)	1	Large broken, rounded-edged stone	539.2
10	25			Stone (natural)	2	Broken quartz pebbles	45.4
10	25			Stone (natural)	1	Flat pebble	19.1
10	25			Stone (natural)	1	Small worked flat stone, reddish	13
10	25			Stone (natural)	1	Small rounded pebble	12.9
10	25		5	Stone (natural)	1	Quartz broken crystal, worn to point?	7.6
10	25			Stone (natural)	1	Small rounded pebble	6.6
10	25		7	Stone (worked)	1	Large wedge shaped cobble, with the larger flat surface bearing two parallel crescentic depressions upon it, formed by grinding and pecking.	6750
10	25		10	Stone (worked)	1	Part of a large cobble, the edges seem to have been ground down through use wear. However, this is not part of a quern.	4000
10	25			Stone (worked)	1	Flat round waterworn pebble possible pecked end. Smoothing stone? Edges roughened to provide finger grip?	203.4
11	85			Bone (animal)	15	Animal bones	186.4
11	85			Bone (animal)	15	Animal bone	49.6
11	85			Bone (animal)	5	Animal bone	9.3
11	85			Daub/clay	many	Clay and daub	318.5
11	85			Daub/clay	3	Clay or Daub	77.8
11	85			Flint	1	Beach flint	6.6
11	85			Stone (natural)	1	Rounded pebble	43.5
11	85			Stone (natural)	1	Rounded pebble	43.5
11	85			Stone (natural)	1	Flat stone	9.9
11	85			Stone (natural)	1	Small pebble	4.3
11	85			Stone (natural)	1	Very small pebble	3
11	85		14	Stone (worked)	1	Large whetstone	950
11	85		14	Stone (worked)	1	Whetstone	83.1
13	27			Stone (worked)	1	Elongated pebble utilised as a whetstone and possible pestle.	1900
13	27			Stone (worked)	1	Fragment of a large flattened beach cobble. One surface has been dished through use as a saddle quern	1813
14	28			Bone (animal)	1	Animal bone	7.5
14	28			Stone (natural)	1	Broken fragment of a quartz cobble. Natural	99.6
14	28			Stone (worked)	1	Cobble used as a rubbing stone? One wear surface with polish. Edges roughed for finger grip.	559.8
15	30			Stone (worked)	1	Pebble whetstone	197.3
18			8	Stone (worked)	1	Large block of stone with circular depression at one end.	7000
19				Bone (animal)	1	Animal bone	1.1
24	55			Bone (animal)	18	Animal bone	101.5
24	55			Bone (animal)	18	Animal bone	100.9
24	55			Bone (animal)	4	One piece shows butchery marks	16.2
24	55			Daub/clay	6	Daub	139.3
24	55		11	Pottery	1	Potsherd, granitic fabric. Romano-British	17.4
24	55		13	Stone (worked)	1	Flat fragment of gritstone forming part of disc. One edge worked.	53.7

Context No.	Cut No.	Recovered from samples	Small Finds No.	Material	No. of items	Description	Weight (g) unless stated
29				Bone (animal)	2	4 animal, 1 poss bird, pig jaw with 2 teeth and cattle tooth	113.8
29				Bone (animal)	2	Animal bone	14
29				Daub/clay	2	Daub/clay	12.9
29				Flint	1	Waste	<0.1
29				Stone (natural)	1	Natural	5.1
29				Stone (worked)	1	Pebble whetstone	496.6
29				Wood?	1	Could be fossilized wood?	5.6
36			26	Bone (animal)	1	Animal bone	48.9
36			18	Iron	1	Curved piece of iron	19.6
36				Tooth (animal)	1	Animal tooth	17.7
37		Y		Pottery	1	Degraded pottery or burnt clay	0.4
37	*			Slag	1	Slag/ash	5.3
37	*			Stone (natural)	3	Round waterworn pebbles	131.6
37	*			Stone (natural)	1	Angular broken pebble	63.5
37		Y		Stone (natural)	4	Pieces of quartz	1.2
37	*		25	Stone (worked)	1	Sandstone, tapered surfaces, curved end. Utilised?	125.7
37	*			Stone (worked)	1	Diamond shaped piece of fine grained sandstone/quartzite used as a whetstone with the four edges being wear facets exhibiting polish, and striations.	48.5
43		Y		Organic		Charcoal	0.8
43		Y		Organic		Insect abdomen / thorax poss ground beetles plus possible seeds	0.1
43		Y		Stone (natural)	4	Natural iron-rich friable stone	15
43		Y		Stone (natural)	2	Natural stones	1.9
44		Y		Organic		Charcoal	6.1
44		Y		Organic (roots)		Matted roots	0.1
44		Y		Residue		Kept as it contains a lot of charcoal flecks	13.4
45			16	Stone (worked)	1	Elongated pebble whetstone. Quartzite? 1 flat wear facet, other surfaces show polishing and striations.	189.9
46		Y		Bone (animal)	4		5.2
46		Y		Daub/clay	1		8.7
46		Y		Iron	1	Iron object	3.2
46		Y		Organic		Charcoal	2.7
46		Y		Organic	10	9 whole plus 1 broken insect abdomen / thorax	0.1
46			19	Pottery	1	1 basal angle sherd (flat base) granitic fabric. South Devon ware? Romano-British	35.8
46			27	Pottery	2	2 sherds granitic fabric. South Devon ware? Romano-British (Internal residue present on one)	25.4
46			31	Pottery	1	1 flat basal sherd granitic fabric. South Devon ware? Romano-British (Internal residue present)	14.4
46		Y		Pottery	5	1 body sherd with incised line decoration forming a lattice pattern. 4 other bodysherds granitic fabric. South Devon ware. Romano-British.	14.3
46			20	Pottery	1	1 sherd granitic fabric. South Devon ware? Romano-British	13.2
46			21	Pottery	1	1 sherd granitic fabric. South Devon ware? Romano-British (Internal residue present)	9.9
46			24	Pottery	2	2 sherds granitic fabric. South Devon ware? Romano-British	9.6

