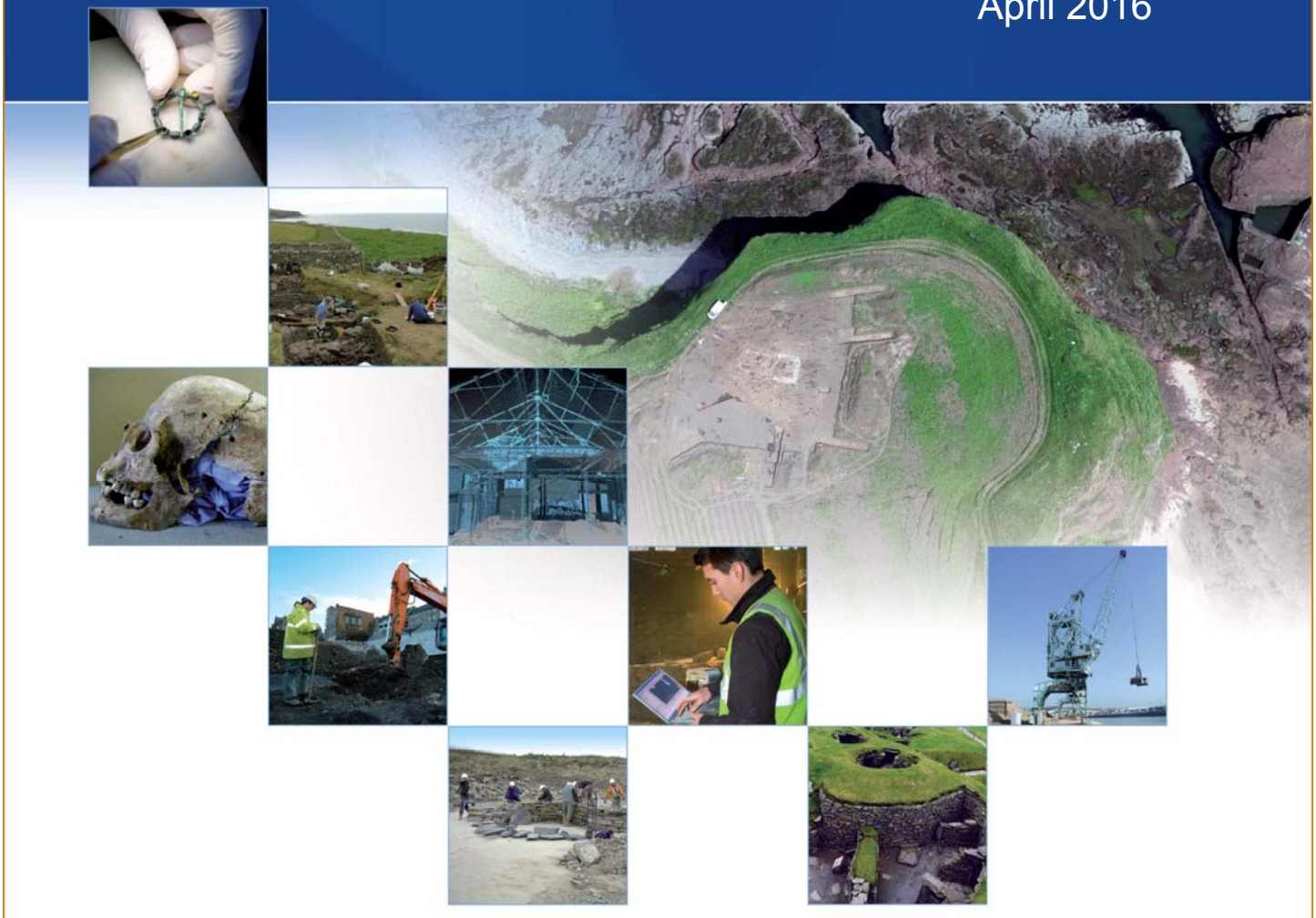
Moredun Top, Moncreiffe Hill, Perth and Kinross: Archaeological Evaluation Phase 1 Data Structure Report

AOC 23223
OASIS No. aocarcha1-243382
April 2016



AOC Archaeology Group

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Moredun Top, Moncreiffe Hill, Perth and Kinross:

Archaeological Evaluation Phase 1

Data Structure Report

On Behalf of: **Tay Landscape Partnership**
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National Grid Reference (NGR): **NO 1313 1988**

AOC Project No: **22849**

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Date of Fieldwork: **September 2015**

Date of Report: **February 2016**

This document has been prepared in accordance with AOC standard operating procedures.	
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Draft/Final Report Stage: Draft	**Date: 19/04/16**

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ABSTRACT

An archaeological excavation was undertaken by the Tay Landscape Partnership, with local volunteers, Perth and Kinross Heritage Trust and AOC Archaeology Group at Moredun Top hillfort. The works follow on from and compliment the earlier evaluation works completed at the adjacent site of Moncreiffe Hill, itself an Iron Age fort. The 2015 works formed the first season of an intended three year programme of excavations at the hillfort.

The 2015 works comprised five trenches, which investigated the three main lines of ramparts, an annex enclosure. Within the hillfort a large flat topped mound along with a double ring hut circle were investigated.

The excavation of the ramparts demonstrated that there was a complex sequence of enclosure at the hillfort. The trench excavated across the two main enclosing banks demonstrated that both of these had at least two separate phases of construction with primary earth banks being overlain by stone ramparts. A similarly long sequence of occupation deposits internal to the upper of the main rampart lines was recorded. Across all the lines of enclosure the massive and monumental nature of the dry-stone ramparts was revealed.

Excavations within the interior of the hillfort focussed on a flat topped mound. Here another large dry-stone wall was exposed probably the outer wall of a monumental roundhouse. In the interior of this structure were a series of in-situ burnt deposits probably derived from the burning of structural elements of the roundhouse. Limited excavation was also undertaken at a double ring hut circle within the interior.

A series of radiocarbon dates from across the site were obtained all of which dated to the 2nd half of the 1st millennium BC.

1 INTRODUCTION

A community archaeology project, comprising the excavation of five trenches, was carried out at Moredun Top, Moncreiffe Hill, Perth and Kinross by Perth and Kinross Heritage Trust with AOC Archaeology Group as part of the Tay Landscape Partnership scheme *Hillforts of the Tay*. The project followed on from two phases of evaluation completed at the adjacent Moncreiffe Hill in 2014 and 2015 (Cook et al 2014; Humble et al 2015) and aimed to: investigate the nature and date of the ramparts, to assess potential internal buildings. The works were conducted according to the terms of a *Project Design* (Strachan 2015). The project was undertaken with the kind permission of the landowner, Lord Moncreiffe to whom thanks are due. Tay Landscape Partnership and AOC Archaeology Group would like to thank all of the volunteers who made the excavation a success.

2 HISTORICAL BACKGROUND

Moredun Top Hillfort (NGR: NO 1355 1995; NMRS: NO11NW23; PKHER: MPK5232; Scheduled Monument: 9440) is the larger of two hillforts on Moncreiffe Hill, to the SE of Perth (Figure 1). The hill itself is a key geographical feature in the landscape, located at the meeting of the Rivers Tay and Earn and so dominating the lower straths of both rivers. The monument itself comprises a clearly multi-period site with the remains of at least two forts of late Iron Age and/or Early Historic date, as well as traces of other buildings. The monument lies between 190-225m O.D. and crowns the summit of Moredun Top, the highest part of Moncreiffe Hill. Its location exploits the naturally defensive cliffs on the south face of the hill, and affords extensive views of the surrounding landscape in all directions, truly dominating the landscape at the tryst of these important river systems.

Both Moredun Top, and its neighbour Moncreiffe Fort (NGR: NO 131 198), sit on exposed bedrock of the Ochil Volcanic Formation, being pyroxene – andesite, with the drift geology of the surrounding area consists of Glaciofluvial till, gravels, sands and silts (British Geological Survey 1:50000 digital data).

All of the currently identified earthworks relating to the site are included in the scheduled area. The Scheduled Monument designation documentation from March 2001 includes the following summary:

> *The monument comprises the remains of a hillfort with evidence for use dating from both the late Iron Age and the Early Historic period. The monument lies between 190-225m O.D. and crowns the summit of Moredun Top, the highest part of Moncreiffe Hill. From this point, it commands extensive views of the surrounding landscape and exploits the naturally defensive cliffs on the S face of the hill. The fort appears to show two main phases of construction and use. The first phase is a large roughly oval enclosure, measuring approximately 175m E-W by 100m N-S, defined by a stone and earth rampart. A second, inner, rampart may also date from this phase. The summit of the hill is enclosed by a double set of stone ramparts or walls. These define another roughly oval area approximately 50m NW-SE by 35m transversely. A further rampart following the natural contours of the hill on the N side encloses a large semi-circular "court" or annex, reminiscent of Early Historic sites throughout Scotland. Traces of possible footings for circular buildings have been recorded on the hill summit, but it is not clear if these relate to one or both of the phases of defensive activity. In addition to the physical remains, the site may also have historic associations. In AD728 a significant battle in the struggle for control of the Pictish Kingdom was fought at Monad Croib, also known as Monad Craebi. The modern "Moncreiffe" may derive from these earlier place names. The area proposed for scheduling comprises the*

> *remains described and an area around them within which related material may be expected to survive. It is an irregular area, measuring a maximum of 260m N-S by 250m E-W, as marked in red on the accompanying map extract*

Previous archaeological work

While there is no mention of either hillfort in the Old and New Statistical Accounts (1791-99 and 1834-45 respectively), the author of the Old Statistical Account notes that:

> *The view from the top of Moredun is extensive, various, and grand. The ingenious Mr Pennant, on account of the richness and variety of this prospect, calls it "The Glory of Scotland".*

The site appears annotated as 'Carnac fort (Remains of)' on the OS 1st edition 6" map. Christison notes relatively little about Moredun, noting that the 'remains are so dilapidated and overgrown that it is difficult to plan them' (1900, 81). He identifies only the central 'nuclear' fort, however he does note the existence of some external features and 'several small, round, saucer-shaped hollows' (ibid). The fort is subsequently described by Wainwright (1955) and Feachem (1963), the latter noting the multi-phased occupation with a 'dun-like structure' within a larger fort, and suggesting that the later could be post-Roman in date, and also noting that the roundhouses identified by Christison appeared to post-date both of these features.

A programme of archaeological works were undertaken at the adjacent hillfort of Moncreiffe Hill in September 2014 and April 2015 as an earlier phase part of the Tay Landscape Partnership scheme *Hillforts of the Tay*. These works comprised a detailed topographic survey of all visible features on site and the excavation archaeological trenches. In summary the results of these excavations are the confirmation of the presence of a hillfort defined by several enclosing ramparts of middle Iron Age date. In addition artefacts and radiocarbon dates demonstrate some form of activity in the middle Neolithic period.

3 OBJECTIVES

The overarching objective of the excavations was to 'establish a chronology for the development of this complex of sites'. The specific targets through which to achieve this objective are the mound, ramparts of the enclosures, and interior of the enclosures (Strachan 2015). To this end five trenches were excavated in 2015 these aimed to;

- Trench 1: assess nature/fate of construction of the mound;
- Trench 2: assess nature of ramparts and potential for any associated ditches;
- Trench 3: assess nature/date of the rampart and any associated ditches;
- Trench 4: assess nature/date of stone wall already revealed by early excavations;
- Trench 6: assess nature/date of proposed hut circle feature.

4 METHODOLOGY

The archaeological evaluation comprised the hand excavation of four trenches in locations agreed in advance with Historic Scotland, as a condition of the Scheduled Monument Consent. These trenches were placed to assess potential features identified in the RCAHMS survey (Figure 2).

The trenches were excavated by hand and all features and structures revealed were cleaned by hand before being recorded by digital photography, drawn to an appropriate scale and a written record produced using AOC *pro forma* context sheets. The archaeological works were undertaken in agreement with the project design (Strachan 2015).

5 RESULTS

The excavations were carried out between the 1st and the 26th of September 2015. Weather conditions were variable but generally clear and dry through the course of the excavations and archaeological visibility remained good. The following presents a summary of the excavation results full details can be found in the appendices.

Plate 1: Aerial view of Moredun hillfort during the excavations with T1 mid-centre and T3 top right.

5.2.1 Trench 1

Trench 1 was located over a prominent flat topped sub-circular mound at the north-east of Moredun, which appears to be respected by the all of the rampart lines in this sector of the hillfort (Figure 2). This flat topped mound measures 25m N-S by 32m E-W and is up to 2.5m high. The flat top of the mound measures 17.9m by 10.2m. The slopes of the mound are covered in a number of small hollows are probably small quarry pits post dating the use of the hillfort. Trench 1 extended for 15m NNE-SSW and was 4m wide, the trench extended over the southern edge and down the slope of the mound (Figure 2).

Across Trench 1 up to 0.2m of dark brown humic sandy silt turf (100) and topsoil (101) was removed to expose an at first chaotic mass of tumbled sub angular stone of various lithologies (102 & 105) (Figure 3). From tumbled stone deposit (102) a quartzite pounder or grinder (SF119) a piece of possibly vitrified stone (SF103) were recovered. Further excavation was limited to a 2m wide extending down the centre of the full length of Trench 1. Due to the location and nature of the structures and deposits within the trench permission for a 2m extension to the NNE of Trench 1 was sought and received from Historic Scotland. After extending the trench to the NNE the last 2m of the SSW end of the trench were not excavated any further.

Wall [124]

Extending across trench one was a large dry-stone wall [124] (Figure 4 & 6, Plate 2) composed of an internal face [110], rubble core (116) and external face [103]. Overall the wall was 5.8m thick, extending across the full width of trench one sondage and was a maximum of 0.7m high. The external facing course [103] (Figure 7) composed of large roughly squared and dressed blocks mainly of red sandstone up to 0.8m by 0.4m with smaller pinning between. Facing course [103] was laid in level courses with no bonding material present and survived up to 3 courses high. The rubble core (116) of wall [124] comprised large rounded and sub-angular stone in a matrix of sandy silt. The internal face [110] to wall [124] was composed of large squared and dressed blocks mainly of red sandstone with smaller pinning between. Underlying the wall was a deposit of grey silty clay (123) sitting on the bedrock (108).

Wall [124] had a slight curve, barely appreciable in the narrow width of the Trench 1 sondage the slight curve does tie in with a circular structure sitting on the flat top of the mound possibly the remnants of a monumental roundhouse.

Plate 2: Aerial view of trench 1 showing wall [124] with terraced bedrock outside

Overlying wall [124] were a number of deposits associated with its post abandonment collapse and slumping. These comprised a similar deposits of stone tumble (102 & 105) to the interior (102, 112 & 113) and exterior (105) of wall [124]. As well as these large stone tumble deposits there were deposits of smaller stone in a matrix of sandy silt (107 & 111) above wall [124] and to the exterior respectively.

Features to exterior of wall [124]

To the outside of the monumental roundhouse wall [124] the bedrock [108] had been shaped and quarried to form a series of terraces (Figure 5). As well as these cut terraces in the bedrock two patches of pecking or hammer marks were visible in the bedrock demonstrating that bedrock of the knoll had been shaped and altered. Overlying the bedrock at the bottom

end of the trench was a deposit of small sub-angular stone chips in a silty gravel matrix (114) derived quarrying and shaping of the bedrock above.

Overlying the quarried bedrock and the quarry chippings were several probable occupation deposits (104, 106 & 109) that comprised dark charcoal rich silts (Figure 6). From (104) a bipolar core (SF110) and an iron hoop or ring (SF111) and from (109) a damaged red sandstone disc-bead (SF120) was recovered (see artefact report below). These charcoal rich silt deposits are probably associated with the use and occupation of the roundhouse.

Interior features

Within the interior of the roundhouse below the collapse or slumping deposit (113) were a number of in-situ burnt deposits. The upper most of these (118) was a black, charcoal rich deposits with frequent large chunks of roundwood charcoal including carbonised wood (SF133), a bone disc (SF132) was also recovered from this deposit. This charcoal rich deposit probably represents the in-situ remains of structural timber elements of the roundhouse that have burnt and collapsed. A radiocarbon date obtained from hazel charcoal from this material provided a date range of 371-199calBC (Calibrated to 2σ, SUERC65160; Table 1). Underlying the roundwood charcoal layer (118) were two further layers of in-situ burning (119 & 120) of charcoal rich sands and silts, these are probably the burnt remains of the floor surface of the roundhouse. Below burnt floor layers (119 & 120) were two silty deposits (121 & 122) abutting the internal face [110] of wall [124].

5.2.2 Trench 2

Trench 2 was excavated across two of the ramparts of the hillfort of Moredun, and lay on the western side of the hillfort (Figure 2). From the survey of the hillfort the inner upslope rampart appeared to overlie the lower downslope rampart and Trench 2 aimed to investigate the chronological relationship between the two ramparts. Trench 2 was oriented NW-SE and measured 30m by 4m.

Plate 3: Excavation in progress, Trench 2.

Across Trench 2 up to 0.25m of turf and topsoil deposit (200) of dark grey to black silty loam was removed to expose large amounts of tumbled stone concentrated in and upper and lower band (201 & 202 respectively) with exposed bedrock [211] and a soil deposit between (207) (Figure 8). Further excavation was limited to sondage extending down the centre of Trench 2 that was 2m wide in the upper half of the trench and 1m wide to the NW of Trench 2 (Figures 9 & 10).

Upper rampart [203]

The upper tumbled stone deposit (201) extended downslope from the SE end of trench 2 for 15m and was a maximum of 1.05m thick tapering off downslope to the NW. A rough line of large boulders (205) formed the maximum extent of the upper tumbled stone deposits, these may have been large facing stones that may have rolled the furthest from the upper rampart (during the excavations this is the area that large stones rolled from the upper rampart tended to come to rest). Removal of the upper tumbled stone (201) exposed a large dry-stone rampart [203] extending across the width of the Trench 2 sondage.

The upper rampart [203] comprised an inner [209] and outer [208] face with a rubble core (210 between. The outer face of rampart [203] had been roughly rebuilt or refaced [206] with the re-facing course [206] sitting on a collapsed stone deposit (214), suggesting that the rampart had partially collapsed before being roughly rebuilt. Overall upper rampart [203] was 4.05m thick, widening to 5.2m with the re-build or re-facing [206] and survived to a maximum height of 1.8m.

Plate 4: Inner face [209] of rampart [203].

The internal face [209] (Figure 12) comprised roughly squared and faced blocks up to 0.4m by 0.3m by 0.2m in size laid in uneven courses with up to three courses surviving, no bonding material was present. The outer face [208] (Figure 13) was better constructed with the stonework making up the face comprising dressed and squared sandstone/greywacke blocks up to 0.6m by 0.3m with smaller pinning stones in the gaps. The outer face was built directly upon the bedrock [211]. Between the two facing courses [208/209] was a rubble core (210) composed of angular to sub-angular stone of varying lithologies up to 0.5m by 0.4m by 0.4m set in a loose matrix of dark grey silty clay.

Plate 5: Outer face [206] of rampart [203].

Outside the external face [208] of rampart [203] there was a second facing course [206] (Figures 9 & 14) that sat on a deposit of tumbled stone (214). This outer facing course comprised large rounded natural boulders of various stone types up to 0.7m by 0.6m by 0.5m laid in irregular courses. This facing course might have been an attempt to buttress the outer face of the rampart rather than a re-facing. The re-built face [206] sat on a layer of collapse demonstrating that rampart [203] was partially collapsing prior to the episode of alteration.

Plate 6: Rebuilt outer face [206] of rampart [203] located on tumbled stone deposit (214).

To the exterior of rampart [203] tumbled stone deposit (201) sat directly on bedrock [211], suggesting that they are directly outside rampart [203] had been cleared to expose the bedrock, perhaps to enhance the appearance of the rampart from out-with the hillfort.

Deposits and structures internal to upper rampart [203]

A deep stratigraphic sequence of deposits and structures was identified to the interior of the upper rampart [203]. These demonstrated several phases of use, alteration and abandonment of the upper rampart along with occupation both pre and post dating the construction of rampart [203]. The excavated area internal to the upper rampart was very small with a maximum size of 1.5m by 2m in area and as a result some of these deposits and structures are not fully understood.

Extending along the inner wall face [209] of upper rampart [203] was the linear cut [212] of an antiquarian wall chasing excavation (Figures 9 & 11) cut into a collapsed stone deposit (201) of medium to large angular stones in a silt loam matrix. This cut extended 0.6m out from the wall with a projection to SE in the middle of the sondage and was 0.8m deep. The antiquarian excavation trench [212] was filled with a deposit of angular to sub-angular stone in a loose sandy silt matrix (213) very similar in character to the tumbled stone deposit (201) into which the trench. This fill (213) is probably the result of the backfilling of the antiquarian trench [212] with the removed material soon after its excavation.

Removal of tumbled stone deposit (201) exposed a small patch of cobbled surface [216] in the southern corner of trench 2 (Figure 9 & 11). These cobbles had been disturbed by the antiquarian trench [212]. Cobbled surface [216] covered an area 1.0m by 0.7m and comprised squared cobbles of typical size 0.1m by 0.05m by 0.05m. Cobbles [216] were set in a levelling or bedding deposit (217) of orange brown silty sand.

Underlying cobbled surface [216] was a lower deposit of tumbled stone (218) composed of medium to large angular stones measuring up to 0.4m x 0.4m x 0.3m set in a loose matrix of sandy silt with occasional charcoal. Removal of tumbled stone deposit (218) exposed a paved surface [220], partially truncated by the antiquarian excavation trench [212]. Paved surface [220] was made up of medium to large flat sub-angular slabs measuring 0.5m x 0.4m x 0.2m set in a leveling or bedding deposit (221) of firm sandy silt from which a spall of shale bracelet was recovered (SF206, see artefact report below).

Plate 7: Paved surface [220] extending over construction cut [223]/(224).

Paved surface [220] extended over the sandy silt fill (224) of a linear cut [223] running parallel to inner wall face [209] (Figures 11 & 12). Linear cut [223] was a probable construction cut for the inner wall facing course [209] and rampart [203]. Construction cut [223] extended 0.5m out from wall face [209] and was 0.2m deep with steep sides and a flat base. This feature extended below wall face [209] but was only excavated to the exterior of the rampart as the rampart was not fully removed.

Construction cut [223] was cut into a deep homogenous deposit (225) of reddish brown firm sandy silt up to 0.5m deep that extended throughout the excavated area internal to and extended below rampart [203] (Figures 10, 11 & 12) . The interpretation of this deposit is not entirely clear it may be a thick deposit of colluvial material, however there is a possibility that (225) is an earthen bank of an earlier earthen rampart that was superseded by stone rampart [203].

Plate 8: Charcoal rich occupation deposit (229) underlying possible earthen rampart (225).

Underlying the possible earthen rampart (225) was a charcoal rich silty sand (229) occupation deposit. Deposit (229) formed the earliest anthropogenic soil in the sequence, a radiocarbon date obtained from birch charcoal from this material provided a date range of 356-62calBC (Calibrated to 2σ, SUERC65166; Table 1). Below occupation deposit (229) was a buried ground surface (230) and bedrock [211].

Secondary stone lower rampart [204]

Removal of the lower tumbled stones (202) exposed a lower stone rampart [204] (Figures 9 & 10) comprising an inner [227] and outer [228] facing course with a core of earth (226) and stone (233). Built up against the inner face [227] of rampart [204] was a thick deposit (207) of sandy clay. Overall rampart [204] was 3.25m wide and was a maximum of 1.7m high from the base of the outer course [228] to the top of the rubble core (233).

Plate 9: Lower stone rampart [204] showing inner facing [227] and stone core (226).

The inner facing course [227] of rampart [204] comprised a single course of squared sandstone blocks up to 0.6m by 0.3m by 0.3m in size. Of the outer face [228] only a single in-situ block was exposed. The core of rampart [204] comprised sub-rounded to sub-angular stone up to 0.5m by 0.3m by 0.3m set in a sandy silt matrix (226). A radiocarbon date obtained from alder charcoal from the earth core (226) of rampart [204] provided a date range of 361-165calBC (Calibrated to 2σ, SUERC65165; Table 1).

Primary earthen lower rampart [231]

Underlying stone rampart [204] was a series of deposits interpreted as a primary earthen rampart [231] and features associated with its collapse (Figures 10 & 11). Rampart [231] comprised an earth core (215) a cut [234], possibly a re-facing or re-build, and collapse or slumping deposits (237 & 238). Overall [231] was 8.05m thick and 2.95m high from its lowest element to the highest surviving part of deposit (215). Not all the elements of rampart [231] were fully excavated due to the depth of the deposits.

Plate 10: Earth rampart (215) at base of sondage with stone rampart [204] above.

The earth core of the primary earthen rampart [231] was a homogenous deposit of sandy silt (215) extending for 8.05m. A radiocarbon date obtained from cherry charcoal from this deposit provided a date range of 405-231calBC (Calibrated to 2σ, SUERC65164; Table 1). Cut into the upper surface of (215) was a scarp [234] that might have been a re-facing of the rampart following a period of partial collapse. Overlying rampart [231] were two deposits associated with slumping or collapse (237 & 238).

Underlying the earth core (215) of rampart [231] was a buried ground surface (235) of sandy silt. This lay on a glacial till deposit (236) in turn sitting on bedrock [211].

5.2.3 Trench 3

Trench 3 was located across the western side of rampart of the lower annexe/enclosure, which extends to the north of the fort (Figure 2). The trench was placed just to the north of the modern path, which passes through a gap in the rampart, with the intention of exploring whether this entrance is contemporary with the annexe itself or the result of more recent activity. Trench 3 measured 10m by 4m, aligned east-west.

Removal of up to 0.15m of turf and topsoil (300) across Trench 3 exposed, at the eastern end of the trench, on the interior of the annexe/enclosure, a mound of up-cast material from the construction of the path. The mound was found to comprise stones (301) up to 0.4m in diameter within a fine sandy silt matrix (302). Further excavation was limited to a 2m wide sondage extending down the centre of trench 3.

Underlying this modern mound were a series of deposits (307 and 308; 303 and 304; 306 and 309) that were interpreted as slumping or collapse of material from rampart [325]. Internal to rampart [325], was a spread of mostly sub-angular stones (308) up to 0.4m in diameter within a fine silty clay matrix (307) which extended across the eastern end of Trench 3, and was interpreted as hillwash among the rubble (308) built up against the interior facing course [313] of rampart [325]. Underlying and to the north of (301) and (302), immediately to the east of and abutting rampart [325], was a spread of rubble (306) loosely contained within a dark,

rooty, very friable sandy silt (309) with high content of small stones (up to 0.02m in diameter). Overlying and downslope of rampart [325] was a spread of rubble (304) comprising mostly sub-angular stones up to 0.5m in diameter within a sandy silt matrix (303) from which (SF304) modern bottle glass was recovered.

Underlying (303) and (304), downslope and to the west of rampart [325], was a further deposit of rubble (312) comprising stones up to 0.7m in diameter contained within a matrix of moderately friable sandy silt (311). This deposit was also interpreted as slump/collapse from rampart [325].

Rampart features

Extending across Trench 3, rampart [325] measured 4.6m in width, comprising substantial an inner [313] and outer facing [305] which survived to a maximum height of just over 1m. These walls were built of a mixture of angular and rounded stones up to 0.7m in diameter, placed directly onto a thin layer of natural subsoil (328) which overlay the bedrock [326]. The lower wall [305] showed significant signs of stress at the southern end of the excavated section, closest to the modern path, where even the largest stone blocks were shattered. Both facing courses were neatly dressed on the external faces only. The rampart core comprised sub-angular stones (324) up to 0.3m in diameter, within mid brown clayey silt (318) up to 0.5m in depth.

Plate 11: External face [305] of rampart [325]

Underlying rampart [325] was an earlier phase of this rampart [327] that comprised a very truncated inner facing [319] of sub-angular stones up to 0.4m in diameter, arranged in a line running broadly NNE-SSW. Only one course survived. The core of rampart [327] was medium brown, compact, gravelly/clayey silt (322), which formed the matrix of stones (321). The outer facing of rampart [327], was not identified, facing course [305] may have formed the outer face for both early and late ramparts, or construction of the later rampart [325] removed the outer face of [327].

Plate 12: Primary rampart [327] internal face [319]

Underlying (318) and 324), wall [319], and (321) and (322), was a dark orangey brown silty clay (320) up to 0.3m in depth with occasional charcoal flecks and pebbles. This was interpreted as the base layer of anthropogenic material associated with wall [319], and appeared to predate rampart [325]. A radiocarbon date obtained from alder charcoal from this deposit provided a date range of 375-201calBC (Calibrated to 2σ, SUERC65167; Table 1).

Internal deposits

Underlying rubble (307) and (308), within the interior of the annexe/enclosure, was a thin deposit of dark orangey-brown sandy silt (316) up to 0.05m in depth, with high content of subangular pebbles and stones up to 0.1m in diameter. Within this deposit were small flecks of charcoal, occasional flecks of burnt bone and part of an animal jawbone (SF 002 & 006). (316) was interpreted as an occupation deposit relating to the use of the annexe/rampart. Abutting (316) at the far eastern end of Trench 3 was a similarly shallow, charcoal-rich deposit (314), a mid blackish brown sandy silt with high stone/gravel content. This too was interpreted as being related to the use of the annexe/rampart.

Underlying (316) approximately 1.2m to the east of wall [313] was a 0.4m wide spread of degrading, greenish sandstone slabs [315] up to 0.25m in diameter, tentatively interpreted as a paved surface relating to the occupation/use of the annexe/enclosure.

Both (314) and (316) overlay a dark orangey brown deposit (323) up to 0.3m in depth, with very high content of angular stones up to 0.2m in diameter that abutted the inner face [313] of rampart [325]. This might be a deposit of broken and weathered unconsolidated rock or a working deposit associated with the construction of rampart [325] derived from trample and stone chippings from the dressing of the facing courses.

Lying directly on the bedrock around 0.3m from the eastern end of Trench 3, within the interior of the annexe/enclosure, was a thin skim (up to 0.02m in depth) of dark blackish brown clay covering an area of up to 0.4m x 0.3m with frequent charcoal inclusions and occasional inclusions of gravel up to 0.02m in diameter. This was interpreted as a trample/occupation layer directly overlying the bedrock.

5.2.4 Trench 4

Trench 4 straddled the rampart of the inner small oval fort, suggested by the RCAHMS survey to be the latest of the fortifications at Moredun. Trench 4 crossed the rampart of the inner fort in its western circuit (Figure 2) on an east west alignment and measured 15m by 4m. Trench 4 aimed to assess the nature and date of this inner rampart. Prior to excavation a line of facing stones could be traced running north to south alignment to the outside of the rampart extending into the excavation area. Outside of this line of facing stones was a hollow suggested to be the remains of antiquarian excavations 'wall chasing' along the outer face of the rampart.

Plate 13: Bank [406] of material up-cast from antiquarian trench [405]

Across Trench 4 up to 0.2m of mid brown silty sand turf and topsoil were removed to expose a mass of tumbled stone (Figure 21). Finds of modern glass (SF400) and possibly vitrified material (SF401) were recovered from the topsoil. Apparent within the mass of stone was a large block [402] on the same line as the outer facing stones lying outwith the trench. The linear cut of an antiquarian trench [405] extended along the outside of this line of facing stone, filled with loose dark brown silty sand (412) from which modern bottle glass (SF403) and possible vitrified material (SF406) was recovered. To the outside (W) of this cut was a bank [406] composed of small to medium angular stone (408) in a matrix of mid brown silty sand (407) composed of the upcast of the antiquarian trench. Excavation into these features and lower deposits was limited to a 2m wide sondage comprising the N half of Trench 4.

Rampart [401]

Extending across trench 4 was a large dry-stone rampart [401] composed of an outer [402 & 419] and inner face [410] with a rubble core (409 & 421) in a soil matrix (411). Within the wall were four internal stabilising walls [430, 431, 432 & 434]. Overall rampart [401] was 5.85m thick and survived to a maximum height of 2.2m from the base of outer face [419] the uppermost stones of the wall core (409).

Plate 14: Outer facing [402 & 419] of rampart [401]

The outer face [402 & 419] of rampart [401] comprised large rounded boulders up to 1.2m by 0.7m in size with smaller pinning stones between (Figure 25). This face survived a total of three courses (1.8m) high. The inner face was less well preserved with only a single in-situ course [410] identified at the base of the excavations (Figure 24). The upper courses of the internal face (416) had slumped outward. Sitting between the two facing courses was a rubble core (409 & 421) of medium sized angular stone with occasional larger blocks. The upper layer of which (409) was heavily voided. The rubble core (409 & 421) sat in a soil matrix (411) of dark brown loose sandy silt. From the rubble core deposit (409) pieces of possibly vitrified stone (SF409) and slag (SF407) were recovered.

Within the wall core were four in-situ core courses or stabilising walls [430, 431, 432, 434] (Figure 22). Each of these was a single course width of stones on a linear arrangement. These internal dry-stone walls may have been to aid the structural integrity of the rampart as a whole.

Overlying rampart [401] were a number of deposits associated with its slumping and collapse. These comprised tumbled stone deposits (403, 414, 415, 416 & 418) of which (415 & 416) comprised collapsed facing slabs from the outer and inner faces respectively. These tumbled stone deposits were set in a loose silty matrix (404, 413 & 417).

Deposits to exterior of rampart [401]

To the exterior of rampart [401] Trench 4 was excavated down to the bedrock [425 & 433]. In places this was overlain by a glacial till deposit (428) the upper surface of which comprised a layer of iron panning (429). Above these natural deposits were patches of a buried ground surface (420, 423 & 424) of which (423) extended below rampart [401]. A radiocarbon date obtained from hazel charcoal from this buried ground surface (423) provided a date range of 475-39calBC (Calibrated to 2σ, SUERC65168; Table 1). Overlying buried ground surface (420) was a discrete charcoal rich containing several large charcoal chunks (422).

5.2.5 Trench 6

Plate 15: Trench 6 post-excavation showing collapsed stone deposit (601)

Trench 6 was located over the bank of a double ring hut circle in the interior of the hillfort and aimed to characterise and date the roundhouse. Trench 6 was intended to be a 5m by 5m placed over the double bank of the hut circle, due to limited time the size of this trench was reduced to a 6m by 1m trench oriented N-S over the adjoining bank of the hut circles (figure 2). Across Trench 6 up to 0.2m of organic rich silty loam topsoil (600) was removed, from which a quartzite pebble (SF600) and a disc shaped quartzite pounder or grinder (SF603) were recovered. Underlying topsoil (600) was a deposit (601) of small to medium sized angular stone (Figure 26 & 27). No in-situ structural stones were apparent in (601) and this deposit is the post abandonment collapse of the hut circle banks. Collapse (601) was not excavated due to limited time on site.

Laboratory code	Material	Context	Uncalibrated date BP	Calibrated 1σ	Calibrated 2σ
SUERC-65160 (GU39688)	Charcoal: Hazel	118	2211±30	359-206calBC	371-199calBC
SUERC-65164 (GU39689)	Charcoal: Cherry	215	2287±30	400-263calBC	405-231calBC
SUERC-65165 (GU39690)	Charcoal: Alder	226	2177±30	354-183calBC	361-165calBC
SUERC-65166 (GU39691)	Charcoal: Birch	229	2151±30	350-118calBC	356-62calBC
GU39692	Charcoal: Alder	318	Failed		

Laboratory code	Material	Context	Uncalibrated date BP	Calibrated 1σ	Calibrated 2σ
SUERC-65167 (GU39693)	Charcoal: Alder	320	2216±30	359-209calBC	375-201calBC
SUERC-65168 (GU39694)	Charcoal: Hazel	423	2357±30	475-390calBC	534-381calBC

Table 1: Summary of Radiocarbon dates

5.2.6 Artefact Assessment

Dawn McLaren, Rob Engl, Anne Crone & Gretel Evans

Introduction

A total of one hundred and eighteen bags of artefactual material were recovered from Trenches 1, 2, 3, 4 & 6 during the 2015 season of excavation. These finds are dominated by fragments of possible worked or vitrified stone but also include many struck lithics, possible metalwork related slags, a worked bone disc, a fragment of charred wood, a single sherd of ceramic and multiple fragments of modern bottle glass. Burnt and unburnt animal bone fragments as well as hand-retrieved charcoal fragments are discussed in a separate section below (see J Robertson).

The assemblage has been assessed by material type and a summary of the results of this initial examination are outlined below.

Lithics

A total of 39 chipped stone artefacts were recovered including both stratified and unstratified material. Of the 39 artefacts 28 were made on fine grained translucent quartz with smaller numbers of flint (7), pitchstone (2) and chert (1). A single piece of fossil coral was also identified.

With the exception of the pitchstone which has a single known source in the Isle of Arran, the remainder of the material is considered of local derivation. The flint ranged from grey brown to red in colour with small size and surviving cortex suggesting an origin in the gravel deposits of Eastern Scotland. The quartz would also appear to be derived from the same glacial gravels.

Of the 39 artefacts 20 were considered to be of natural origin. These included the fossil coral, the chert and 17 pieces of quartz. The natural material included several pebbles useful as a rough guide to the probable size of the worked material.

No modified tools were present within the assemblage. However useful evidence was provided by the primary material. The recording of two inner flakes of imported pitchstone suggests a probable Neolithic presence on the hill top. Early prehistoric activity is also illustrated by the single bipolar core (SF110). Bipolar reduction is a characteristic component of lithic assemblages within the earlier prehistory of northern Scotland. It is especially prevalent in the Mesolithic and Bronze Age where it is used both to work intractable materials such as quartz and to extend the life of more serviceable materials such as flint.