Context No.	Cut No.	Recovered from samples	Small Finds No.	Material	No. of items	Description	Weight (g) unless stated
46			32	Pottery	1	1 rimsherd. Everted. granitic fabric. South Devon ware? Romano-British	9.2
46			30	Pottery	1	1 sherd granitic fabric. South Devon ware? Romano-British (Internal residue present)	8.5
46			22	Pottery	1	1 sherd granitic fabric. South Devon ware? Romano-British	7.5
46			37	Pottery	1	1 sherd granitic fabric. South Devon ware? Romano-British	6.2
46			35	Pottery	1	1 neck sherd granitic fabric. South Devon ware? Romano-British	5.7
46			36	Pottery	1	1 rimsherd? Possibly cordon? granitic fabric. Romano-British	5.7
46			23	Pottery	2	2 sherds granitic fabric. South Devon ware? Romano-British (Internal residue present)	5.6
46			38	Pottery	1	1 sherd granitic fabric. South Devon ware? Romano-British	5.2
46				Stone (natural)	1	Waterworn pebble	102.4
46		Y		Stone (natural)	1	Round black pebble	17.5
46			17	Stone (worked)	1	Elongated oval shaped cobble utilised as a rubbing stone. One worn surface showing striations and polish. Edges roughened to provide finger grip.	852
46		Y		Tooth (animal)	1	Cattle tooth	4.9
47				Bone (animal)	57	Animal bones	308.5
47				Bone (animal)	57	Animal bones: butchered	304.7
47				Bone (animal)	1	Pig jaw + 1 tooth	8.2
47				Bone (animal)	1	Pig jaw + 1 tooth	8.2
47				Daub/clay	1	With indentation in surface	4.3
47				Pottery	34	Romano-British potsherds	172.5
47			34	Pottery	9	9 sherds granitic fabric. South Devon ware? Romano-British (Internal residue present)	91.1
47			28	Pottery	5	5 sherds granitic fabric. South Devon ware. 2nd to 4th centuries AD. (Internal residue present)	24.3
47				Pottery	3	3 small undiagnostic sherds granitic fabric. South Devon ware? Romano-British (Internal residue present)	5.8
47			39	Pottery	1	1 rimsherd. Everted. granitic fabric. South Devon ware? Romano-British	
47			34	Stone (natural)	4	Stones in with pottery	190.7
47				Stone (natural)	5	Pebbles	170.7
47				Stone (worked)	1	Elongated cobble with one pointed end showing percussion damage. Two wear facets showing polished and striated surfaces.	481.6
47				Stone (worked)	1	Flattened elongated oval shaped cobble utilised as a whetstone with one of the flat surfaces exhibiting wear polish and striations. Edges have been roughened to provide finger grip.	197.4
47				Tooth (animal)	1	Cattle tooth	6
47				Tooth (animal)	1	Cattle tooth	6
47			33	Tooth (animal)	1	Pig tooth	3.3
47				Tooth (animal)	1	Pig incisor tooth	2.9
47				Tooth (animal)	1	Pig tooth	2.9
47			40	Tooth (human?)	1	Human tooth?	1.4
48				Bone (animal)	8	Animal bone	98.6
48			29	Bone (animal)	2	Animal bone	70.9

Context No.	Cut No.	Recovered from samples	Small Finds No.	Material	No. of items	Description	Weight (g) unless stated
48			41	Coin	1	Roman coin	
48				Daub/clay	6	Daub/clay	94.8
49	55			Bone (animal)	1	Animal bone	4.9
49	55			Slag/clay	many	Many friable pieces	1000
49	55		42	Slag/clay	4	Pieces	456.2
53		Y		Daub/clay		Small red clay pieces	28.7
53		Y		Daub/clay		Lighter coloured clay or heated red clay	2.9
53		Y		Iron		Very small pieces of magnetic material	16.1
53		Y		Organic		Charcoal flecks	>0.1
53		Y		Organic	1	Insect abdomen case	>0.1
53		Y		Organic		Charcoal, very tiny pieces	0.1
53		Y		Residue			
53		Y		Slag/clay		Possible furnace material	4.5kg
53		Y		Stone (natural)	1	Large quartz stone, part of possible furnace?	447.4
53		Y		Stone (natural)	4	Small natural pieces?	19.7
56				Bone (animal)	11	Animal bones	128.8
56				Bone (animal)	1	Left lower pig jaw 3 teeth	25.4
56		Y		Bone (animal)	8	7 Bone + 1 Pig Jaw with 3 teeth	21.4
56				Bone (animal)	1	Right lower pig jaw	15.5
56		Y		Bone (animal)	2		5.1
56		Y		Bone (animal)	16	15 bone plus 1 claw (bird?)	4
56		Y		Bone (animal)		1 burnt bone fragment	1.6
56		Y		Bone (animal)	4	animal bone	1.2
56		Y		Daub/clay		5 small abraded fragments of daub/burnt clay	1.4
56		Y		Daub/clay	5	Small red clay pieces	1.2
56		Y		Iron	1	Square headed bent nail	0.7
56		Y		Iron	1	Square headed nail	0.6
56		Y		Organic		Charcoal	7
56		Y		Organic		Charcoal	0.2
56		Y		Organic (roots)		Matted roots	3.9
56			43	Pottery	34	1 body sherd with incised line decoration. 33 other bodysherds Granitic fabric. South Devon ware? Romano-British (Internal residue present)	172.5
56				Pottery	13	Romano-British potsherds	142.2
56			43	Pottery	13	1 rimsherd. Everted. 1 shoulder/neck sherd with diagonal incised line decoration. 4 bodysherds with incised line (lattice pattern) 8 other bodysherds Granitic fabric. South Devon ware? Romano-British (Internal residue present)	142.2
56				Pottery	4	4 sherds granitic fabric. Decorated with incised line in lattice pattern. South Devon ware? Romano-British (Internal residue present)	52.9
56			43	Pottery	1	Romano-British. Larger of rimsherds	44.4
56			44	Pottery	2	2 neck sherds granitic fabric. South Devon ware? Romano-British	21.7
56			45	Pottery	1	1 basal angle sherd (flat base) granitic fabric. South Devon ware? Romano-British	18.2
56			43	Pottery	1	Romano-British. Smaller of rim piece	17.1
56				Pottery	1	Romano-British. Smaller of rimsherds	17.1
56		Y		Pottery		2 body sherds with incised line decoration forming a lattice pattern. 4 other bodysherds Granitic fabric. South Devon ware? Romano-British. (Internal residue present)	16.2

Context No.	Cut No.	Recovered from samples	Small Finds No.	Material	No. of items	Description	Weight (g) unless stated
56			43	Pottery	1	1 rimsherd. Everted. Granitic fabric. South Devon ware? Romano-British	9.5
56			43	Pottery	1	1 rimsherd. Everted. Granitic fabric. South Devon ware? Romano-British	9.5
56		Y		Pottery		1 body sherd Granitic fabric. South Devon ware? Romano-British (Internal residue present)	4.1
56		Y		Residue			
56		Y		Slag		1 metal slag fragment	1.6
56		Y		Stone (natural)	1	Quartz, broken pebble	66.8
56		Y		Stone (natural)	6	Waterworn natural pebbles	43.8
56		Y		Stone (natural)	29	28 quartz pieces, plus 1 quartz crystal	41.1
56		Y		Stone (natural)	2	Waterworn iron-rich pebble plus slate/quartz stone	10.5
62		Y		Organic		Charcoal	1
62		Y		Organic		Insect abdomen / thorax poss ground beetles plus heads with antenna of ant/beetle and a fly	0.3
64		Y		Organic		Charcoal, very small pieces	0.1
U/S				Lead	3	Pieces of smelted lead	136.9