Stone

Despite the dominance of possible worked stone amongst the assemblage collected in the field, upon further examination, many of the items are unworked with no evidence of modification or wear from deliberate use.

Worked

The worked stone from Moredun Hilltop comprises a limited but interesting range of cobble tools, decorative items, possible unfinished items and a gaming piece.

A range of tools (Q=7) have been recognised amongst the assemblage, many of which have been produced on water-rounded river or beach pebbles/cobbles. It is unlikely that these were sourced from Moncreiffe Hill and may well have been collected from a nearby stream or river, if not from the Tay. Glacial erratic cobbles and boulders were also noted across the site, in every excavated area. These rounded pebbles, cobbles and boulders stood out due to their rounded and smooth surfaces amongst the majority of rocks on site which were angular and often frost-shattered.

These cobble tools comprise many general or multipurpose cobble tools which demonstrate a range of functions based on the different types of wear recognised on the surfaces. In many instances (such as those with evidence of abrasion or pitting) it is not possible to be precise about the tasks being undertaken and a range of functions are possible including processing foodstuffs, preparing clay for potting, crushing pigments or ore etc. These include pounder/grinders made from quartzite cobbles (SF 101, spoil Trench 1 and SF 603, context 600); lightly used pounder (SF 119, context 102); Possible grinding or smoothing stone (SF 114, context 107); grinding or sharpening stone (SF 115, context 107). Tools with more specific functions are also recognised, such as a sharpening stone (SF 605) from Trench 6, used to sharpen metal blades and a multifunction cobble tool from the spoil of trench 1 that displays multiple uses including as a possible smoother for processing animal hides and as a working surface.

A small, flat, stone disc (SF 301, context 307) came from Trench 3. The disc is sub-circular in shape with ground, facetted edges. The uneven level of grinding around the circumference of the stone suggests that the stone was abandoned during manufacture and may have been a roughout for a spindle whorl or a stone disc, similar to those found at Hurly Hawkin, Angus (Henshall 1982, 233-5, fig 9). A further curving edge fragment, possibly from a similarly sized stone disc or whorl (SF 305, context 314) was also recovered from the same area of Trench 3.

The decorative items (Q=2) consist of a small damaged red-sandstone disc-bead (SF 120) from context 109, Trench 1, and a tiny spall from a shale bracelet (SF 206) from context 221, Trench 2. The disc bead is a simple form of personal ornament produced from a small piece of red sandstone. The sandstone used on site at Moredun has frequent quartz inclusions meaning that it sparkles in bright sunlight and would have been an ideal choice for producing ornamental items not just because of its aesthetic qualities but because the rock itself is quite soft and would have been easy to produce.

The edges and faces have been ground to shape and a simple biconical perforation sunk through the centre of the disc for perforation. Due to the ease of manufacture, these simple disc-beads are not closely datable but research into local parallels is recommended.

The second decorative item of stone from 2015 is the spall from the surface of a polished shale bracelet. Because of the size of this surviving fragment, it is unlikely that the original dimensions of the bracelet will be identifiable but its significance should be considered alongside the previous discovery of a jet or shale bracelet fragment from the site, now in the collections of Perth Museum (Mark Hall, pers comm.; Perth Museum Accession Number 1998.106) as well as the fragments of shale bracelet and possible jet bead found in 2014 and 2015 during excavations at Moncreiffe Hillfort.

A small, plano-convex, disc-shaped, white or pale grey quartzite pebble (SF 600) was recovered from topsoil in Trench 6. Although the shape of this little stone has not been modified by grinding or chipping, its surfaces are highly polished, particularly the flat base. This sheen and polish has been the result of handling and possibly rubbing against a soft surface such as textile or wood.

The most likely interpretation of this item is that it was used as a gaming piece however use as a token or counter for accounting could also be a possibility, similar to the interpretations made for Roman glass and stone counters like those from Elginhaugh (Price & Worrell 2007, 455-6). More difficult to catagorise is SF 147 which was recovered from context 121, Trench 1. It consists of a waterworn ?quartzite pebble, the surfaces with a consistent sheen that may be the result of handling. The natural banding of the stone has created the appearance of a yellow stripe or band which runs diagonally across the centre of one rounded surface which stands out against the dark brown 'background' colour of the stone. The stone displays no evidence of modification through use as a tool or concentrated polish to suggest wear from use as a gaming piece or

similar yet the banding of the stone is striking and unusual and it may have been collected and retained as a result.

Natural

Eleven stones, mostly cobbles or fragmentary cobbles, collected in the field display no evidence of working and are considered to be natural. (SF 116, SF 117, SF 126; SF 131, SF 203, SF 303, SF 402, SF 408, SF 423, SF 604). This includes two cobbles (SF 408 and SF 423) whose surfaces have entirely degraded or weathered meaning that there is no way to be certain whether these stones were used or not.

In addition, three flat angular tablets of sandstone with 'fossilised' worm clasts surviving on at least one surface of each stone came from Trench 1. These have been retained for geological assessment but are not worked.

Vitrified

Twenty-two pieces of heat-affected or possibly vitrified stone were recovered from Trenches 1 and 4. Once brought back to AOC's laboratory, these were hand washed in clean water to reveal the details of the surfaces and morphology of the fragments. At least five fragments appear to be vitrified but closer examination and possible analysis in conjunction with a geologist may be required to establish if these are fragments of vitrified stone or another type of heat affected material. Possible vitrified stone requiring closer examination and analysis are: SF 103; SF 401; SF 405; SF 406; SF 409

The remaining fragments, although clearly 'heat-affected' appear to be largely geological in origin consisting of voided lavas and basalts: SF 112 (context 102); SF 122 (context 111); 3 unnumbered finds from Trench 1; 1 general find (SF 001, vicinity of Trench 1); SF 411-SF 419a & b, SF 421, SF 422 (contexts 403, 402, 409, 421).

Ceramic

A single thick sherd of a coarse, handmade ceramic vessel (SF 148) was unstratified from Trench 1. It is a body sherd from a large, low-fired, incompletely oxidised vessel with a fairly steep sided body. It is not possible to identify the form of the vessel with confidence from this one surviving sherd, nor is it possible to estimate its diameter or height, but it seems likely that the pot was flat based and later prehistoric in date. A light coating of dark staining on the interior is likely to been food residues indicating this pot had been used as a cooking vessel.

Iron

A fragmentary iron object (SF 111) came from context 108, Trench 1. It is a flat curving fragment from an iron hoop or ring, broken at both ends. The surfaces are heavily corroded, preventing confident identification of the original form and date.

Vitrified material

In addition to the fragments of possible vitrified stone discussed above, there are several fragments of other vitrified materials present amongst the assemblage. Many of these appear to be metalworking slags, particularly debris resulting from ironworking (SF 212; SF 407; SF 410; SF 420 & SF 601). Others, like SF 404 (context 407) are so light and vesicular they may well be some kind

of fuel ash slag that is not necessarily associated with metalworking and may have formed in a domestic hearth.

Worked bone

A single item of worked bone (SF 132) was recovered from Trench 1. This item consists of a thin bone disc with central perforation, damaged around c.40% of its circumference, and coated in residual soil. It was recovered in close proximity to a charred timber and a patch of dark staining on the bone may be transfer from the charred deposit it was resting within or it may have been burnt. This will be investigated after specialist cleaning and stabilisation. Several alternative interpretations could be made over its function such including a decorative toggle or small pot lid.

Charred wood

SF133 is a length of well-preserved carbonised wood which has fragmented into large lumps. It represents a sample of a longer timber excavated within surrounding soils from the interior of the curvilinear structure in Trench 1 and was thought to represent a structural timber, perhaps a plank. Initial examination of it suggests it is a non-oak species, possibly alder and has survived as a chord of roundwood; there is no visible evidence of working. It has clearly been burnt *in situ* and has not been disturbed since. The outermost rings appear to be present so it would make an excellent C14 sample.

Glass

Multiple sherds of green and colourless translucent bottle glass were recovered from trenches 3 and 4 (contexts 303, 400 and 412). All of these sherds represent modern glass bottles brought to the site and discarded. From the colour and composition of the glass and the shape of the bottles, as far as possible to discern from the surviving sherds, all of the bottles represented are late 19th to late 20th century in date.

Conservation

Only two items amongst the 2015 hand-retrieved artefact assemblage merit conservation. One, SF 132, a flat bone disc, was carefully lifted by hand from Trench 1. It was found to be damp from contact with surrounding charcoal-rich soils and as a result was packed on site in a small sealable plastic box and was immediately returned to AOC for cold storage prior to conservation. This item is very fragile and because of the inherent properties of the thin bone and damp condition on excavation it is considered to be vulnerable to warping and cracking on drying, particularly if such drying is uncontrolled. The recommendation would be for the object to be dried in a controlled environment and the process carefully monitored by a conservator so any detrimental changes in the condition of the object can be assessed and responded to appropriately.

Once dry, cold storage is no longer required and re-packing is recommended. Careful cleaning of the surfaces is necessary for the object's long term preservation and to allow macro/microscopic examination during specialist analysis. Pre- and post-conservation record photographs will be taken of the object for archive purposes.

The second item, SF 111, is a fragment of a hoop or loop of iron. The object was heavily corroded at the time of excavation and was stored on site within a plastizote-lined hard plastic box within a sealable plastic box containing silica gel to create a humidity controlled

environment. This form of storage slows down the corrosion of the object but further work will be necessary to stabilise it for long-term curation. It is recommended that the object is x-rayed to allow the morphology of the item to be identified under the layers of corrosion; this x-ray will inform conservation processes and will act as a stable archive record of its condition prior to treatment. Cleaning of the surfaces will comprise mechanical, rather than chemical cleaning.

5.2.7 Environmental Assessment

Jackaline Robertson

Factual Data

Thirty seven bulk samples were submitted for environmental analyses from the 2015 evaluation undertaken at Moredun hilltop, Moncreiffe Hill, Perth and Kinross. The bulk samples were collected from the ramparts and interior of an Iron Age/Early Historic hillfort. The recovered environmental finds comprised a small quantity of charred macroplant remains and poorly preserved animal bone which had been recovered alongside a much larger number of charcoal fragments. The aim of this analysis was to determine the potential and significance of these finds and assess what information they can contribute to the understanding the past occupation and chronology of this site.

The evaluation undertaken in 2015 is a preliminary phase to future work and it is recommended that any later environmental finds are analysed in conjunction with the assemblages discussed in this report.

Methodology

The bulk samples were processed in their entirety in laboratory conditions using a floatation method designed to retrieve charred macroplant remains and artefacts (cf. Kenward *et al*. 1980). The sediment consisted of silty sand which did not require any pre-treatment. All plant macrofossils were subsequently examined at magnifications of x10 and up to x100 where necessary to aid identification. Identifications were confirmed using modern reference material and seed atlases stored at AOC Edinburgh (Cappers *et al* 2006; Jacomet 2006).

The charcoal assemblage was large and well preserved but the majority concentrated within a single context with further lower level scatters across various excavated features. To ensure as much information as possible was obtained from this assemblage the conclusions presented here can only be described as interpretive assumptions and is therefore arbitrary. Those samples which contained two or more species were usually interpreted as fuel waste where as larger concentrations were more likely to have originated from the burning of an artefact or of a small discrete structure such as a wattle screen or post.

The animal bone assemblage was identified to element and species with the aid of skeletal atlases (Hillson 1986; Schmid 1972) and the reference collection stored at AOC Archaeology Ltd (Edinburgh). Where an element could not be identified to species, it was instead described as large mammal (cattle / horse red deer), medium mammal (Sheep/goat/roe deer/pig) or indeterminate. The results are presented in appendix 1. The bone assemblage was poorly preserved and extremely fragile. For this reason most of the fragments were not washed and instead were slowly air dried at room temperature and the sediment lightly brushed off in an effort to minimise further damage. The majority of the fragments could not be identified to species or element and were instead catalogued by size and condition.

The proximal, distal and shaft areas of each fragment was recorded to determine the level of fragmentation within the assemblage (Dobney et al 1988). Assessing the level of staining

used the following method: no staining was rated "0"; some staining affecting less than 25% of the bone surface was designated as "1"; less than 50% surface staining was "2"; while 50 – 75% was described as 3" and greater than 75% was rated as "4". A four point system was used to analysis preservation with excellent, good, adequate and poor. The assemblage was also examined for butchery marks, pathologies, bone working, burning and carnivore gnawing.

Results

A summary of the results of this initial examination are presented in three accompanying tables: table 2 outlines the surviving charred macroplant remains; table 3 the charcoal remains and table 4, the surviving bone fragments.

The carbonised macroplant assemblage was small, consisting of 93 plant remains which were recovered from ten samples; these were concentrated in context [113]. The assemblage was dominated by cereal remains which were present in nine bulk samples. The species identified were 19 barley caryopses (*Hordeum* sp) and nine emmer/spelt wheat caryopses (*Triticum* sp). A further 27 cereal caryopses could not be identified due to poor preservation. There were also five chaff fragments. The only other food remains were eight fragments of hazelnut shell (*Corylus avellana* L) noted in two samples. The remainder of the assemblage was composed of 25 weed seeds concentred in sample [113]. The remains from sample [113] appear to represent deliberate disposal of food remains whereas there was no evidence of selective disposal of macroplants within the remaining nine samples.

The charcoal assemblage was large and totalled 1.2kg in weight, recovered from 33 contexts contexts across the site. The majority of this material, however, came from a single context, [118] in trench 1. Several fragments of charcoal were recovered from this context weighing over 1045g, representing over 84% of the total charcoal assemblage. The species identified were alder (*Alnus glutinosa* L) which accounted for 55% followed by hazel (*Corylus avellana* L) 15%, oak (*Quercus* sp) 15%, birch (*Betula* sp) 6%, cherry (*Prunus avium* L) 5%, apple/pear/hawthorn/quince (*Maloideae* sp) 2%, blackthorn (*Prunus spinosa* L) 1% and heather (*Calluna vulgaris* L) 1%. The charcoal assemblage was concentred in context [118] which had 1kg followed by significant quantities form context [215], [221], [225], [317] and [422] which all contained 10 or more grams. The remainder of the charcoal pieces were scattered throughout the rest of the site in small quantities and are not considered to be optimum for future study.

The bone assemblage was small as only 866 fragments were submitted for analysis from 37 samples. The species and number identified were cattle (96), sheep/goat (1), pig (2), large mammal (232), medium mammal (2) and a further 533 fragments were described as indeterminate. The bone was poorly preserved and 58% had been modified by burning which made identifying the fragments difficult. Those fragments which could be identified to both element and species were all teeth and even these were poorly preserved. The poor preservation of the bone was a reaction to acidic soil conditions and exposure to the elements which are unfavourable to the recovery of bone.

Context			**106**	**111**	**113**	**207**	**217**	**221**	**224**	**226**	**318**	**600**
Area			**Tr 1**	**Tr 1**	**Tr 1**	**Tr 2**	**Tr 2**	**Tr 2**	**Tr 2**	**Tr 2**	**Tr 3**	**HD**
% Sort			**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**N/A**
Cereal												
Hordeum sp	Barley	Caryopsis/es	1	1	5	6		5			1	
Triticum sp	Wheat	Caryopsis/es			7			2				
Cerealia sp	Cereal	Caryopsis/es			24			1	1	1		
Cerealia sp	Chaff	Glume/node			5							
Wild food												
Corylus avellana L	Hazelnut	Shell frag(s)					2					6
Weed taxa												
Atriplex sp(p).	Oraches	Seed(s)			1							
Bilderdykia convolvulus L.	Black bindweed	Fruit(s)			3							
Carex sp	Sedge	Nutlet			2			1				
Galeopsis Subgenus *Galeopsis*	Hemp nettle	Nutlet(s)			2							
P. lapathifolium L.	Pale Persicaria	Fruit(s)			3							
Potamogeton sp(p).	Pondweeds	Pyrene(s)			1			1				
Indet	Indet	Seed/fruit/nutlet			10			1				

Table 2: Charred macroplant assemblage summary

Context	Area	Species	Name	Frag	RW	Charcoal (g)	Comments
102	Tr 1	*Alnus Glutinosa* L	Alder	2			Hand retrieved
102	Tr 1	*Quercus* sp	Oak	1		0.8	Hand retrieved
106	Tr 1	*Alnus Glutinosa* L	Alder	4			
106	Tr 1	*Quercus* sp	Oak	1		1	
111	Tr 1	*Alnus Glutinosa* L	Alder	5		0.6	
113	Tr 1	*Alnus Glutinosa* L	Alder	8	1		
113	Tr 1	*Calluna vulgaris* L	Heather		3		
113	Tr 1	*Quercus* sp	Oak	8			
116	Tr 1	*Alnus Glutinosa* L	Alder	3		0.2	
117	Tr 1	*Alnus Glutinosa* L	Alder	9			
117	Tr 1	*Quercus* sp	Oak	1		2.9	
118	Tr 1	*Alnus Glutinosa* L	Alder	5			4 huge frags
118	Tr 1	*Corylus avellana* L	Hazel	1	14	1045.8	
119	Tr 1	*Corylus avellana* L	Hazel	1		0.5	
120	Tr 1	*Alnus Glutinosa* L	Alder	1			
120	Tr 1	*Betula* sp	Birch	1			
120	Tr 1	*Corylus avellana* L	Hazel	1			
120	Tr 1	*Quercus* sp	Oak	1	1	1.2	
121	Tr 1	*Alnus Glutinosa* L	Alder	1			
121	Tr 1	*Corylus avellana* L	Hazel	1			
121	Tr 1	*Quercus* sp	Oak	1		0.6	
122	Tr 1	*Alnus Glutinosa* L	Alder	1		0.1	
123	Tr 1	*Alnus Glutinosa* L	Alder	2			
123	Tr 1	*Betula* sp	Birch	2			
123	Tr 1	*Quercus* sp	Oak	1		0.4	
207	Tr 2	*Alnus Glutinosa* L	Alder	4			
207	Tr 2	*Betula* sp	Birch	3			
207	Tr 2	*Prunus avium* L	Cherry	2			
207	Tr 2	*Corylus avellana* L	Hazel	1		1.1	
215	Tr 2	Alnus Glutinosa L	Alder	4			
215	Tr 2	*Betula* sp	Birch	3			
215	Tr 2	*Corylus avellana* L	Hazel		1		
215	Tr 2	*Prunus avium* L	Cherry	5	4		
215	Tr 2	*Quercus* sp	Oak	3		24.5	
217	Tr 2	*Alnus Glutinosa* L	Alder	11			
217	Tr 2	*Corylus avellana* L	Hazel	2			
217	Tr 2	*Prunus avium* L	Cherry	1			
217	Tr 2	*Maloideae* sp	Apple	2			
217	Tr 2	*Quercus* sp	Oak	4		6.2	
221	Tr 2	*Alnus Glutinosa* L	Alder	7			
221	Tr 2	*Prunus spinosa* L	Blackthorn	1			