Appendix 6: Small Finds register

Number	Context	Type	Easting	Northing	Height (m OD)
1	2	Pottery	220102	111657	7.497
2	2	Pottery	220102	111657	7.465
3	2	Stone	220098	111656	7.407
4	7	Stone	220101	111654	7.036
5	10	Quartz	220099	111656	7.257
6	2	Stone	220094	111655	7.286
7	10	Stone	220099	111656	7.453
8	18	Stone	220099	111654	7.028
9	10	Iron	220099	111656	7.313
10	10	Stone	220099	111657	7.405
11	24	Pottery	220102	111657	7.364
12	10	Bone	220099	111656	7.117
13	24	Stone	220102	111657	7.293
14	11	Stone	220092	111655	7.266
15	3	Stone	220094	111655	7.242
16	45	Stone	220089	111654	7.137
17	46	Stone	220093	111654	7.329
18	36	Iron	220099	111655	7.083
19	46	Pottery	220093	111654	7.041
20	46	Pottery	220093	111655	7.02
21	46	Pottery	220093	111654	6.961
22	46	Pottery	220092	111654	6.966
23	46	Pottery	220092	111654	7.087
24	46	Pottery	220093	111653	7.087
25	37	Stone	220099	111656	7.028
26	36	Bone	220099	111655	6.961
27	46	Pottery	220092	111654	7.064
28	47	Pottery	220097	111654	7.095
29	48	Bone	220100	111655	7.09
30	46	Pottery	220093	111655	7.033
31	46	Pottery	220093	111653	6.966
32	46	Pottery	220093	111653	6.983
33	47	Tooth	220097	111654	7.009
34	47	Pottery	220095	111655	7.084
35	46	Pottery	220094	111653	6.959
36	46	Pottery	220093	111654	6.955
37	46	Pottery	220093	111654	6.908
38	46	Pottery	220093	111654	6.968
39	47	Pottery	220095	111655	7.061
40	47	Tooth	220095	111655	7.071
41	48	Coin	220100	111655	7.058
42	49	Slag	220103	111656	7.063
43	56	Pottery	220097	111655	7.071
44	56	Pottery	220096	111655	7.083
45	56	Pottery	220096	111656	7.129

Appendix 7: Table of marine molluscs

Context No.	Cut No.	Recovered from samples	No. of items	Description	Weight (g)
2		Y	1	Flat periwinkle	>0.1
2			153	Mainly common limpet (<i>Patella Vulgata</i>) 142 whole + 11 broken	331.7
2		Y	many	Mussel fragments	257
2			34	Mainly common limpet (<i>Patella Vulgata</i>)	80.9
2			34	Common limpet (<i>Patella Vulgata</i>)	80.9
2		Y		26 whole limpet plus fragments	60.7
2			39	Common mussel (<i>Mytilus Edulis</i>) fragments	41
2			10	Thick topshell (<i>Monodonta Lineata</i>) 7 whole + 3 broken	37.2
2			6	4 whole +2 Broken Dog Whelk (<i>Nucella lapillus</i>)	14.8
2			6	Dog Whelk (<i>Nucella lapillus</i>) 4 whole + 2 broken	14.8
2		Y	4	3 whole + 1 broken edible periwinkle (<i>Littorina littorea</i>)	11.7
2			6	Common mussel (<i>Mytilus Edulis</i>)	6.5
2			6	Common mussel (<i>Mytilus Edulis</i>) fragments	6.5
2			3	Dog Whelk (<i>Nucella lapillus</i>)	4.8
2		Y	1	Thick topshell (<i>Monodonta lineata</i>) Edible?	4.7
2			1	Thick topshell (<i>Monodonta Lineata</i>)	3.9
2			1	Thick topshell (<i>Monodonta Lineata</i>)	3.9
2			1	Flat periwinkle (<i>Littorina littoralis</i>)	0.6
2			1	Flat periwinkle (<i>Littorina littoralis</i>)	0.6
2		Y		Mussel fragments	0.2
3			110	Mainly common limpet (<i>Patella Vulgata</i>) 89 whole + 21 broken	256.1
3			106	Mainly common limpet (<i>Patella Vulgata</i>) 85 whole + 21 broken	186.5
3			40	39 whole + 1 Broken <i>Monodonta Lineata</i> (Thick Topshell)	131.4
3			40	Thick topshell (<i>Monodonta Lineata</i>) 39 whole + 1 broken	131.4
3			52	Mainly common limpet (<i>Patella Vulgata</i>) 36 whole + 16 Broken	101.1
3			52	Mainly common limpet (<i>Patella Vulgata</i>) 36 whole + 16 broken	101.1
3		Y		Mussel shell fragments	95.7
3			14	Thick topshell (<i>Monodonta Lineata</i>)	48.4
3		Y		1 limpet shell and fragments	20.5
3			12	Common mussel (<i>Mytilus Edulis</i>) fragments	14.9
3			12	Common mussel (<i>Mytilus Edulis</i>) fragments	14.9
3			16	Common mussel (<i>Mytilus Edulis</i>) fragments	12.5
3			2	Thick topshell (<i>Monodonta Lineata</i>)	9.9
3			2	Edible Periwinkle (<i>Littorina littorea</i>)	6.4
3			2	Dog Whelk (<i>Nucella lapillus</i>)	4.1
3			2	Dog Whelk (<i>Nucella lapillus</i>)	4.1
3			1	Dog Whelk (<i>Nucella lapillus</i>)	3.2
3			1	Dog Whelk (<i>Nucella lapillus</i>)	2.3
3			1	Fragment of Dog Cockle (<i>Glycymeris Glycymeris</i>)	1.5
3			1	Flat periwinkle (<i>Littorina littoralis</i>)	1.2
3		Y	13	12 x mussel shell fragments plus 1 limpet fragment	0.7
3				Small bag of Turret shell (<i>Rissoa Parva</i>)	0.4
3			33	Common mussel (<i>Mytilus Edulis</i>) frags	
3			3	Common limpet (<i>Patella Vulgata</i>)	
3			1	Common mussel (<i>Mytilus Edulis</i>) frags	
3			108	Mainly common limpet (<i>Patella Vulgata</i>) 87 whole + 21 broken	
3			10	Common mussel (<i>Mytilus Edulis</i>) frags	
3			1	Dog Whelk (<i>Nucella lapillus</i>)	
3			15	Thick topshell (<i>Monodonta Lineata</i>)	
3			1	Dog Cockle fragment?	
3				Contains 4 <i>Rissoa Parva</i> as well as <i>Paludestrina jenkinsi</i> and <i>Alvanio Canallata</i>	
6	5		6	Flat periwinkle (<i>Littorina littoralis</i>)	4.6
6	5		5	Marine shell (one broken)	4.3
6	5		5	Marine shell (one broken)	4.3
10	25		3	Small fragments	<0.1
10	25		1	(<i>Ostrea edulis</i>) common oyster half shell	8.9

Context No.	Cut No.	Recovered from samples	No. of items	Description	Weight (g)
10	25		1	(<i>Patella Vulgata</i>) common limpet	4.7
10	25		1	Common mussel (<i>Mytilus Edulis</i>) frag	1.3
10	25		3	Fragments of unknown shell	0.3
11	85		10	Mainly common limpet (<i>Patella Vulgata</i>) 9 whole + 1 broken	26.1
11	85		3	Common mussel (<i>Mytilus Edulis</i>) fragments	2.2
11	85		58	Mainly common limpet (<i>Patella Vulgata</i>) 47 whole + 11 broken	
11	85		8	Thick topshell (<i>Monodonta Lineata</i>) 7 whole + 1 broken	
11	85		15	Common mussel (<i>Mytilus Edulis</i>) fragments	
11	85		1	Dog Whelk (<i>Nucella lapillus</i>)	
13	27		15	9 mussel, 5 limpet, 1 topshell	28.5
13	27		9	Common mussel (<i>Mytilus Edulis</i>) frags	16.6
13	27		5	Common limpet (<i>Patella Vulgata</i>)	5.9
13	27		1	Thick topshell (<i>Monodonta Lineata</i>)	4.8
14	28		14	Mainly common limpet (<i>Patella Vulgata</i>) 9 whole + 5 broken	27.4
14	28		19	Common mussel (<i>Mytilus Edulis</i>) fragments	15.3
15	30		3	1 half shell and 2 fragments	3
15	30		3	Common mussel (<i>Mytilus Edulis</i>) 1 half shell + 2 frags	3
29			4	Common mussel (<i>Mytilus Edulis</i>) fragments	4.7
29			1	Edible periwinkle (<i>Littorina littorea</i>)	3.5
29			1	Common limpet (<i>Patella Vulgata</i>)	1.4
46			1	Limpet (<i>Patella vulgata</i>)	8
46		Y	1	Broken thick topshell (<i>Mondonta lineata</i>)	1.2
47			126	Flat periwinkle (<i>Littorina littoralis</i>) 123 whole + 3 broken	90.1
47			9	Common limpet (<i>Patella Vulgata</i>) 7 whole + 2 broken	29.3
47			7	Thick topshell (<i>Monodonta Lineata</i>) 4 whole + 3 broken	14.6
47			8	Common mussel (<i>Mytilus Edulis</i>) frags	13.6
47			2	Great Scallop (<i>Pecten Maximus</i>) Frags	11.9
47			2	Dog Whelk (<i>Nucella lapillus</i>)	9.1
47			2	Variegated Scallop (<i>Chlamys varia</i>) frags	0.5
56		Y	1	Flat periwinkle	>0.1
56			1	Frag of Warty Venus shell? (<i>Venus verrucosa</i>)	4.2
56			1	Broken limpet (<i>Patella vulgata</i>)	2.7
56		Y		Fragments of limpet and mussel	2.3

Appendix 8: Table of terrestrial molluscs

Context No.	Cut No.	Recovered from samples	No. of items	Description	Weight (g)
2		Y		<i>Cochlicella acuta</i>	19.7
2		Y	73	<i>Cochlicella acuta</i> whole & frags	4.9
2		Y		2 x <i>Cochlicopa lubricella</i> rather than <i>lubrica</i> , 1 x <i>Clausilia bidentata</i> , 3 x <i>Discus rotundatus</i> + 3 immature, unknowns?	0.3
3		Y		Includes <i>Cochlicella acuta</i>	10.5
3		Y		<i>Cochlicella acuta</i>	0.8
3			1	Very large common snail (<i>Helix aspersia</i>)	
37		Y	1	<i>Cochlicella acuta</i>	>0.1
43		Y		<i>Cochlicella acuta</i>	0.2
44		Y		<i>Cochlicella acuta</i> + 1 other	0.2
46		Y		<i>Cochlicella acuta</i>	1.2
56			3	Whole <i>Cepaea nemoralis</i> (Brown Lip Snail)	10.2
56		Y		<i>Cochlicella acuta</i>	0.1
62		Y		Very degraded <i>Cochlicella acuta</i>	0.2
64		Y		<i>Cochlicella acuta</i>	>0.1

Notes on land snails by Steve Hebdidge (referencing Turk 2001)

Cepaea nemoralis (brown-lipped snail), 12mm–22 mm

Native. Nearly ubiquitous.

Clausilia bidentata (two toothed door snail), 9mm–11mm

Native, Found among rocks, old walls, woods and hedge banks. Widespread and common.

Subfossil: Riviere Towans SW5537 (Johnson 1903); Phillack Towans SW53 (Edmunds 1848); Gwithian SW588424 (Spencer 1975); Towan Head, Newquay SW800625 (Kennard and Warren 1903, Woodward 1908); Perranporth SW759556 (Spencer 1975).

Cochlicella acuta (pointed snail), 10mm–18mm

Probably a late prehistoric introduction & found in maritime situations usually dunes and coastal grasslands.

Subfossil: found mouth of river Hayle marked quarry or gravel pit associated with midden; Godrevy sandhills SW54 (Johnson 1903); Gwithian SW588424 (Spencer 1975); Harlyn Burial Ground (Bullen 1902; 1912); St Piran Church area SW7656 (Bullen 1909); other places Phillack, Towans, Perranporth, Towan Head Newquay, Trebertherick and Trebertherick Point, Mother Ivey's Bay, Brea Hill, St Michael's Rock.

Cochlicopa lubricella 4.5mm–6.5mm

Native, catholic and characteristically in drier places than *C. lubrica*. It was not recognised as a separate species until mid 20th Century (Mandahl-Barth 1950).

Subfossil: Towan Head Newquay SW800625; Perranporth SW759556; Gwithian SW588424 (Spencer 1975).