Context	Area	Species	Name	Frag	RW	Charcoal (g)	Comments
221	Tr 2	*Betula* sp	Birch	2			
221	Tr 2	*Quercus* sp	Oak	4		27.1	
224	Tr 2	*Alnus Glutinosa* L	Alder	8			
224	Tr 2	*Corylus avellana* L	Hazel	1			
224	Tr 2	*Quercus* sp	Oak	1		2.3	
225	Tr 2	*Alnus Glutinosa* L	Alder	15			
225	Tr 2	*Corylus avellana* L	Hazel	3	1	59.5	
226	Tr 2	*Alnus Glutinosa* L	Alder	2		0.3	
229	Tr 2	*Alnus Glutinosa* L	Alder	4	1		
229	Tr 2	*Betula* sp	Birch	1			
229	Tr 2	*Corylus avellana* L	Hazel	2			
229	Tr 2	*Quercus* sp	Oak	2		1.7	
237	Tr 2	*Alnus Glutinosa* L	Alder	8			
237	Tr 2	*Betula* sp	Birch	1			
237	Tr 2	*Corylus avellana* L	Hazel	2			
237	Tr 2	*Maloideae* sp	Apple	3			
237	Tr 2	*Prunus avium* L	Cherry	2			
237	Tr 2	*Quercus* sp	Oak	8		8.7	
314	Tr 3	*Corylus avellana* L	Hazel	1			
314	Tr 3	*Alnus Glutinosa* L	Alder	1		1.1	
316	Tr 3	*Alnus Glutinosa* L	Alder	1			
316	Tr 3	*Betula* sp	Birch	1			
316	Tr 3	*Corylus avellana* L	Hazel	2			
316	Tr 3	*Quercus* sp	Oak	1		0.6	
317	Tr 3	*Alnus Glutinosa* L	Alder	12			
317	Tr 3	*Corylus avellana* L	Hazel	5			
317	Tr 3	*Betula* sp	Birch	3		21.8	
318	Tr 3	*Alnus Glutinosa* L	Alder	2		0.2	
320	Tr 3	*Alnus Glutinosa* L	Alder	3		0.5	
322	Tr 3	*Alnus Glutinosa* L	Alder		1		
322	Tr 3	*Prunus avium* L	Cherry		2		
322	Tr 3	*Quercus* sp	Oak		2	1.5	
420	Tr 4	*Betula* sp	Birch	1			
420	Tr 4	*Corylus avellana* L	Hazel	2	1		
420	Tr 4	*Maloideae* sp	Apple	1		0.4	
422	Tr 4	*Alnus Glutinosa* L	Alder	15		12.9	Large splinter frags
423	Tr 4	*Alnus Glutinosa* L	Alder	9			
423	Tr 4	*Corylus avellana* L	Hazel	2			
423	Tr 4	*Quercus* sp	Oak	4		4.1	
424	Tr 4	*Corylus avellana* L	Hazel	3			
424	Tr 4	*Quercus* sp	Oak	1		0.5	
427	Tr 4	*Alnus Glutinosa* L	Alder	15			

Context	Area	Species	Name	Frag	RW	Charcoal (g)	Comments
427	Tr 4	*Betula* sp	birch	1		5.5	
428	Tr 4	*Alnus Glutinosa* L	Alder	4			
428	Tr 4	*Maloideae* sp	Apple	1		3.9	
Total				275	32	1238.5	

Table 3: Charcoal assessment summary

Species	NISP
Cattle	96
Sheep/goat	1
Pig	2
L/M	232
M/M	2
I/M	533
Total	866

Table 4: Animal bone assemblage summary

Discussion

Cereal

The cereal assemblage was small and this made it difficult to establish which species, if any, was the most economically important to the people living at this site. Nor was it possible to determine how agriculture and exploitation of cereal species changed over time. What could be ascertained was that both barley and emmer/spelt wheat were probably cultivated nearby. Both these species are typical finds at prehistoric sites in Scotland but usually barley is more economically important with wheat being a secondary crop. This is because of the environmental and soil conditions in the NE of Scotland which tends to favour the cultivation of barley. Processing of crops appears to have occurred on site based on the presence of a small number of cereal caryopses, chaff and weed seeds in context [113]. The cereal from Moredun Hilltop probably derived from domestic waste such as accidental burning and cooking refuse which was allowed to accumulate on the floor surfaces before being trampled into nearby features. With the exception of context [113] there is no evidence that any of these features were deliberately used for the disposal of domestic food waste.

Wild food

The only wild food recovered was hazelnut shell which is a typical find at Scottish prehistoric sites (Bishop 2007). This is due to its easy accessibility as a wild growing food source and also recycling of the shell as a kindling material. The dense nature of the shell ensures it survives even in the most unforgiving of soil conditions.

Weed taxa

The weed species were a mix of agricultural and waste ground species which tend to favour acidic and/or damp soil conditions. Some of these plants have been collected for use as both human and animal feed especially in times of famine. There is no evidence that these remains are representative of food waste. Instead, the concentration of various weed taxa, including sedge, black bindweed and hemp nettle, within context [113] suggests that the cereal had not been fully processed and that these plants were growing alongside the main crops as contaminants and were accidently brought to site and charred.

Wood species

The charcoal assemblage was made up of both fuel and structural material. The majority of the remains derived from mixed species which is usually indicative of fuel debris. Evidence for structural remains was noted in context [118] which had the largest concentration of charcoal at 1kg. There were also possible structural remains in contexts [225] (59.3g) and [422] (12.9g). The charcoal from [118] is composed of two species but hazel roundwood is clearly the dominant species with a much smaller number of alder. It is likely that both hazel and alder were used to construct a wattle screen or perhaps a roof section. It is not unusual for both species to have been used in this joint capacity for structural building. Context [225] was dominated by alder with a smaller number of hazel and it is possible that these remains are also representative of a discrete structure. The charcoal from [422] was composed entirely of large alder fragments which appeared to have splintered. These remains probably originated from a discrete structure such as a post. The remainder of the assemblage appears to have derived from fuel debris.

Bone

The animal bone is so poorly preserved that little information could be obtained. What can be established is that the main domesticates, including cattle, sheep/goat and pig, were present, contemporary with the archaeological features that were the focus for evaluation. It is logical to assume that beef, lamb/mutton and pork all formed part of the diet. It is also likely that the cattle and sheep/goat would have been exploited for their secondary products prior to slaughter.

Conclusion

The charred macroplant recovered from Moredun Hilltop is typical of a Scottish Iron Age site located in the NE of Scotland. It is obvious that barley and emmer/spelt had a role in the diet of the people living here but it was not possible to assess which, if any, species was the more economically important. The chaff and agricultural weed seeds indicates that some processing of crops did take place at this location. The agricultural weed seeds tend to favour an acidic soil which suggests that the surrounding landscape would have favoured the cultivation of barley over wheat. The acidic soil also undermined the preservation of the bone assemblage.

The charcoal assemblage contained both structural remains and fuel residue. There was evidence that at least two wattle screens or roof sections along with a post had been burnt, although it was not possible at this stage to determine if this was due to a catastrophic or controlled burning event. The remainder of the charcoal had derived from fuel debris. All three environmental assemblages have accumulated through domestic activities such as food preparation, cooking, fuel and cleaning.

6 DISCUSSION

The excavations at the hillfort of Moredun have produced a great deal of evidence for the use, construction and occupation of the hillfort. The sequence and complexity of enclosure has been investigated. The nature of the ramparts and their date has started to be addressed. The flat topped mound in the NE of the hillfort can now be shown to be a monumental roundhouse of the 1st millennium BC.

What is conspicuously absent is any evidence for the early historic occupation of the hillfort as is suggested by the possible historical reference to the site of a battle in AD728 at Monad Croib from which the modern name ‘Moncreiffe’ may derive. This may be a classic case of absence of evidence not equating to evidence of absence and there is still a possibility that Moredun was occupied in the Early Historic period. Alternatively taken together with the excavations at Moncreiffe Hillfort (Cook et

al 2015, Humble et al 2016) the hillforts of Moredun and Moncreiffe may be constructions of the 1st Millennium BC with no later occupation.

This DSR report is both preliminary and provisional, with many issues raised by the excavation data still to be addressed. In ascertaining a fuller knowledge of the excavation results, a post-excavation research design will be produced that will describe all necessary and appropriate assessment processes and consequent post-excavation analyses together with publication proposals for the final report. This report will integrate the stratigraphic, contextual and descriptive data from the excavation with specialist post-excavation analyses covering dating, palaeoenvironmental and economic issues. These will then be included with the findings from the previous phases of work culminating in an article fit for academic publication.

7 ACKNOWLEDGEMENTS

AOC Archaeology and Tay Landscape Partnership would like to thank all of the volunteers who made the project as success contributing an amazing 2,502 hours of work.

Alan Livett; Alec Sloan; Alistair Leslie; Allan Farmer; Andrew Cooper; Andrew Bain; Anthea Deane; Aurime (Aura) Bockute; Barbara Hogarth; Bill Grigg; Brighid O'Dochartaigh; Campbell Wilson; Charlene Forbes; Christine McLeod; Christopher Wilson; Conor Cummings; Deryck Deane; Diana MacIntyre; Dot Mechan; Dougie McLean; Duncan Cameron; Edward Stewart; Elizabeth Gatland; Eric Duncan; Fiona Dennis; Fraser Stewart; Gordan Gerrie; Harriet Donnelly; Ian Jones; Irene Haggart; James Harvie; Jean Tumilty; Jenny Simmonds; Jo Long; Joe Bennett; John McRobbie; John Robb; Kathleen Brotchie; Keith Rose; Lauren Davidson; Lidia Dye; Lisa Laurie; Mark Anderson; Mary Kamel; Mary McDougall; Mervyn Woodward; Michael Cairns; Mike Assenti; Nick Brotchie; Nicola Carmichael; Paul Jack; Robert Bone; Sally Rose; Samantha Leggett; Sheila Munro; Steve Ponsonby; Tessa Poller; Tom Sneddon; Tom Tumilty; Tony Simpson; William O'Driscoll; Willie Rowan

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Archaeological Evaluation Phase 1

Data Structure Report

Section 2: Appendices

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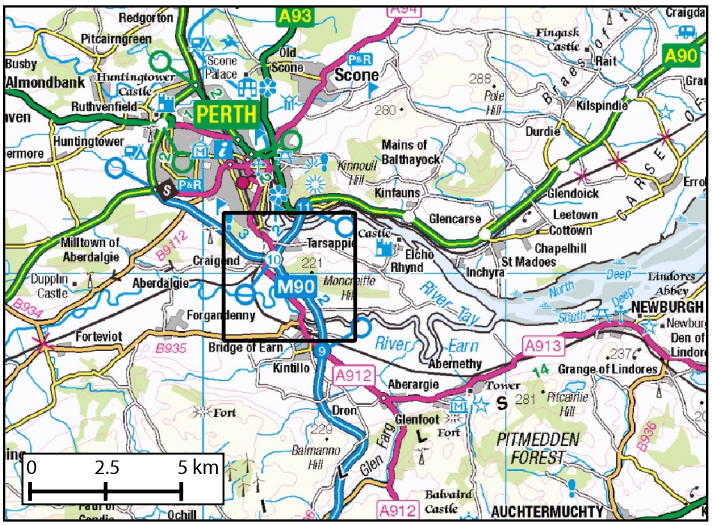

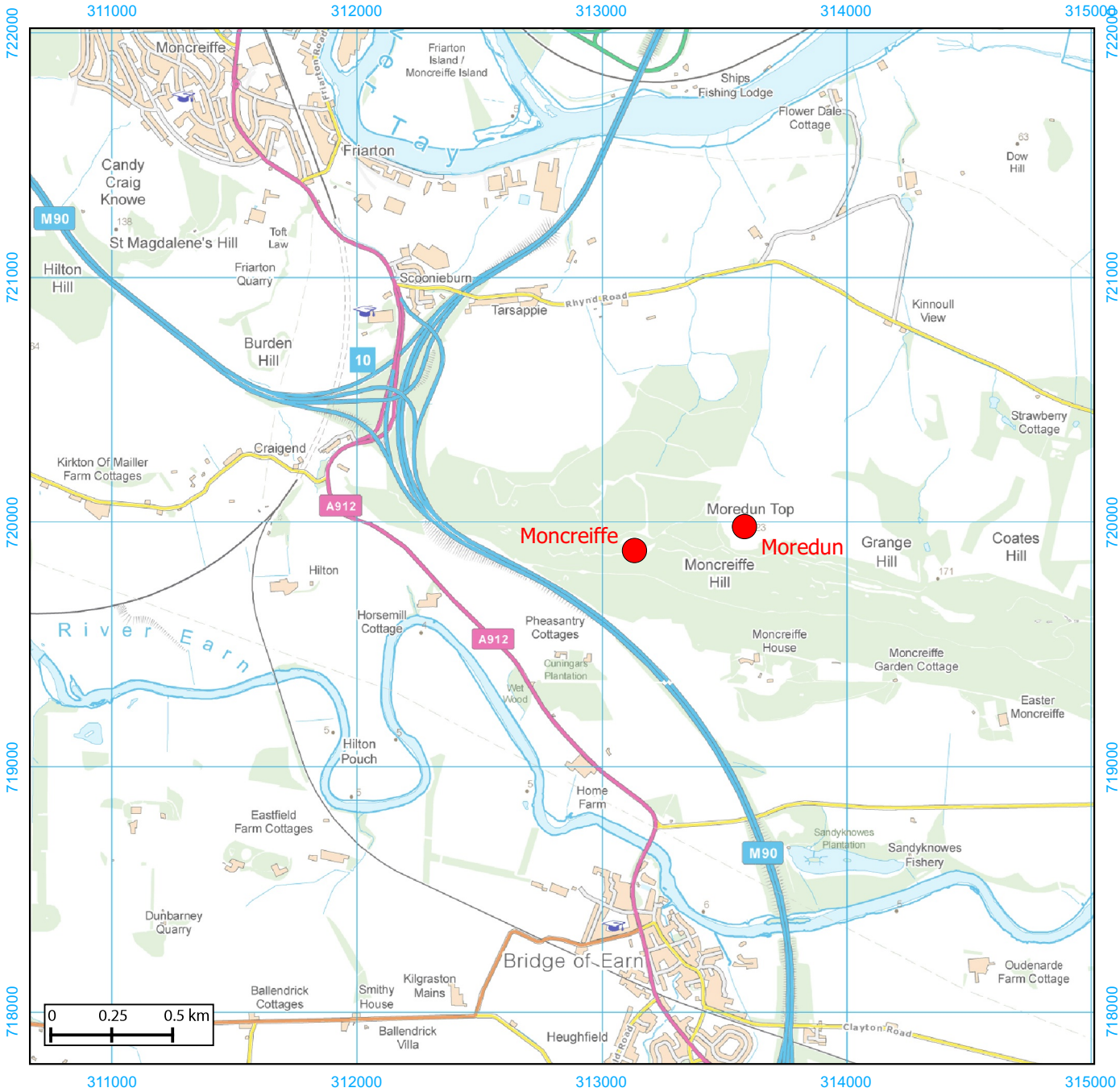

Figure 1: Site Location

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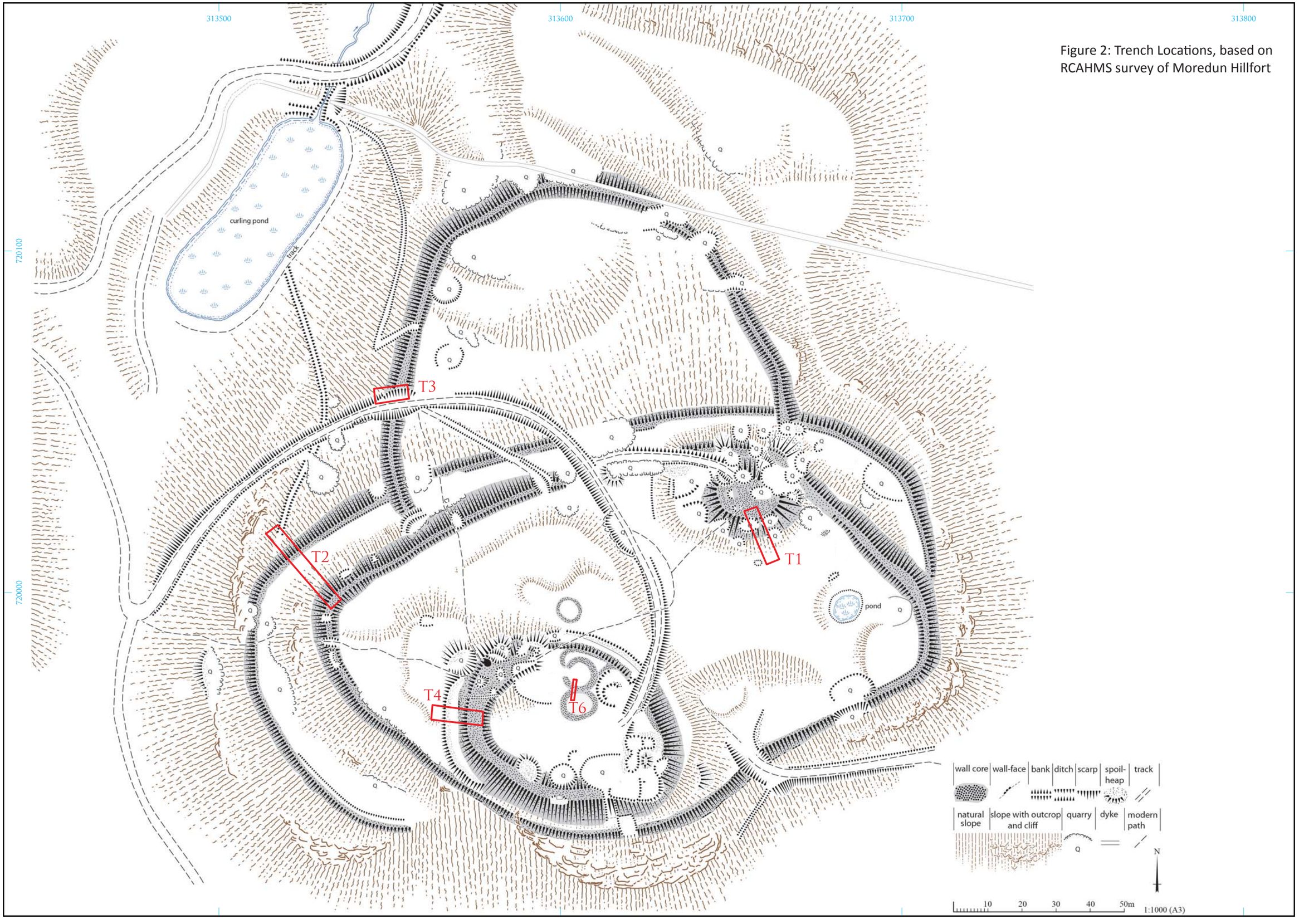

Figure 2: Trench Locations, based on RCAHMS survey of Moredun Hillfort

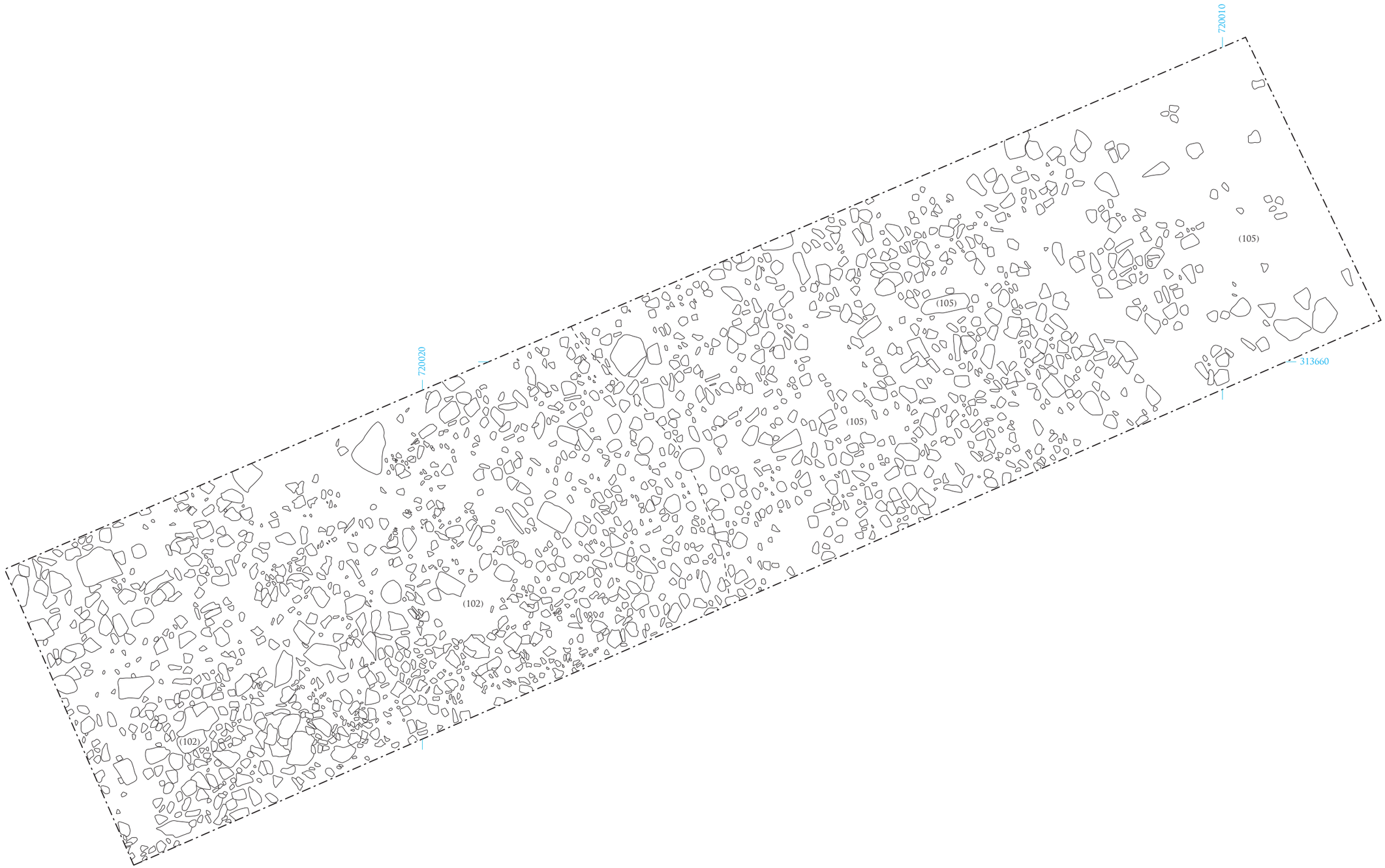

Figure 3: Trench 1 Pre-excavation plan

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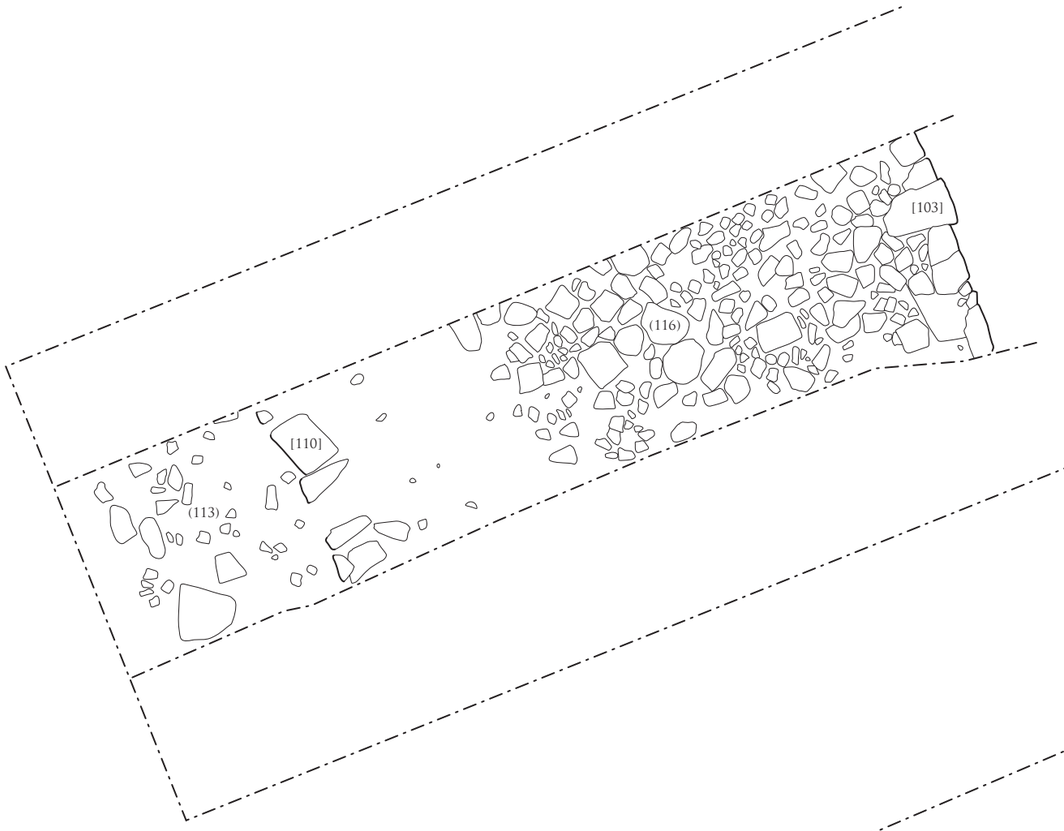

Figure 4: Mid-excavation plan of wall [124] and internal deposits

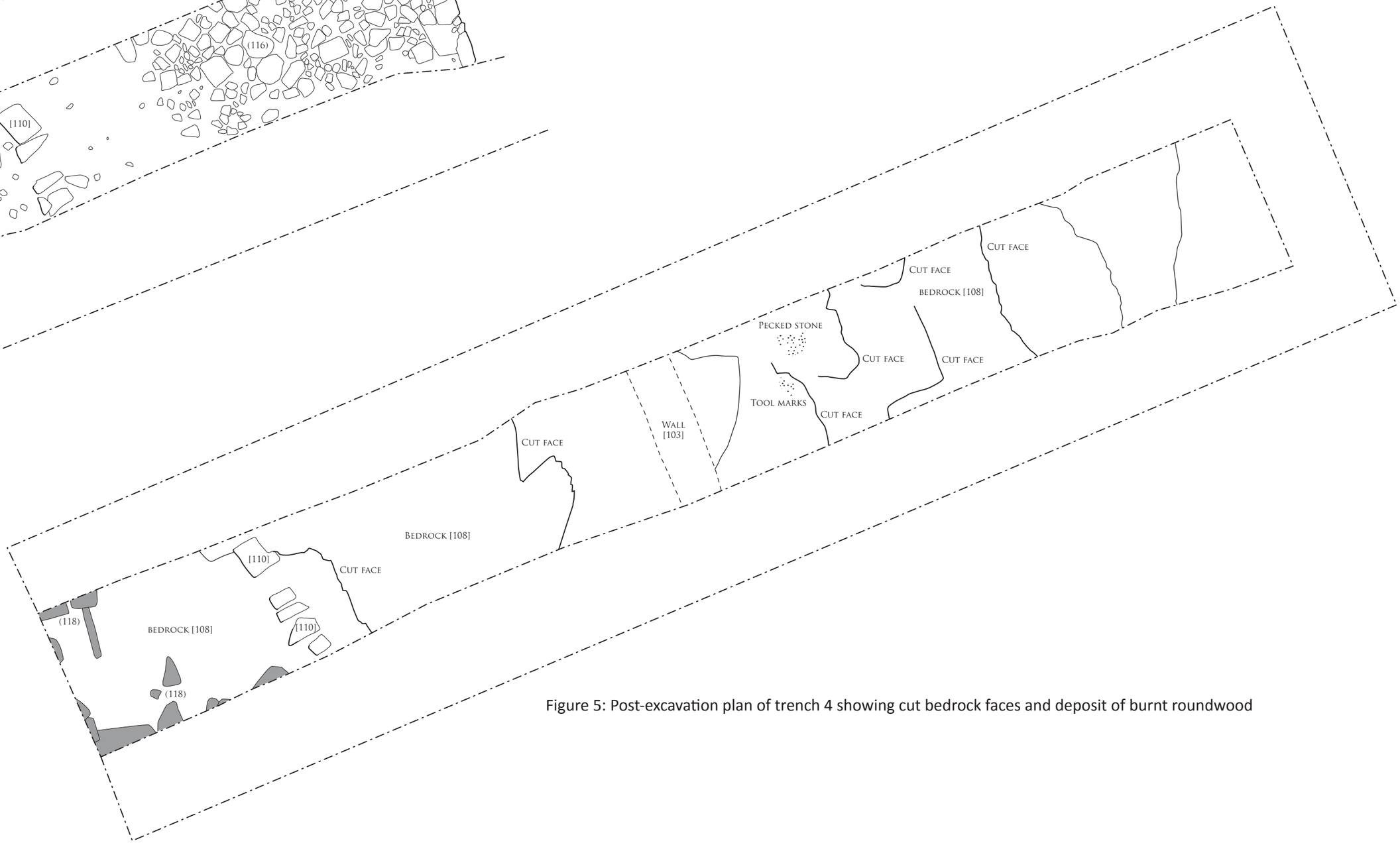

Figure 5: Post-excavation plan of trench 4 showing cut bedrock faces and deposit of burnt roundwood

Figure 4 & 5: Trench 1 mid and post-excavation plans

0 10m

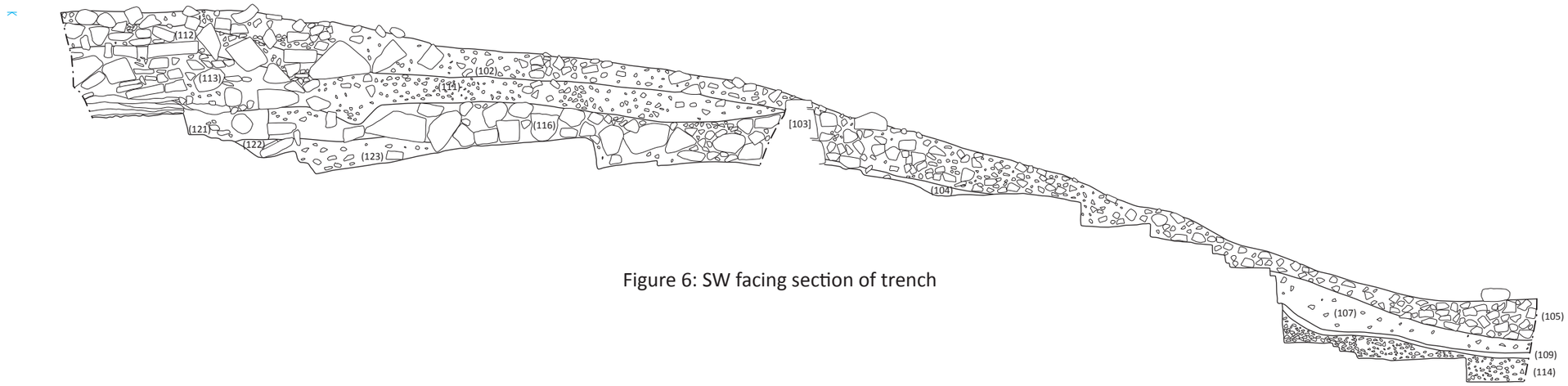

Figure 6: SW facing section of trench

Figure 7: SE facing elevation of wall [103]

Figure 6 & 7: Trench 1 SW facing section and SE facing elevation of wall [103]

0 10m

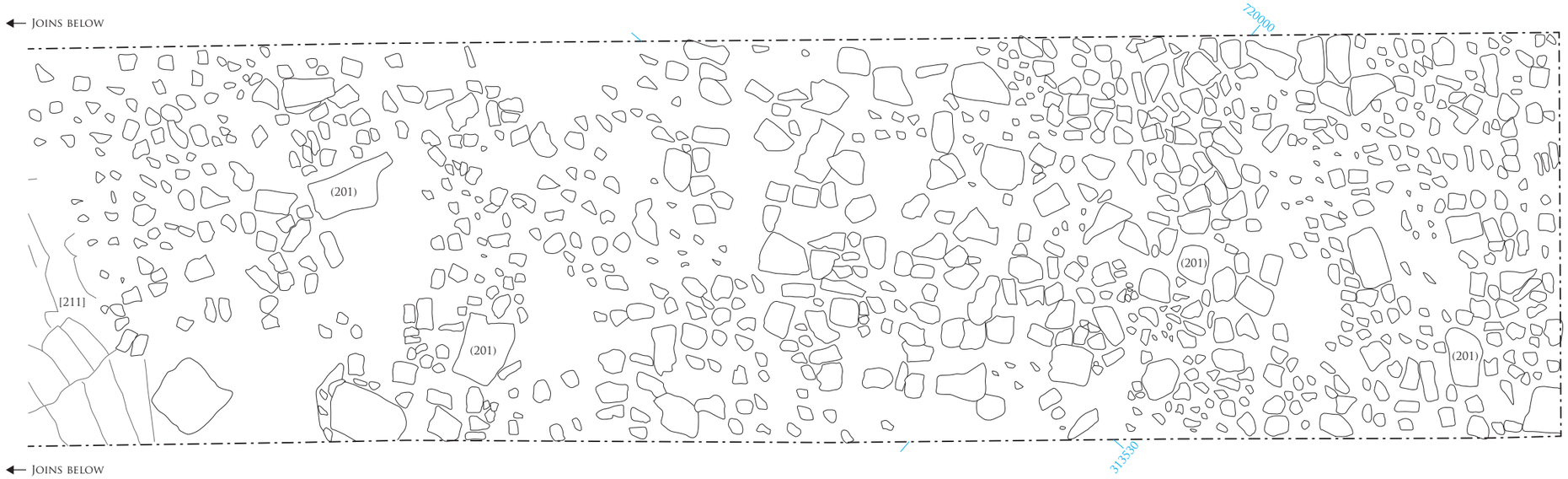

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Figure 8: Trench 2 Pre-excavation plan