Discus rotundatus (rotund disc), 5.5mm–7mm

Native. Nearly ubiquitous.



Subfossil: found Phillack Towans SW53 (Edmunds 1848); Gwithian SW588424 (Spencer 1975); Harlyn Burial Ground (Bullen 1902; 1912); Perranporth; Towan Head Newquay SW800625 (Kennard and Warren 1903; Woodward 1908; Spencer 1975).

Appendix 9: Conservation record for coin



LRconservation

Treatment report

Job No: 1701	Object Name: Possible coin	Material: Copper alloy	Age: Roman or Romano British		
client: Charlie Johns, Cornwall Archaeology Unit					
Photos:	X-rays:	Samples:	Previous Treatment:		
Date Started: 6.2.17		Date Completed: 6.7.17	Conserved By: Laura Ratcliffe-Warren		
Description:	Size:	Diameter 13mm		Thickness 2mm	No. pieces 1
<p>Small copper alloy disk – most likely a coin with soil adhering to it. A bump on one side suggests a head.</p> <p>Excavated from a foreshore location site code DPL17, Small Find number Δ41, context (48)</p> <div style="display: flex; justify-content: space-around;">   </div>					
<p>Condition:</p> <p>Major Structural:</p> <p>Minor structural:</p> <p>Surface damage:</p> <p>Accretions: Soil and some marine type concretion.</p> <p>Chemical: Appears to be largely mineralised no obvious active corrosion.</p>					

Biological:

Disfigurement:

Bad old repair:

Treatment:

Mechanical removal of the surface concretion reveals an uneven surface, no sharp definition of any decoration. It is obvious however that there are two flat disks of metal, either two very thin coins back to back or a folded piece of metal with two round sides, like a metal tag on a binding. Decoration that can be made out is suggestive of coins though with one side looking like a head facing left and the other looking like two standing figures.

Possible head facing left.



Possible two figures either side of a pillar



Double layer



No consolidation was required as the item seems stable and hard.

Recommendations:

Keep in low humidity and handle with gloves.

Appendix 10: Project Design



Project Design

Excavations at Duckpool

Morwenstow, Cornwall 2016

For the National Trust



Cornwall Archaeological Unit

Cornwall Archaeological Unit

Project Design:

Excavations at Duckpool

Morwenstow 2016

For the National Trust

Authors	Charlie Johns
Derivation	Brief supplied by Jim Parry
Origination date	17/10/2016
Revisers	
Date of last revision	12/11/2016
Version	Rev 00
Status	Draft
Summary of changes	
Circulation	
Required action	
File location	G:\TWE\Waste & Env\Strat Waste & Land\Historic Environment\Projects\Sites\Sites D\Duckpool NT Excavation 2016
Approval	

Cover photograph: Duckpool from the air.

Introduction

Cornwall Archaeological Unit (CAU) is pleased to have been invited by Jim Parry on behalf of the National Trust to submit a tender for the investigation of Romano-British industrial site, located at Duckpool, Morwenstow, on the north Cornish coast (centred at NGR SS 2010 11634). The excavation is being undertaken because the site has been identified as being in danger of being lost through coastal erosion (Fig 1).

CAU have undertaken numerous archaeological investigations of prehistoric and Romano-British sites along the north Cornish coast, including the initial excavations at Duckpool in 1992 (Ratcliffe 1995). CAU have also produced a report on Duckpool for a Historic England project to assess the heritage significance of Cornish ports and harbours (Buck *et al* 2016). We are confident that we can draw on our expertise and knowledge to undertake a successful project which will satisfy the terms of the brief.

Background

Duckpool is located in the parish of Morwenstow on the exposed Atlantic coast of north Cornwall which is characterised by its high vertical or steeply sloping cliffs. It is a small cove with a shingly, pebbly beach at the mouth of the Coombe Valley and exposed to the prevailing westerly winds from the Atlantic which drive wind and rain over the beach and funnel them up through the valley.

During the summer of 1984 amateur archaeologist Richard Heard recorded a bank of clay and silt exposed at the top of the beach together with a patch of rock burnt red and patches of charcoal. There were also layers of limpet and whelk shells and two lines of stones forming a V-shaped trench. David Thackray of the National Trust also reported that much slag had been found here (Ratcliffe 1995).

The threat to the site posed by coastal erosion and use of the area as car park led to an excavation by the Cornwall Archaeological Unit (CAU) in 1992 which identified a series of broadly contemporary hearths, a flue and layers containing industrial and domestic debris. During the later Romano-British period (3rd to mid-4th centuries BC) the site appears to have been a specialist settlement involved in secondary metal working, including the casting of lead, pewter and possibly copper alloy objects. In addition the much more unusual process of extracting dye — known as Tyrian purple — from dog whelks took place here (Ratcliffe 1995).

Duckpool may also have had a more general function as a small harbour serving its immediate hinterland and there may have been other industries or processes associated with this role as well as metal working and dye extraction (Ratcliffe 1995).

Radiocarbon dates and artefactual evidence indicate that the beach-head continued to be used as an industrial site between the 7th and 12th centuries AD, although metal working had ceased and the nature of activities taking place is unknown. It has also been suggested that Duckpool may have functioned as a harbour for the prosperous early medieval manor of Kilkhampton (Ratcliffe 1995). It does not appear to have developed as permanent harbour in later periods, although the beach may have continued to be used as landing place. The place-name is first recorded in the 16th century as *Duck Poole* (Norden 1728) and is an English coastal name whose meaning is self-explanatory as wild ducks are still seen in the pool behind the shingle bank at the top of the beach.

Further excavation in the western bay of the car park would allow for the recording of remains here before their gradual erosion and establish the full surviving extent of the below ground archaeological remain to help determine whether this site should be designated as a Scheduled Monument. It is anticipated that the site investigations will take place during November/December 2016.

Scope and aims of the archaeological recording

The purpose of the archaeological project will be:

General aims

- To record archaeological features, layers and finds associated with the Romano-British industrial site.
- To establish the extent, condition, significance and character of the archaeological resource.
- To establish the presence/absence of archaeological remains.
- To identify any artefacts relating to the use of the site.
- The dissemination and publication of the results.
- The long-term conservation of the project archive in appropriate conditions.

Specific objectives

In particular the key objectives of all elements of the project will be:

1. To determine extent of the Romano-British industrial site.
2. To improve the known chronology of the site through the acquisition of dateable material for radiocarbon dating.
3. Make a record of the site before it is eroded away by the sea.