0 10M

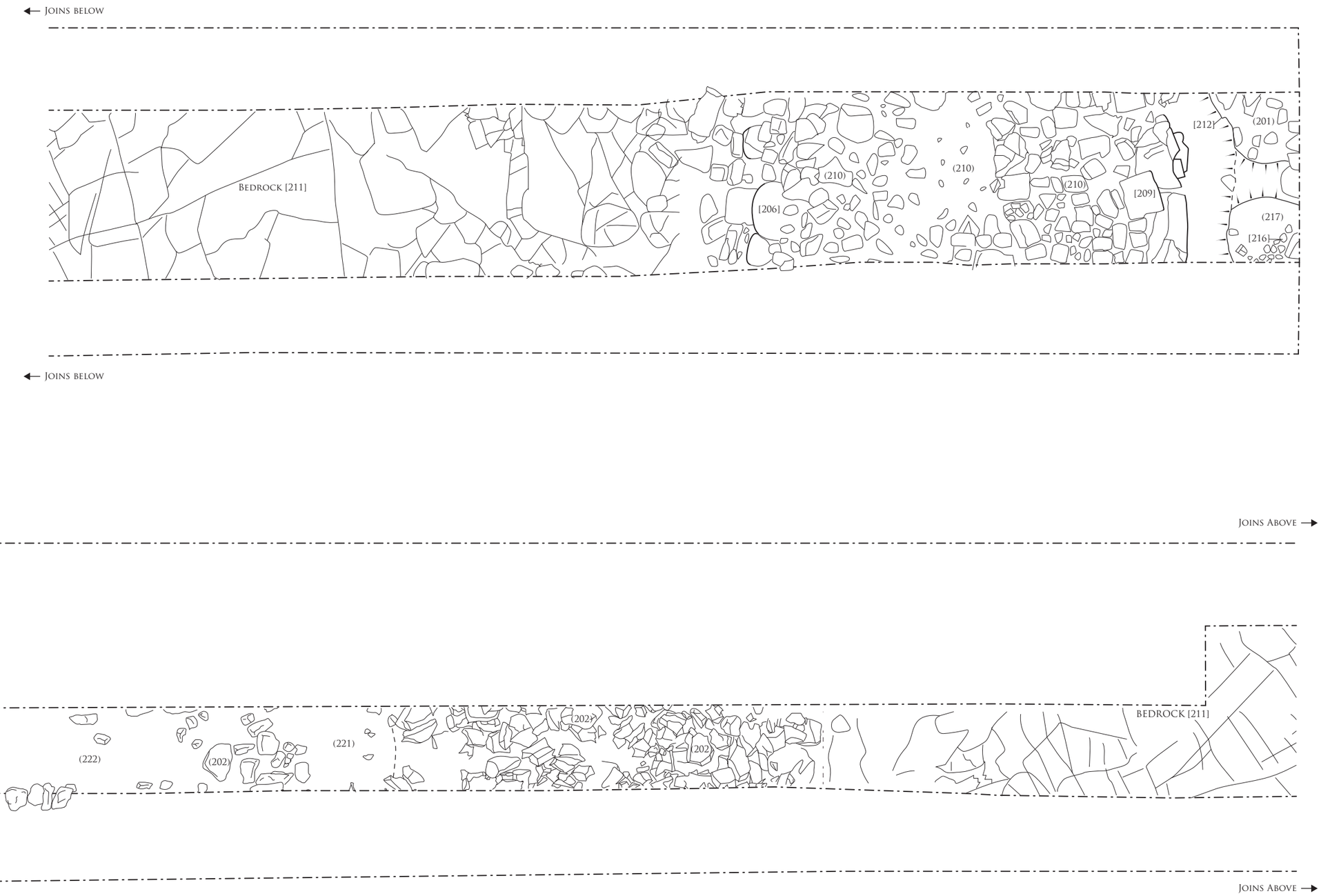


Figure 9: Trench 2 mid-excavation plan

0 10m

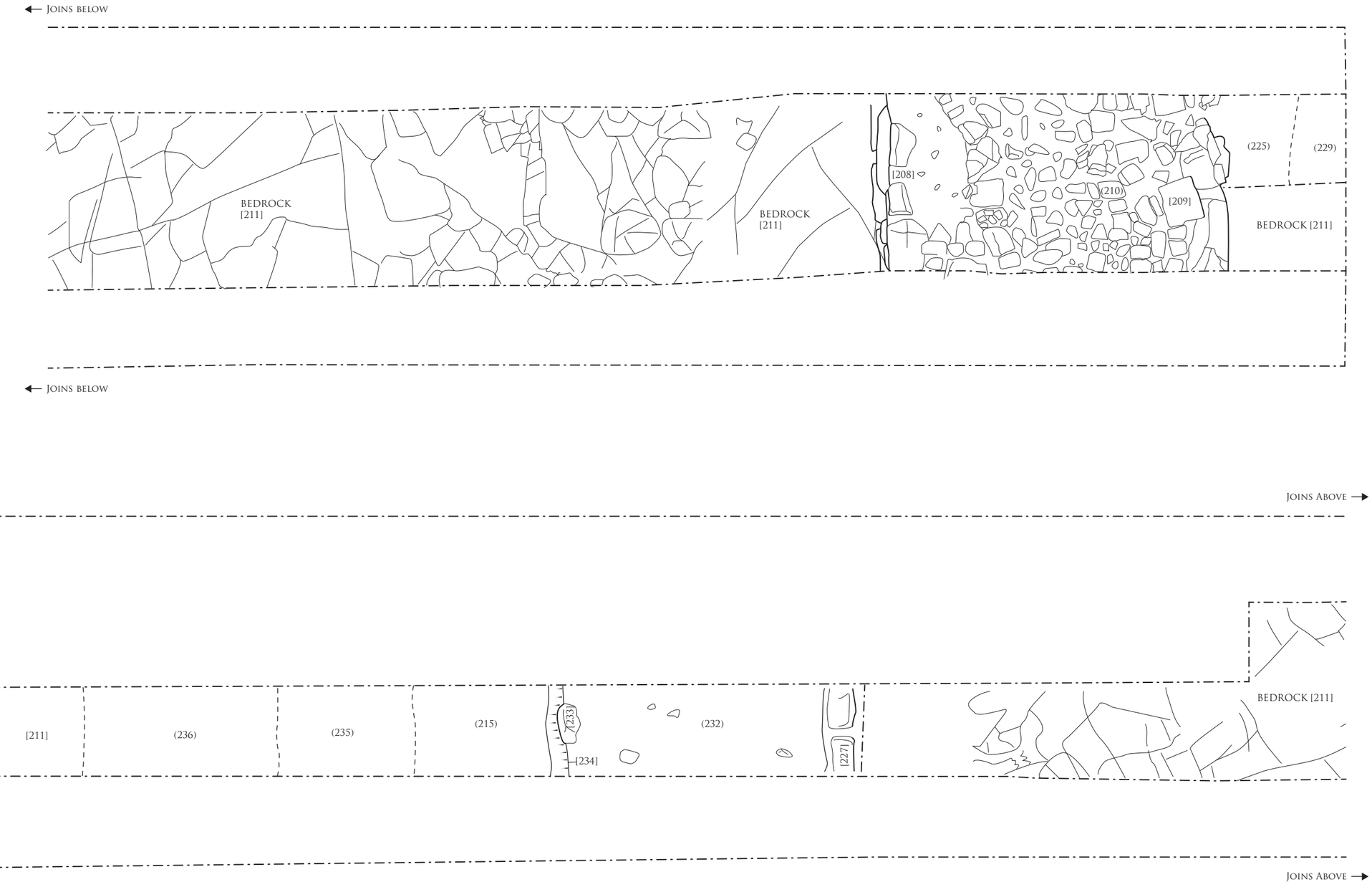


Figure 8: Trench 2 Pre-excavation plan

0 10M

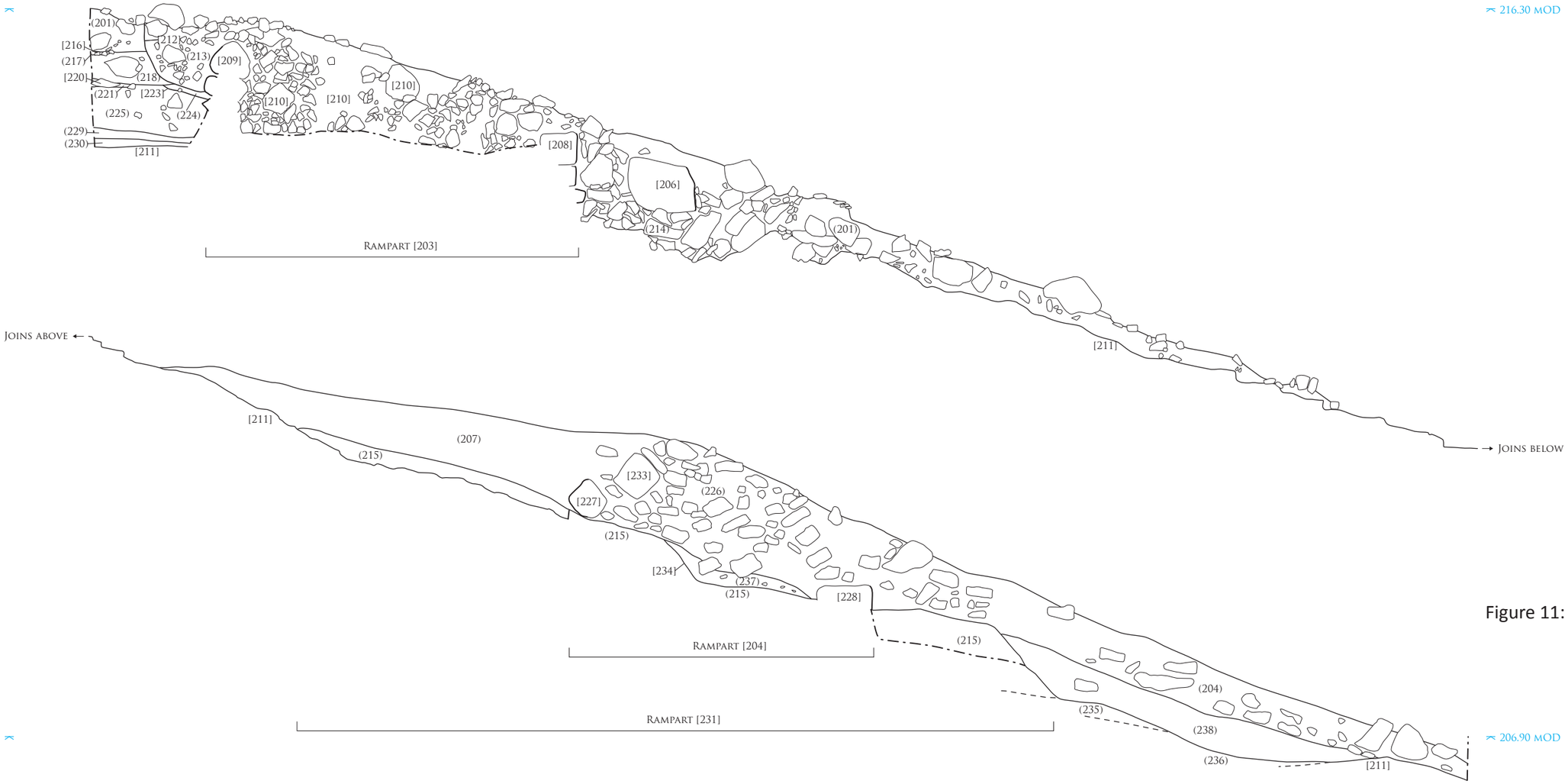


Figure 11: NE facing section of trench 2

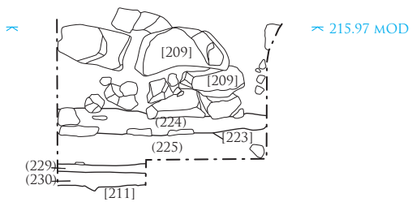
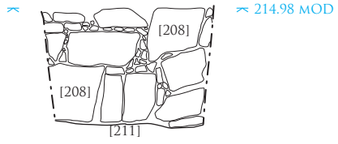


Figure 12: Internal face [209] of rampart [203]



Figue 13: External face [208] of rampart [203]

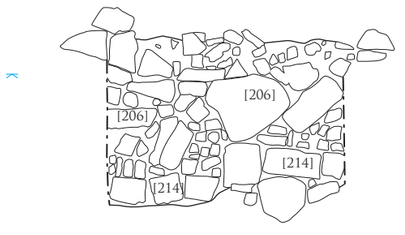


Figure 14: Rebuilt outer face [206] of rampart [203]

Figure 11 - 14: Trench 2 NE facing section and elevations of ramparts

0 10m

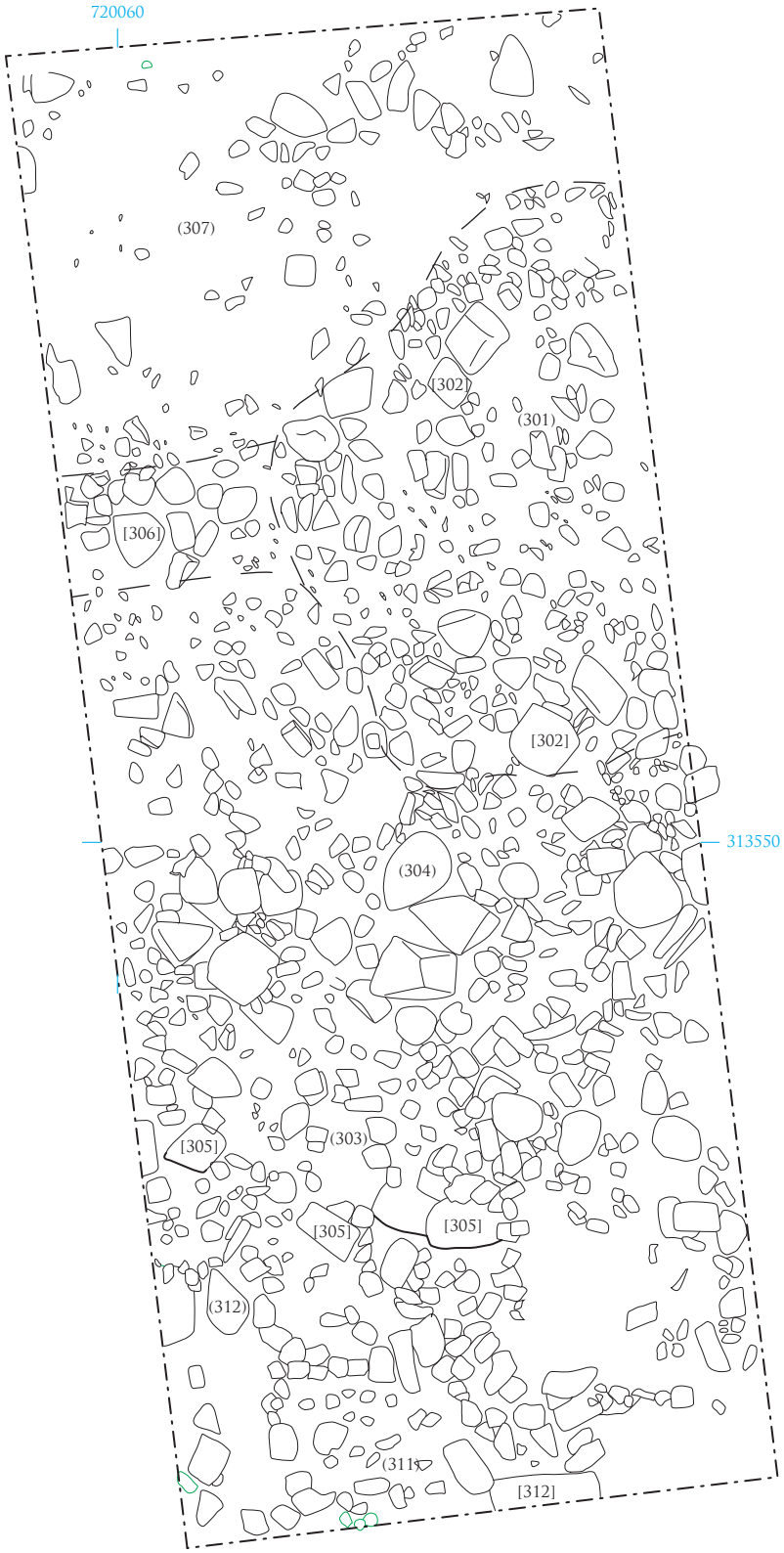


Figure 15: Trench 3 Pre-excavation plan

0 10M

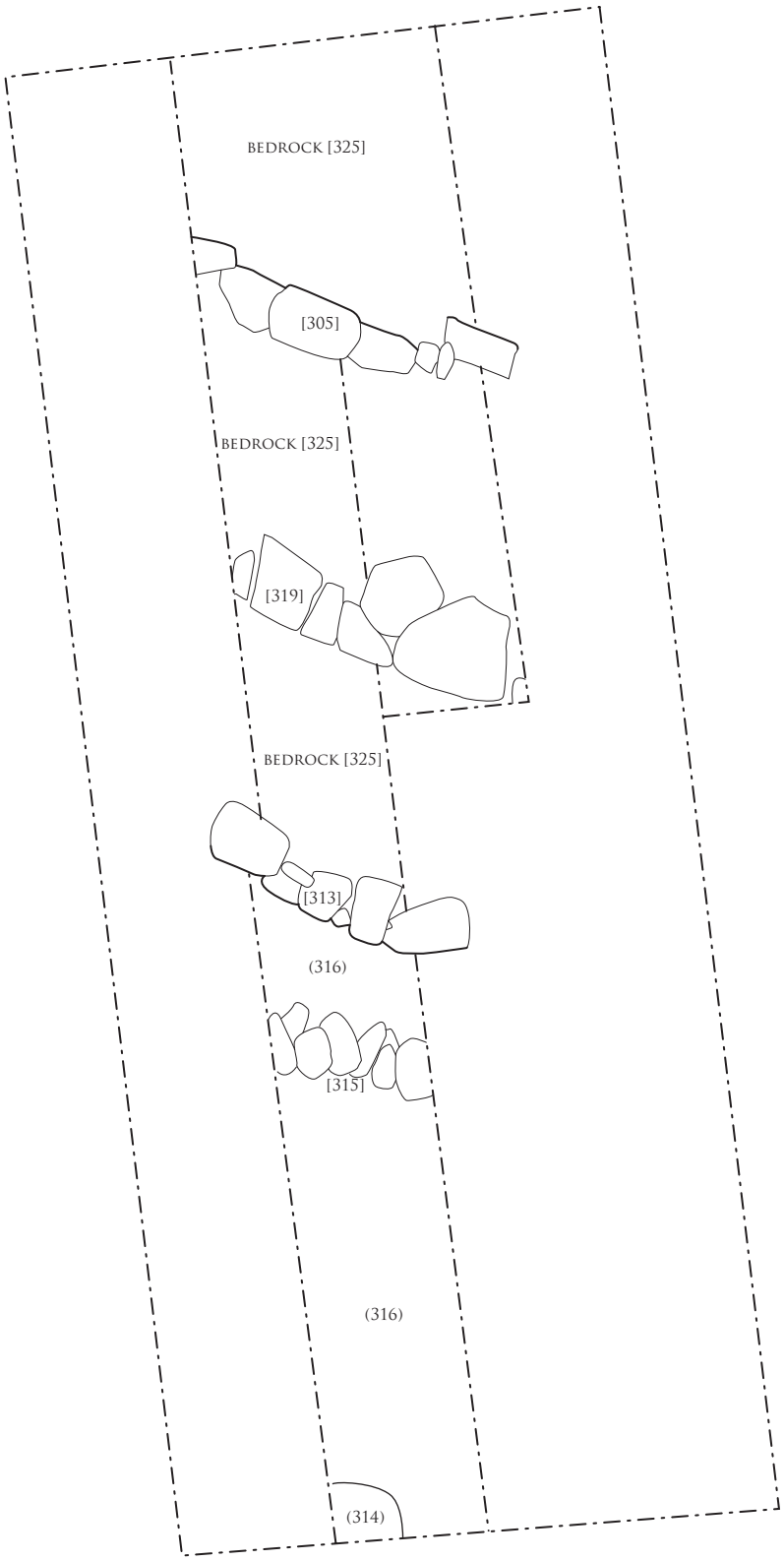


Figure 16: Trench 3 Post-excavation plan

0 10M

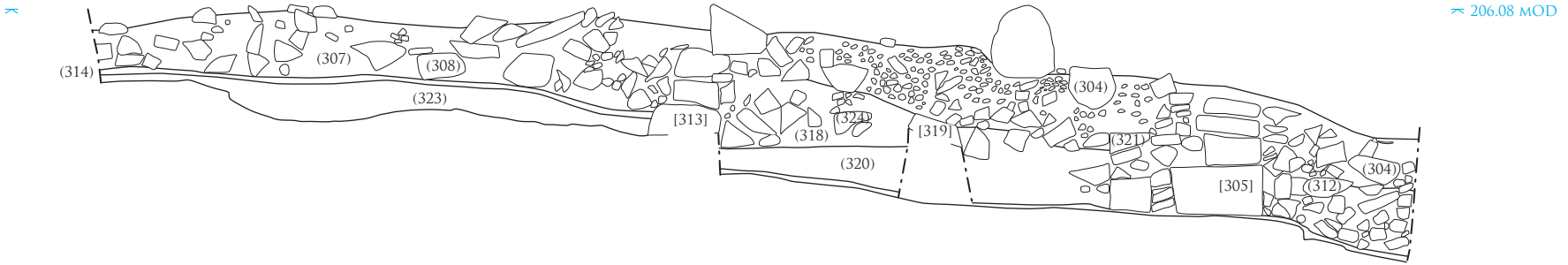


Figure 17: N facing section

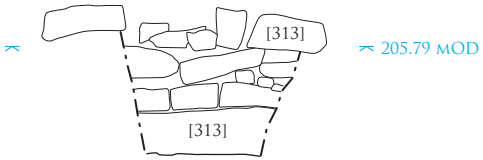


Figure 18: NW facing elevation of external face

Figure 19: NW facing elevation of medial face

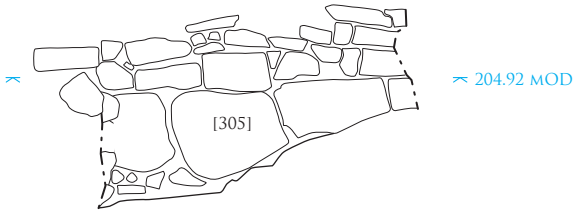


Figure 20: SE facing elevation of internal face

Figure 17-20: Trench 3 N facing section and elevations of ramparts

0 10M

Figure 21: Trench 4 Pre-excavation plan

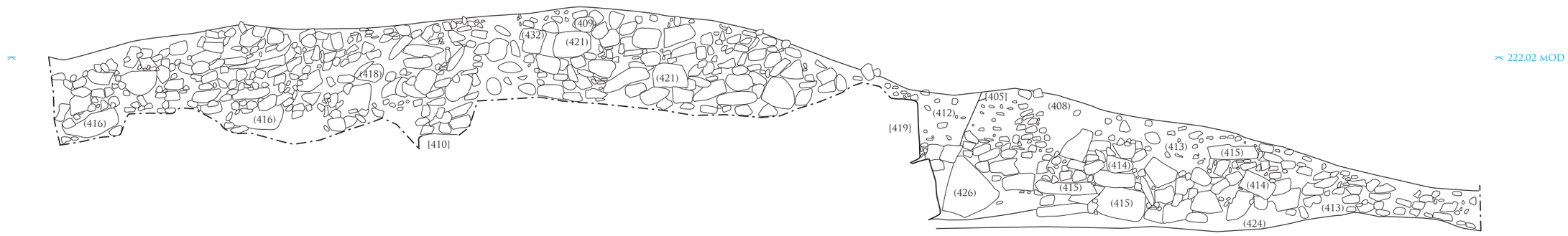


Figure 23: S facing section of trench 4

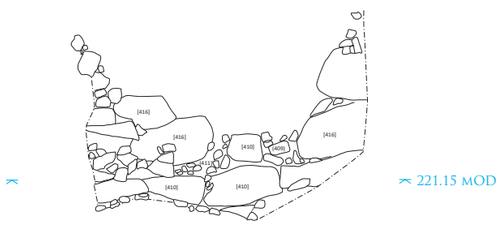


Figure 24: Internal face [410] of rampart

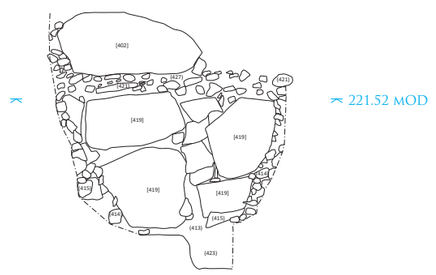


Figure 25: External face [419] of rampart

Figure 23-25: Trench 4 S facing section and elevations of ramparts

0 10M

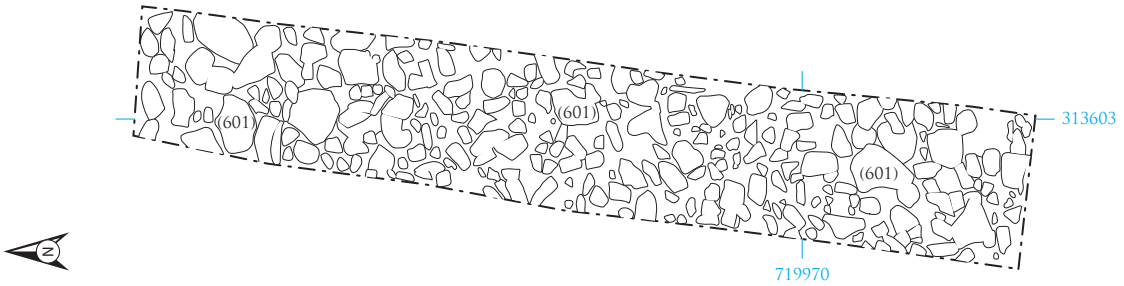


Figure 26: Trench 6 plan

Figure 27: Trench 6 E facing section

Figure 26 & 27: Trench 6 plan and section

0 10M

APPENDIX 1: CONTEXT REGISTER

Trench 1

Context No.	Area	Description and Interpretation
100	Tr 1	**Turf**
101	Tr 1	Lightish brown silt with occasional small stones **Topsoil**
102	Tr 1	Dark brown sandy silt with frequent mid-large sub-angular stones which includes red sandstone blocks. Contains occasional flecks of charcoal ad burnt bone. **Stone 'tumble' / rubble of wall collapse – possible quarrying contamination**
103	Tr 1	Wall composed of large blocks mainly sandstone cut into rough rectangular blocks. Second course of stonework composed of red sandstone. **Stone wall face (outer) of broch**
104	Tr 1	Very fine sandy silt which was dark grey / brown in colour with frequent small charcoal flecks and burnt bone. **Deposit overlying bedrock**
105	Tr 1	Dark brown sandy silt with frequent large – mid sub-angular stones and occasional charcoal flecks. Varies from 0.2m – 0.6m in depth. **Rubble from demolition of [103] [116]**
106	Tr 1	Dark blackish brown soft silt with frequent charcoal flecks and is found in hollows on W of sondage on bedrock [108]. Measured 0.1 – 0.6m in depth. **Dark silty deposit on bedrock**
107	Tr 1	Crumbly mid brown sandy silt with occasional small river pebbles and sub-angular stones. Also contained occasional charcoal flecks and burnt bone. Measured 0.3 – 0.4m in depth. **Slump of material possibly accumulation of material at end of use or out of use of site**
108	Tr 1	Stepped down from N – S of trench below [103]. Some areas of bedrock quarried from downslope of [103] and between [110] and [103]. **Bedrock – possibly stepped on purpose**
109	Tr 1	Very dark soft silty deposit which was compact in places overlying orange chunky gravel / sub-angular stones deposit (114) at S end of trench. Contains frequent charcoal flecks and organic material. **Occupation deposit / accumulation associated with broch**
110	Tr 1	Several square faced stone blocks orientated approximately E-W in sondage. Blocks seemed to have been moved post occupation either as a result of demolition or robbing. **Inner wall face of broch**
111	Tr 1	Mid grey clay silt with very frequent small-mid sub-angular stones. Heav clay rich deposit underlying rubble/tumble (102) **Demolition backfill deposit – post-use deposit sealing 'core' (116)**
112	Tr 1	Large sub-angular stones north of wall [110], includes red sandstone blocks and faced stone from wall [110] **Collapse / demolition backfill of wall [110] over interior of structure**
113	Tr 1	Fairly charcoal rich mid grey silty clay with frequent mid-large sub-angular stones. Overlies deposit (118). **Fire/roof collapse of structure**
114	Tr 1	Mid brown/orange silty gravel – mainly stone chipping which is sub-angular and fragmented from quarrying of bedrock south of [103] **Quarrying chippings from terracing of bedrock [108]**
115	Tr 1	**In situ burning – interior (SAME AS (118)) VOID**
116	Tr 1	Very large rounded and sub-angular stones set in loose mid brown sandy silt and sits almost on top of bedrock in places. **Rubble wall core**
117	Tr 1	Brownish grey clay deposit below disturbed wall [110] **Grey clay deposit**
118	Tr 1	Very charcoal dense deposit, black in colour and located beneath charcoal rich clay (113). Patches of orange heat affected soil in amongst deposit. **In situ burning possibly associated with roof or internal fire**
119	Tr 1	Fine orange silty sand with lenses or orange silty brown (120) **In situ burning – episodes of burning / collapse**
120	Tr 1	Mid brown sandy silt with frequent charcoal flecks and burnt bone **Episodes of burning and collapse**

Context No.	Area	Description and Interpretation
121	Tr 1	Fine sandy silt, mid brown in colour with occasional sub-angular stones. Sealed by burnt material (118) **Possibly same as (123)**
122	Tr 1	Mixed brown orange sandy deposit against stone in section **Silting after initial construction or associated with rubble outside wall**
123	Tr 1	Mixed grey clayish deposit below (116) and silting up on bedrock [(108) and rubble core (116)

Trench 2

Context No.	Area	Description and Interpretation
200	Tr 2	Dark grey black ilty loam with long grass, moss and ferns **Topsoil**
201	Tr 2	Mixture of medium to large angular stones and boulders ranging from 0.10m – 0.80m, with a medium orange brown silt loam matrix. Directly overlies bedrock in some areas. **Tumble from upper rampart [203]**
202	Tr 2	Mix of medium to large angular stones and sub-rounded boulders ranging from 0.10m – 0.50m with a medium orange brown silty loam. **Tumble from lower rampart [204]**
203	Tr 2	Dry stone rampart composed of inner facing wall [209], rubble core (210), outer face [208] which has been rebuilt / buttressed [206]. 3.35m wide **Upper rampart**
204	Tr 2	Lower stone built rampart comprising inn [227] and outer [228] faces and a stone [233] and earth (231) core. **Lower rampart**
205	Tr 2	Line of 4 large stones aligned E-W at the base of tumble from upper rampart (201). **Tumble from upper rampart [203]**
206	Tr 2	Acing course of inner rampart [203] composed of at least two courses of rough large rounded boulders measuring u to 0.6m x 0.6m x 0.5m and small angular stones. **Rebuild / N facing of outer face [203]**
207	Tr 2	Dark grey brown compact sandy clay with some angular stones and contained occasional charcoal flcks, burnt bone and frequent slag. **Upper fill of possible ditch**
208	Tr 2	Outer face of rampart [203] composed of large squared blocks measuring 0.6m x 0.5m x 0.4m, possibly quarried / dressed. Up to 3 courses surviving. **Outer face of upper rampart [203]**
209	Tr 2	Survives up to 4 courses high, comprised of roughly squared blocks measuring 0.8m x 0.5m x 0.4m laid in very rough courses and partially collapsed / slumped. **Inner face of upper rampart [203]**
210	Tr 2	Composed of angular to sub-angular stones measuring 0.5m x 0.4m x 0.4m, extending between inner [209] and outer [208] face of rampart [203]. **Rubble core of rampart [203]**
211	Tr 2	Bedrock sloping from S-N, exposed after removal of rampart collapse. **Bedrock**
212	Tr 2	Linear cut orientated E-W running along southern face of inner wall face [209]. **Cut of Antiquarian trench**
213	Tr 2	Deposit of angular stone of varying sizes, measuring up to 0.5m x 0.45m x 0.4m of sub-rounded to angular shape in a loose sandy silt matrix. **Fill of Antiquarian trench [212]**
214	Tr 2	Mix of medium to large angular stones measuring up to 0.7m x 0.5m x 0.4m with a sandy silty gravel matrix. **Tumble from rampart [203], underlying rebuild [206]**
215	Tr 2	Mixed orange brown firm sandy silt with occasional charcoal and gravel **Possible buried ground surface below (207) and lower rampart [204]**
216	Tr 2	Small patch of possible rough cobbled surface in SW corner of trench. Disturbed by Antiquarian trench [212] and comprised of squared cobbles measuring up to 0.1m x 0.05m x 0.05m. **Possible cobbled surface immediately interior of rampart [203]**
217	Tr 2	Mixed orange brown silty sand with occasional gravel and charcoal flecks. **Levelling deposit below (216)**
218	Tr 2	Deposit of medium to large angular stones measuring up to 0.4m x 0.4m x 0.3m set in a loose matrix of sandy wilt with occasional charcoal. Extends between [209] at S end of trench. 0.4m thick.

Context No.	Area	Description and Interpretation
		Collapse of rampart [203]
219	Tr 2	**VOID – same as (226)**
220	Tr 2	Area of flat slabs at S end of trench. Composed of medium to large flat sub-angular slabs measuring 0.5m x 0.4m x 0.2m . **Rough paving of interior of hillfort**
221	Tr 2	Mixed reddish brown firm sandy silt with frequent charcoal flecks and pea gravel. **Leveling deposit for [220]**
222	Tr 2	Mixed reddish brown sandy silt with occasional charcoal and sub-angular stones. **Old ground surface**
223	Tr 2	Linear cut with a sharp break of slope and sharp sides meeting an irregular base. Measures 0.25m wide and 0.09m deep. On E-W alignment. **Construction cut for [203] / [209]**
224	Tr 2	Brown sandy silt of loose compaction with charcoal and angular stone inclusions. Measures 1.3m x 0.25m x 0.09m **Fill of cut [223] - redeposited silty sand.**
225	Tr 2	Mid reddish brown firm silty sand with charcoal flecks and angular stones. **Old ground surface**
226	Tr 2	Loose deposit of sandy silt with frequent rooting and occasional charcoal (same as (219)) **Earth core of [204]**
227	Tr 2	Comprised of large squared blocks **Inner face of [204]**
228	Tr 2	Comprised of large blocks with possible facing stones above collapse (202) **Outer facing course of [204]**
229	Tr 2	Charcoal rich black deposit of silty sand **Occupation deposit**
230	Tr 2	Mid grey brown firm sandy silt with occasional charcoal flecks **Old ground surface below (229)**
231	Tr 2	Comprised of deposit (232) and recut / refacing [234] **Earth rampart below [204]**
232	Tr 2	Dark grey compact ilty clay with abundant charcoal and occasional stones and grael. **Earth of rampart [231]**
233	Tr 2	Comprised of sub-rounded and sub-angular stones measuring up to 0.5m x 0.3m x 0.3m **Stone core of rampart [204]**
234	Tr 2	Linear cut orientated E-W with sharp break of slope with steep sloping sides. **Re-cut of [231]**
235	Tr 2	Mid orange brown firm sandy silt with occasional charcoal flecks and gravel. **Old ground surface below [231]**
236	Tr 2	Mid brown orange silty clay overlying [211] **Natural**
237	Tr 2	Mid orange brown loose silty sand with occasional gravel and charcoal. **Collapse of rampart [231]**
238	Tr 2	Mid orange brown loose silty gravel with occasional charcoal and gravel **Collapse from [231]**

Trench 3

Context No.	Area	Description and Interpretation
300	Tr 3	Very shallow, c0.10m deep **Turf / topsoil**
301	Tr 3	Matrix of (302) composed of fine pale yellow sandy silt. Extends 3m N-S and 3m E-W. Depth of 0.5m. **Upcast from modern path**
302	Tr 3	Subangular stones measuring 0.1m – 0.4m and up to 0.5m deep. **Stones upcast from modern path / rubble created by destruction of section of rampart**
303	Tr 3	Mid orangey brown sandy silt, moderately friable. Measured up to 0.1m deep. **Matrix of rubble (304)**
304	Tr 3	Subangular stones measuring up to 0.3m diameter with occasional large boulders u to 0.5m diameter. **Tumble to E of Wall [305] or rubble core**
305	Tr 3	Orientated NNE-SSW. Comprised of subangular stones measuring up to 0.5m x 0.3m x 0.15m. Survives over 1m in height. Built directly onto natural. Largest stones measure 0.7m diameter at base

Context No.	Area	Description and Interpretation
		of wall. **Lower / outer wall of rampart**
306	Tr 3	Possible linear feature extending N-s comprised of subangular stones up to 0.3m diameter. **Tumble to E of wall [313]**
307	Tr 3	Mid orangey brown silty clay in E end of trench, extending across 4m width, 2m N-S and possibly up to linear features [306] **Matrix on interior E side of tumble [309]**
308	Tr 3	Spread of stones extending across the E end of the trench, measuring up to 0.4m diameter. **Rubble to E of rampart**
309	Tr 3	Matrix of stones (306) comprised of dark orangey brown sandy silt, moderately friable with high stone content – pebbles measuring up to 0.2m diameter. Extends approximately 0.5m E-W from wall [313] into interior **Matrix of tumble from wall [313] in interior of annexe**
310	Tr 3	Mid orangey brown very fine sandy silt extending across E end of trench. Contains largish stones measuring up to 0.5m diameter. **Hillwash among rubble from rampart?**
311	Tr 3	Mid blackish brown sandy silt, moderately friable. High stone content, up to 0.5m diameter. **Matrix of rubble tumble [312]**
312	Tr 3	Large stones measuring from 0.1m to 0.7m diameter and includes large red sandstone blocks **Rubble tumble from wall [305]**
313	Tr 3	Large stones measuring up to 0.5m diameter running NNE-SSW across trench forming a linear features which survives up to 1m in height. Basal stones are large rounded boulders and least 1m long, 0.4m wide and 0.4m high. **Inner face of rampart**
314	Tr 3	Mid blackish brown deposit visible for 0.6m at E end of trench with a high stone with a high stone/gravel content and charcoal inclusion. Measures up to 0.1m deep. **Gravel deposit in annexe interior**
315	Tr 3	Spread of degrading sandstone measuring 1.2m to E of wall [313]. Extends N-S across 1m sondage, .4m wide. Stones measures up to 0.25m diameter. **Sandstone? Paving**
316	Tr 3	Dark orangey brown sandy silt, moderately friable with high stone content of subangular pebbles up to 0.1m diameter. Contains small quantities of charcoal, burnt bone and animal teeth. **Occupation deposit, annexe interior**
317	Tr 3	Dark black brown clay with frequent charcoal inclusions and occasional small angular gravel. Extended in a patch approximately 0.4m x 0.3m and E end of sondage. **Trample / occupation layer**
318	Tr 3	Mid brown clayey silt in wall core. **Wall core deposit**
319	Tr 3	Angular stone within (318) forming a line across trench parallel with inner face [313] **Stone wall core / earlier wall?**
320	Tr 3	Dark orange brown ? lying 0.2m deep with occasional charcoal flecks **Base layer of interior wall in rampart**
321	Tr 3	Medium angular stone wall core consisting of frequent angular stones measuring 0.4m x 0.3m x 0.2m to 0.4m x 0.2m x 0.1m within matrix (322). **Core of wall [319]**
322	Tr 3	A medium brown compact gravelly clayey silt extending from [319] to extent of wall core **Matrix of rubble core of wall [319]**
323	Tr 3	Dark orange brown sandy silt with a very high stone content, stones measure 0.2m diameter. Extends across trench to E of wall [313] and up to 0.2m deep. **Stoney deposit under (316) occupation layer**
324	Tr 3	Stones measuring 0.3m diameter. **Earthen and rubble core or rampart**
325	Tr 3	Rampart comprising walls [309] and [305] **Rampart**

Trench 4

Context No.	Area	Description and Interpretation
400	Tr 4	Mid brown patchy soil with frequent angular stones and patches of roots, moss and turf. **Turf and topsoil**