Method statement

All recording work will be undertaken according to the appropriate Chartered Institute for Archaeologists *Standards and Guidance*. Staff will follow the CIfA *Code of Conduct* and *Code of Approved Practice for the Regulation of Contractual Arrangements in Archaeology*. The Chartered Institute for Archaeologists is the professional body for archaeologists working in the UK.

The archaeological programme will follow four stages: fieldwork; archiving; analyses; and report.

Fieldwork

Pre-excavation

In advance of the excavation CAU, will discuss and agree with the National Trust:

- Working methods and programme.
- Arrangements for the deposition of the archive and human remains.
- Health and Safety issues and requirements.

GPS/ Total Station survey

- Prior to excavation taking place the site will be surveyed using a GPS or if conditions do not allow for this an EDM.

This will include:

- A survey produced at an appropriate scale with an GPS/EDM
- The survey will be tied to a fixed identifiable feature marked on the large-scale ordnance survey map or if fixed points are lacking two permanent pegs will be left *in situ*.
- The following sites will be shown on the survey:
 - The position/extent of the site.

- The location of any other features in the immediate vicinity.
- A north-south section across the site will be recorded. The position of section will be recorded on the main plan.
- The drawn output of the survey will be in the form of AutoCad files.
- The survey's methodology will be detailed within the archaeological report and an illustrative plan and profiles produced for incorporation within the report.

Excavation

It is proposed that the main area will excavated down to natural subsoil/bedrock. All features exposed in the excavated area will be excavated by hand and archaeologically recorded by written description, plan and section and photographic record as appropriate by a CAU archaeologist. The exposed sections will be cleaned up and recorded. If time allows, two test pits will be excavated in the western car park to investigate the extent of the site.

During the archaeological recording the CAU archaeologist will undertake the following tasks:

All archaeological features will be investigated and as a minimum:

- i) Discrete features will be fully excavated.
- ii) Complex features and/or deposits will be excavated to a minimum to enable information to be collected about construction techniques. Should sensitive remains requiring further analysis be uncovered (for example, a metalworking area), the excavation methodology would be adapted accordingly, following discussion with National Trust Archaeologist.
- iii) The long faces of the upstanding trench sections will be cleaned by hand to allow the site stratigraphy to be understood, for the identification of archaeological features, and palaeoenvironmental sampling as appropriate.

Any variation of the above will be undertaken in agreement with the National Trust Archaeologist.

Recording - general

- The position of the standing sections will be marked onto a scaled base map (linked to the National Grid). Prior to the start of the archaeological recording survey points will be established so that the position of the standing sections can be accurately plotted.
- All features shall be hand-dug and recorded in plan and section at scales of 1:10, 1:20 or 1:50. All scale drawings shall be undertaken at a scale appropriate to the complexity of the deposit/feature and to allow accurate depiction and interpretation. Site drawings (plans, sections, locations of finds) will be made by pencil (4H) on drafting film; all plans will be linked to the Ordnance Survey Landline (electronic) map; all drawings will include standard information: site details, personnel, date, scale, north-point.
- All features and finds will be accurately located at an appropriate scale. Sections will normally be drawn at 1:10 and plans at 1:20.
- All archaeological contexts will be described to a standard format linked to a continuous numbering sequence.
- Photography: colour digital images will be taken with black and white photographs being taken for archive purposes. This will include both general and site specific photographs. Photographs should have a scale and detailed ones should include a north arrow. Photographs will be taken to illustrate the principal features and finds discovered, in detail and in context. The photographic record will also include colour digital working shots to illustrate more generally the nature of the archaeological

operation mounted. All photographs of archaeological detail will feature an appropriately-sized scale.

- Drawings and photographs will be recorded in a register giving details of feature number and location.
- All spoil from the excavations will be adequately inspected for finds.
- If human remains are discovered on the site they will be treated with respect. Human remains must initially be left *in situ*, covered and protected. The National Trust Archaeologist and the Public Health will be informed. All recording will conform to best practice and legal requirements.
- Where any artefacts identified as treasure or potential treasure, including precious metals, groups of coins or prehistoric metalwork, be exposed, these will be removed to a safe place and reported to the local coroner according to the procedures relating to the *Treasure Act 1996 Code of Practice (2nd Revision)*. Where removal cannot be effected on the same working day as the discovery suitable security measures will be taken to protect the finds from theft.

Treatment of finds

The archaeological fieldwork may produce artefactual material.

- All finds in significant stratified contexts predating 1800 AD (e.g., settlement features) should be collected by context and described. Post-medieval or modern finds may be disposed of at the cataloguing stage. This process will be reviewed ahead of its implementation.
- All finds will be collected in sealable plastic bags which will be labelled immediately with the context number or other identifier.

Palaeoenvironmental sampling

- Sealed/undisturbed archaeological contexts in the form of buried soils, layers or deposits within significant archaeological features (ditches and pits, etc.) will be sampled for environmental evidence and dating material. Advice may be needed from Hayley McParland, Historic England, Science Advisor (South West).

Archiving

Following review with the CAU Project Manager the results from the fieldwork will be collated as an archive and deposited with the National Trust. CAU will retain a copy of information which is stored in the Project Information File.

This will involve washing and cataloguing of finds, the indexing and cross-referencing of photographs, drawings and context records.

- All finds, etc., will be stored in a proper manner (being clearly labelled and marked and stored according to CAU guidelines).
- All records (context sheets, photographs, etc.) will be ordered, catalogued and stored in an appropriate manner (according to CAU guidelines).

An ordered and cross-referenced site archive will be produced. Site plans, photographs and other records will be completed and indexed. Any retrieved artefacts will be washed, marked and catalogued.

As the cairn/roundhouse constitutes a previously unrecorded site a new entry will be made into the National Trust's SMR; draft entry prepared by CAU and reviewed by the National Trust Archaeologist.

Archive report

The results from the elements of the project (survey and excavation) will be drawn together and presented in a concise report.

A draft of the report will be supplied to the National Trust for comment before it is completed. Six copies of the final report will be required (Property x 2, National Trust

Archaeologist x 2, National Trust Head Office x 2) The report will be presented in a bound A4 printed document; larger pages will be folded into the document. A top copy of the report will be presented unbound for ease of copying.

A copy of the report will be provided to the National Trust Archaeologist in an agreed digital format.

Copies of the report will also be distributed to the Cornwall and Isles of Scilly HER and the main archaeological record centres.

The report production will involve:

- producing a descriptive text;
- producing maps and line drawings;
- selecting photographs;
- report design;
- report editing;
- dissemination of the finished report
- Deposition of archive and finds with the National Trust.

The report will have the following contents:

- Summary - Concise non-technical summary.
- Introduction - Background, objectives, aims and project methodology.
- Results - Factual description of the results of the various aspects of the project with separate sections as necessary for discussion and interpretation.
- Discussion - Discussion of the interpretation of the results, highlighting information gained on a chronological or thematic basis.
A consideration of evidence within its wider context.
Recommendations for further analysis and publication.
- Summary table - A summary table and showing the features, classes and numbers of artefacts recovered and soil profiles with interpretation.
- Archive - A summary and index to the project archive.
- Appendices - List of contexts
- List of graphic records
- List of photographs
List of finds and soil samples
Specialist analyses.
- Illustrations - General location plan.
- Detailed location plans to link fieldwork results to OS map.
- Selected plans and section drawings of the long sections, in which archaeological features are recognised along with adequate OD spot height information. Plans must show the orientation of standing section in relation to north. Section drawing locations will be shown on the site plan. Archaeologically sterile areas need not be illustrated unless

this can provide information on the development of the site stratigraphy or show palaeoenvironmental deposits that have influenced the site stratigraphy.

Finds drawings (if appropriate).

Photographs showing the general site layout and exposed significant features and deposits that are referred to in the text. All photographs should contain appropriate scales, the size of which will be noted in the illustration's caption.

An online OASIS (Online Access to the Index of archaeological investigationS) form shall be completed in respect of the archaeological work. This will include a digital version of the report. The report will also include the OASIS ID number.

A draft digital copy, in MS Word format, of an appropriately illustrated report of the work will be provided to the client by 24th December 2017.

Following any necessary revisions, a copy of the final report will be delivered to the client within 15 days of comments being received. The hard copies will include a CD of the photo archive.

Analysis

The structural and stratigraphic data and artefactual material will be reviewed with National Trust Archaeologist to establish whether further analyses and reporting is appropriate and what its scope should be. The outline of the final report, and the work required to produce it will be determined.

In the event of significant remains being recovered (e.g., prehistoric and Roman period artefacts) it may be appropriate to:

- Liaise with specialists (e.g., artefacts) to arrange for analyses of the potential for further analysis and reporting.
- Consult with the National Trust Archaeologist over the requirements for analysis and reporting.

Updated project design and final publication

In the event of significant remains being recorded, the scope and final form of the report will be reviewed and agreed with the National Trust; for example in addition to an archive report the results should be published in an academic journal (for example, *Cornish Archaeology*).

Monitoring

This project design will need to be approved by the National Trust Archaeologist. CAU will contact the National Trust Archaeologist and property staff to discuss the project and confirm details of the brief and timetable. Any problems or queries will be directed to either the National Trust Archaeologist or the property staff. CAU will keep the National Trust Archaeologist regularly informed of the project's progress, including during report preparation. CAU will discuss the results of the work with the National Trust Archaeologist, with a draft report (circulated in advance), before the final completion of the report.

Health and safety

CAU follows Cornwall Council's *Statement of Safety Policy*. Safety at Work, Etc., Act 1974, and any other Acts, Regulations or Orders pertaining to the health and safety of employees. All personnel will conduct themselves in an appropriate manner in accordance with relevant CIfA guidelines (<http://www.archaeologists.net/codes/ifa>).

A full risk assessment will be produced in advance of the fieldwork.

References

- Buck, C, Johns, C, and Fleming, F, 2016. *Duckpool: Cornish ports and harbours; assessing heritage significance, threats, protection and opportunities*, Truro (Cornwall Archaeological Unit)
- Norden, J, 1728. *Speculi Britanniae Pars: a topographical and historical description of Cornwall*, London (reprinted 1966 by Frank Graham, Newcastle upon Tyne)
- Ratcliffe, J, 1995. Duckpool, Morwenstow: A Romano-British and early medieval industrial site and harbour, *Cornish Archaeol*, **34**, 81–171

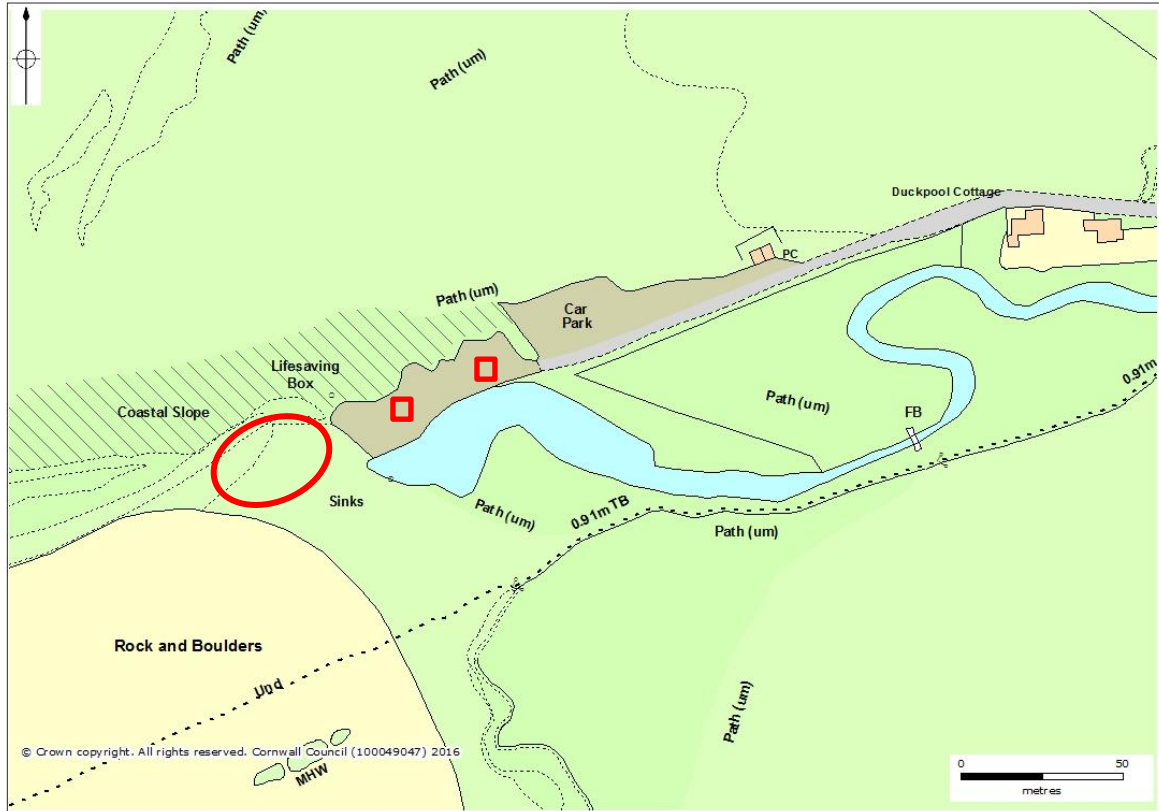


Figure 1: Location map



Figure 2: Air photograph of the site

Cornwall Archaeological Unit

Cornwall Archaeological Unit is part of Cornwall Council. CAU employs 20 project staff with a broad range of expertise, undertaking around 120 projects each year.

CAU is committed to conserving and enhancing the distinctiveness of the historic environment and heritage of Cornwall and the Isles of Scilly by providing clients with a number of services including:

- Excavations and watching briefs
- Assessments and evaluations
- Post-excavation analysis and publication
- Community Excavations and fieldwork projects
- Conservation works to sites and monuments
- Conservation surveys and management plans
- Historic landscape characterisation
- Town surveys for conservation and regeneration
- Historic building surveys and analysis
- Maritime and coastal zone assessments
- Air photo mapping
- Outreach: exhibitions, publication, presentations

Standards



CAU is a Registered Organisation with the Chartered Institute for Archaeologists and follows their Standards and Code of Conduct.

<http://www.archaeologists.net/codes/ifa>

Terms and conditions

Contract

CAU is part of Cornwall Council. If accepted, the contract for this work will be between the client and Cornwall Council.

The views and recommendations expressed will be those of CAU and will be presented in good faith on the basis of professional judgement and on information currently available.

Report distribution

Paper copies of the report will be distributed to the client, to local archives and national archaeological record centres.

A digital copy of the report, illustrations and any other files will be supplied to the client on CD or other suitable media.

Copyright

Copyright of all material gathered as a result of the project will be reserved jointly to the Cornwall Archaeological Unit, Cornwall Council and the National Trust. Existing copyrights of external sources will be acknowledged where required.

Use of the material will be granted to the client.

Freedom of Information Act

As Cornwall Council is a public authority it is subject to the terms of the Freedom of Information Act 2000, which came into effect from 1st January 2005.

CAU will ensure that all information arising from the project shall be held in strict confidence to the extent permitted under the Act. However, the Act permits information to be released under a public right of access (a "Request"). If such a Request is received CAU may need to disclose any information it holds, unless it is excluded from disclosure under the Act.

Insurance

CAU is covered by Cornwall Council's Public and Employers Liability Insurance, with a policy value of £50m. The Council also has Professional Negligence insurance with a policy value of £10m.

Project staff

Work will be carried out by CAU field staff, in conjunction with the National Trust archaeologist, local volunteers, qualified specialists and sub-contractors where appropriate.

The project will be managed by Charlie Johns, a member of staff who is a Member of the Chartered Institute of Field Archaeologists (CIfA), he will:

- Discuss and agree the detailed objectives and programme of each stage of the project with the client and the field officer, including arrangements for health and safety.
- Liaise with the client regarding the budget and related issues.
- Monitor progress and results for each stage and edit the project report.

The fieldwork project will be undertaken with Sean Taylor and a CAU archaeologist. Both members of the team are experienced field archaeologists, who have undertaken comparable fieldwork Cornwall.

CAU Staff CV

Charlie Johns, BA, MCIfA

As an Archaeological Projects Officer with CAU (1991- present) Charlie has special responsibility for projects in the Isles of Scilly and for developing the Unit's maritime capacity. He has extensive experience of directing archaeological excavations and overseeing the post-excavation analysis to publication. Notable projects include the St Austell North East Distributor Road (1997), the Bryher Iron Age sword and mirror burial (1999) and the Lyonesse Project, a study of the development of historic coastal and marine environment of Scilly (2009-16).

Charlie's tasks will be:

- To manage the project and liaise with the client and project specialists.
- To direct and undertake the archaeological fieldwork.
- To edit the archive level report.
- To review the findings from the project and organize and agree an appropriate level of analysis and publication.
- To produce the final publication.

Sean Taylor BA, MCIfA

Sean is an Archaeological Project Officer with CAU, with a range of experience in undertaking archaeological excavations, assessments, evaluations, and watching briefs, and also landscape surveys. He was involved in the excavation of the Constantine Island cist and has excavated other Bronze Age sites, including the Stannon Down cairn group on Bodmin Moor. He is involved in the community group project to locate Tywardreath Priory. Past projects include managing and supervising excavations at the Truro Eastern District Centre, supervising the Mitchell to Newlyn East SWW watching brief, and the Scarcewater, Tregony, Camelford and Avon excavations. Landscape surveys include six assessments on the Lizard as part of the HEATH project, a number of landscape surveys for the National Trust, and he has undertaken surveys for the Exmoor National Park Authority as part of the Mire Restoration Project. He is an experienced user of AutoCAD, GIS, GPS, and EDM survey equipment.

Sean's task will be:

- To carry out the site survey.
- To undertake the archaeological excavation.
- To supervise volunteers and other staff members.
- To produce survey drawings for publication.

Specialists to be contacted during post excavation stage (as appropriate)

Henrietta Quinnell, Freelance finds specialist: Prehistoric and Roman period ceramics and worked stone.

Dr Tim Young, Freelance metallurgist: Analysis of metal working remains.

Dr Roger Taylor, Freelance petrologist: Prehistoric and Roman period ceramics and worked stone.

Julie Jones, Freelance Environmental archaeologist: Analysis of charred plant macrofossils.

Dana Challinor, Freelance charcoal specialist: Analysis of prehistoric or Roman period wood charcoal.

Appendix 11: National Trust Project Recording Form



NT Region: North Cornwall **NGR:** SS 2010 11634

NT Property: Duckpool

Project Name: Duckpool, Morwenstow: Archaeological Excavation 2017.

Activity Type: Excavation

Date Started: WSI request - 12/11/2016, Fieldwork on site 16/01/2017 - 21/01/17

Originator: Cornwall Archaeological Unit

Reason for Project: To make a record of the site before it was lost to coastal erosion

Description: In January 2017 a team of archaeologists from the Cornwall Archaeological Unit investigated a site at Duckpool that was thought to be in danger of severe erosion by the sea.

Artefactual study and radiocarbon dating is required to better understand activity on the site, and securely date it.

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Inputted onto NTSMR: ~	NTSMR	Site	Activity	ID	No:
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To be filled in at end of Project

Date Finished: xxx

Location of Archive Deposit: ... xxx

Contents of Archive:

Xxx

Finds/Archive

xxx.....

Arrangements:

Report Title: Duckpool, Morwenstow: Archaeological Excavation 2017



Distributed to:

Heelis (2 copies) ~ Digital Copy to Heelis ~ Regional Office ~
Property Manager ~ NMR ~ Property Staff ~
Other:

.....
.....
.....

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