Context No.	Area	Description and Interpretation
401	Tr 4	Stone built rampart, roughly 5m in width and survives up to 2m in height. Consists of inner facing stones (410) and outer facing stones (402) + (419) and rubble core (409) + (421). **Stone built rampart**
402	Tr 4	Large rectangular slab measuring 1.18m x 0.33m x 0.37m. **Outer facing slab of [401]**
403	Tr 4	Consists of loosed angular stones or medium size and smaller stones within rooty soil (404). Bonded on W side by [402]. **Tumble of outside face (W) of [401]**
404	Tr 4	Mid brown rooty powdery silty soil matrix. Same as (411). **Soil matrix of (403) rampart core**
405	Tr 4	Steep sided curvilinear cut of ditch. **Cut of ?robber / Antiquarian trench**
406	Tr 4	Linear mound of rubble consisting of (407) and (408). **Bank / upcast outside [401] + [405] – redeposited tumble from outer face o collapsed rampart [401]**
407	Tr 4	Mid brown compact soil matrix with frequent shattered angular stones **Soil matrix of [406]**
408	Tr 4	Consists of small angular stones and medium sized angular stone blocks roughly 0.15m diameter. **Redeposited stone rubble from collapsed rampart [401] , upcast from robber / Antiquarian trench [405]**
409	Tr 4	Loose voided rubble consisting of medium sized angular stones measuring 0.2m x 0.2m x 0.2m and smaller stones. Occasional large angular boulders at centre of excavated N sondage. **Tumble / core rampart [401]**
410	Tr 4	Large angular blocks aligned N-S across E end of trench. Lower courses of inner facing lies over 2m below ground urface. **Inner facing slabs of rampart [401]**
411	Tr 4	Mid brown to dark brown loose silty soil with frequent small angular stone inclusions and occasional charcoal glecks. **Soil matrix of upper stone core [401]**
412	Tr 4	Loose dark brown soil with frequent small stones and pea gravel. **Fill of [405]**
413	Tr 4	Dark brown ilty soil with frequent small angular stones and occasional charcoal flecks. **Soil matrix of rubble under (406)**
414	Tr 4	Medium sized angular blocks and rounded boulders at W end of trench. **Rampart tumble at W end of trench**
415	Tr 4	Flat configuration of slabs in front of [402] **Slumped facing slabs [401] to W of [402]**
416	Tr 4	Large slumped angular slabs and blocks to E of (410) amongst (411). Consists of tumbled facing stones. **Slumped facing slabs – inner face of rampart [401]**
417	Tr 4	Dense compact silty clay rich soil of grey or pale brown colour. 1.3m deep **Matrix between large stones tumble 2m from face**
418	Tr 4	Loose rubble consisting of tumbled core from interior of inner face (41) of rampart [401]. Consists of small shattered angular stones and blocks. Depth not established. **Rubble from [401] outwith inner face (410)**
419	Tr 4	Large glacial rounded loose boulders and angular slabs forming lower courses of outer facing stones of rampart [401]. **Lower courses of outer rampart face below [402]**
420	Tr 4	Mid brown clay with slight grit content including angular stones and occasional charcoal. **Original ground surface**
421	Tr 4	Medium to large rounded boulders and angular stones amongst smaller stones. **Rubble core of rampart [401]**
422	Tr 4	Pocket of charcoal within [420] approximately 1.3m deep. **Burnt timber from within rampart core?**
423	Tr 4	Original ground surface underlying [401] [419] and is approximately 0.25m deep. **Old ground surface**
424	Tr 4	Mid brown fine silty clay with frequent charcoal flecks and occasional animal bone and toot fragments. **Old ground surface outwith outer face of rampart**
425	Tr 4	Bedrock at W end of trench **Bedrock W end of trench**
426	Tr 4	Large angular blocks of stone lying in front of [419]

Context No.	Area	Description and Interpretation
		Slumped facing slab
427	Tr 4	Dark brown silty gritty soil with frequent small charcoal inclusions. **Soil matrix of (421) core**
428	Tr 4	Orange brown pea gravel extends 1.2m N-S and 1m E-W. ranges from 0.05m – 0.3m in depth. **Possible natural deposit**
429	Tr 4	Yellow red mid brown layer, lying 0.01m beneath (433) **Iron pan layer**
430	Tr 4	Large angular stones block measuring 0.5m x 0.4m within core of [401]. Depth and extend not defined. **Internal wall abutting E face of outer rampart facing stones**
431	Tr 4	Linear alignment of medium sized rounded boulders roughly 0.3m diameter and angular rocks. Depth not defined **Inner stabilization wall within rampart core [401]**
432	Tr 4	Large angular slabs / blocks aligned roughly N-S, parallel to and set back 0.5m from inner fact of (410). **Internal stone wall abutting W face of inner rampart facing stones**
433	Tr 4	Mall depression in bedrock **Natural depression in bedrock**
434	Tr 4	Possible linear arrangement of large angular stone blocks or rounded boulders running N-S across core of rampart at a depth of 0.8m. **Internal wall, stabilizing core of rampart at E half of core**

Trench 6

Context No.	Area	Description and Interpretation
600	Tr 6	Dark brown organic rich powdery soil **Topsoil**
601	Tr 6	Layer of small, c 0.5 x 0.5m and medium, c 0.15 x 0.2m, angular stones. **Tumble from hut circle banks**

APPENDIX 2: PHOTOGRAPHIC REGISTER

Digital Photographs

Frame	Area	Description	From	Date
2161-2162	Tr 3	West end of Tr 3 following removal of turf/topsoil	W	3/9/15
2163-2166	Tr 3	E end of Tr 3 following removal of turf / topsoil	E	3/9/15
2167-2168	Tr 3	(301) + (302)? Upcast from path	S	4/9/15
2169-2170	Tr 3	Section of wallface [305] after removal of (300)	W	6/9/15
2180-2181	Tr 3	E end of Tr 3 after removal of (300) (301) (302)	E	9/9/15
2182-2183	Tr 3	E end of Tr 3 after removal of (300) (301) (302)	S	9/9/15
2184-2185	Tr 3	W end of Tr 3 after removal of (300) (301) (302)	W	9/9/15
2186-2189	Tr 3	Working shots during removal of (304) (305), (308) + (307)	W+E	10/9/15
2190-2193	Tr 3	Wall [305] during removal of rubble (312)	W	10/9/15
2194-2197	Tr 3	E end of Tr 3 during removal of (307)	E	11/9/15
2198-2202	Tr 3	Wall [305] during removal of rubble (312)	W	11/9/15
2203-2211	Tr 3	Wall [305] during removal of rubble (312)	W	15/9/15
2212-2216	Tr 3	E end of Tr 3 during removal of (307)	E	15/9/15
2217-2218	Tr 3	Wall [313] during removal of (307) (308)	S	15/9/15
2219-2223	Tr 3	Wall [305] after removal of rubble (312)	W	16/9/15
2224-2225	Tr 3	Feature 314	S	16/9/15

Frame	Area	Description	From	Date
2226-2227	Tr 3	Feature 314	N	16/9/15
2228-2229	Tr 3	Feature 315	S	16/9/15
2230-2233	Tr 3	General view E sondage after removal of rubble tumble	E	16/9/15
2234-2235	Tr 3	(317) charcoal at E end of Tr 3	E	18/9/15
2236	Tr 3	Bedrock at E end of Tr 3 wider view	E	18/9/15
2237-2240	Tr 3	E facing elevations of wall [313]	E	18/9/15
2241-2242	Tr 3	N facing section of sondage in Tr 3	N	18/9/15
2243-2246	Tr 3	Close up of N facing section left to right	N	18/9/15
2247-2248	Tr 3	Wall core showing structure [319]	W	18/9/15
2249	Tr 3	Wall core showing structure [319]	N	18/9/15
2250-2251	Tr 3	Wall core showing structure [319]	NW	18/9/15
151	Tr 2	Registration Shot		
152-153	Tr 2	General shot of wall 203 / 210	E	
154-155	Tr 2	Detail of secondary face (206)	N	
156-157	Tr 2	Detail of inner face (209)		
159-160	Tr 4	Mid excavation sot from E showing inner tumble of rampart [401]	E	
161-162	Tr 4	Mid excavation detail of tumble over inner face [401]	E	
163-164	Tr 4	Mid excavation detail of E most tumble of inner face [401]	E	
165-166	Tr 4	Mid excavation detail of E most tumble of inner wall face [401]	S	
167-168	Tr 4	Mid excavation detail of E most tumble of inner ace [401]	S	
169-182	Tr 4	Working sots of removal of rubble from [401]	Various	
183-184	Tr 4	Mid excavation of rubble at base of (406) from [401]	S	
185-186	Tr 4	Mix excavation of rubble at W extent of trench	S	
187-188	Tr 4	Mid excavation of rubble at W end of trench	S	
189-190	Tr 4	Mid excavation of base of (406)	W	
191-192	Tr 4	Mix excavation of rubble core [401] at W end of trench	W	
193-197	Tr 4	Mid excavation working hot of tumble from [401] inner face	Various	
198-201	Tr 2	North facing elevation of wall face [206]	N	
202-203	Tr 2			
204-206	Tr 4	E facing slope (inner) of rampart [401] tumble and inner wall face	E	
207-208	Tr 4	Detail of slumped inner facing stones [401]	E	
209-210	Tr 4	Inner slumped facing stone rampart [401] and tumble	N	
211-212	Tr 4	E most edge of trench 4 – tumble on inner face [401]	N	
213-214	Tr 4	Slumped inner facing stones of [401] and tumble details	N	
215-216	Tr 4	Collapsed core [401] from W taken on (402)	W	
217-218	Tr 4	Collapsed core [401] and facing stones (402)	W	
219-220	Tr 4	Collapsed core of [401] mid between inner facing and (402)	N	
221-230	Tr 4	Working shots		
231	Tr 4	Tumble over inner wall face	E	
232	Tr 4	Tumble over inner wall face	E	
233	Tr 4	Tumble over inner wall face		
234	Tr 4	Tumble over inner wall face		
235-241	Tr 4	Tumble over inner wall face		
242-243	Tr 2	Detail of back of rampart [204]	S	
244-245	Tr 2	Detail of back of rampart [204]	S	
246-247	Tr 2	Detail of back of rampart [204]	Above – W	
248-251	Tr 2	Detail of back of rampart [204]	S	
252-253	Tr 2	Detail of [204] and collapse (202)		
254-257	Tr 2	Wall face [206]	N	
258-263	Tr 4	Mid excavation of inner wall and tumble in Tr 4	E	16/9/15
264-265	Tr 2	S facing elevation of inner face of rampart [203]	S	16/9/15
266-267	Tr 2	Possible cobbled surface [216]	W	16/9/15
268-273	Tr 4	E facing section of Tr 4 after removal of rubble from [401]	N	16/9/15

Frame	Area	Description	From	Date
274-279	Tr 4	E end of Tr 4 after removal of rubble from [401]	S	16/9/15
280-282	Tr 2	Upper rampart outer face [208]	N	16/9/15
283	Tr 2	Upper rampart outer face [208]	NW	16/9/15
284-285	Tr 2	Upper rampart outer face [208]	NE	16/9/15
286-289	Tr 4	Mid excavation of exposure of outer face and tumble	W	16/9/15
290-295	Tr 4	Working shots	-	17/9/15
296-473	Tr 4	Photogrammatry	-	17/9/15
474-475	Tr 2	Rough paving [220]	N	17/9/15
476-477	Tr 2	Rough paving [220]	S	17/9/15
478-481	Tr 2	Interior face of [209]	N	17/9/15
482-483	Tr 2	Stone work of rampart [204]	S	17/9/15
484-485	Tr 2	Stone work of rampart [204]	N	17/9/15
486-487	Tr 2	Stone work of rampart [204]	N	17/9/15
488	Tr 4	Detail of outer rampart [401] face (402) and rubble	W	17/9/15
489	Tr 4	Detail of outer rampart [401] face (402) and rubble	W	17/9/15
490-491	Tr 4	Outer rampart face (402) and outer tumble of [401]	W	17/9/15
492-493	Tr 4	Detail of outer rmpart face (402) and (419)	W	17/9/15
494-495	Tr 4	S facing section at W end of trench and outer wall face	S	17/9/15
496-499	Tr 4	S facing section, W end of trench showing outer rubble (414)	S	17/9/15
500-501	Tr 4	N facing section, W end of trench showing outer wall face (414)	N	17/9/15
502-503	Tr 4	N facing section, W end of trench showing outer tumble	N	17/9/15
504-506	Tr 4	Pocket of charcoal rich clay (420)	S	17/9/15
507-510	Tr 4	Large lump of charcoal with (420) – S facing section of trench showing rubble immediately in front of 402 and 418	S	17/9/15
511-514	Tr 4	Heat affected stone in S facing section	S	17/9/15
515-516	Tr 2	Constructed trench cut [223]	N	17/9/15
517-518	Tr 2	Rampart [204]	N	17/9/15
519	Tr 2	Rampart [204]	S	17/9/15
520-521	Tr 2	Rampart [204]	E	17/9/15
522-524	Tr 4	Core of rampart [401] towards W	E	17/9/15
525-528	Tr 4	Core of rampart [401] towards E	W	17/9/15
529-532	Tr 4	Core of rampart [401] and S trench (sondage edge)	N	17/9/15
533-534	Tr 2	Charcoal rich layer (229)	S	
535-539	Tr 2	Charcoal rich layer (229)	N	
540-547	Tr 2	Charcoal layer / old ground surface / rampart (225) (229) (230)	Various	
556-557	Tr 4	Core material (421 + 427) within [401]	E	22/9/15
558-559	Tr 4	Core material detail	E	22/9/15
560-561	Tr 4	Core from wall face (41)	E	22/9/15
562-564	Tr 4	Core material (421 and 427) looking towards (410) and (402)	W	22/9/15
565-566	Tr 4	Detail core material (421 and 427) looking towards (410) and (402)	W	22/9/15
567-568	Tr 4	Core material (421 and 427) with S sondage section	N	22/9/15
569-582	Tr 4	Detail core (421 and 427) with buttressing stones to wall [410]	N	22/9/15
573-578	Tr 4	Detail section core (421 and 427) with buttressing slabs to west [410]	N	22/9/15
579-580	Tr 4	Detail section core (421 and 427) with buttressing slabs to west [410] with (402)	S	22/9/15
581-584	Tr 4	Detailed section core (421 and 427) at mid length along trench	S	22/9/15
585-588	Tr 4	Detail sction core (421 and 427) adjacent to inner facing slabs [410]	S	22/9/15
589-591	Tr 4	Working shots	S	22/9/15
592-594	Tr 4	(428) overlying bedrock (425) at NW corner	S	22/9/15
595-596	Tr 4	(428) overlying bedrock (425) at NW corner	E	22/9/15
597-598	Tr 4	Working shots W end of trench looking E to (419)	W	22/9/15
599-600	Tr 4	Plan of sondage at base of (419)	W	22/9/15

Frame	Area	Description	From	Date
601-608	Tr 4	Detail of outer wall face [402] (419)	W	22/9/15
609-610	Tr 4	Detail of 425 slumped facing slabs W of (419)	W	22/9/15
611-612	Tr 4	Working shots of slumped facing section of (419)	W	22/9/15
613	Tr 4	Slumped facing slabs in front of (419)	W	22/9/15
614-615	Tr 4	Slumped facing slabs in front of (419)	W	22/9/15
616-617	Tr 4	Detail of slumped facing slabs and remains of (429)	W	22/9/15
618-621	Tr 4	Detail interface between bedrock nd slumped facing slabs	W	22/9/15
622-623	Tr 4	Bedrock at W end of trench	W	22/9/15
624-625	Tr 4	Working shots Tr 4	W	22/9/15
626-627	Tr 2	Trench 2 from path	-	23/9/15
628-631	Tr 4	(402) and (419)	W	23/9/15
632-635	Tr 4	Sondage at base (419) post excavation	W	23/9/15
636-639	Tr 4	Tr 4 W end post excavation showing (419) and sondage	W	23/9/15
640-643	Tr 4	S facing section of W end (419) and tumble	S	23/9/15
644-647	Tr 4	Facing section W end and tumble	S	23/9/15
648-649	Tr 4	Bedrock at W end of Tr 4	W	23/9/15
650-651	Tr 4	Bedrock and patches of (424)	W	23/9/15
652-653	Tr 4	Bedrock at W end of Tr 4	W	23/9/15
654-657	Tr 4	S facing section W end of trench edge	W	23/9/15
658-661	Tr 4	N facing section W end of trench edge	S	23/9/15
662-673	Tr 4	N facing section	N	23/9/15
674-675	Tr 4	Tr 4 showing (419)	N	23/9/15
676-875	Tr 2	Photogrammetery Tr 2	-	23/9/15
026-027	Tr 6	Initial clean of N side of trench	N	24/9/15
028-029	Tr 6	Initial cleaning of S side of trench	S	24/9/15
030-031	Tr 6	Second clean o S side of trench	S	24/9/15
032-033	Tr 6	Second clean of N side of trench	N	24/9/15
034-037	Tr 6	Removed topsoil showing (601) bank tumble on N side of trench	N	25/9/15
038	Tr 6	SF604 in situ with N half of trench, W section	N	25/9/15
039-040	Tr 6	SF604 in situ with N half of trench, W section	E	25/9/15
041-043	Tr 6	SF604 in situ	E	25/9/15
044-046	Tr 6	Removed topsoil sowing (601) bank tumble, S half of trench	S	25/9/15

APPENDIX 3: DRAWING REGISTER

Trench 1

Drawing No.	Area	Details	Scale
1001	Tr 1	Pre-ex plan of rubble (002)	1:20
1002	Tr 1	Pre-ex plan of extension (002)	1:20
1003	Tr 1	Mid-ex plan of Tr 1 [103] [110] (102)	1:20
1004	Tr 1	Mid-ex plan of sondage through Tr 1	1:20
1005	Tr 1	Elevation of facing wall [103]	1:10
1006	Tr 1	In-situ charcoal and burning (118)	1:20
1007	Tr 1	W-facing section of Tr 1	1:10
1008	Tr 1	Post-ex plan of Tr 1	1:20

Trench 2

Drawing No.	Area	Details	Scale
2001	Tr 2	Pre-ex plan of Tr 2 showing tumble (201) (0m-10m)	1:20
2002	Tr 2	Pre-ex plan of Tr 2 (10m-20m)	1:20
2003	Tr 2	Pre-ex plan of Tr 2 (20m-30m)	1:20
2004	Tr 2	N-facing elevation of rebuild [206]	1:10
2005	Tr 2	Plan of rebuild [206]	1:20
2006	Tr 2	Plan of upper rampart [203]	1:20
2007	Tr 2	S-facing elevation of inner face [209]	1:10
2008	Tr 2	N-facing elevation of outer face [208]	1:10
2009	Tr 2	Plan of collapsed rampart [204]	1:20
2010	Tr 2	Plan of rampart [204]	1:20
2011	Tr 2	E-facing section of Tr 2	1:20
2012	Tr 2	Plan of charcoal rich layer (229)	1:20
2013	Tr 2	Plan of rampart [231]	1:20
2014	Tr 2	E-facing section of trench (S half)	1:20
2015	Tr 2	E-facing section of trench (N half)	1:20

Trench 3

Drawing No.	Area	Details	Scale
3001	Tr 3	General plan following removal of turf and topsoil	1:20
3002	Tr 3	Overlay following removal of (301) / (302)	1:20
3003	Tr 3	W-facing elevation of wall [305]	1:10
3004	Tr 3	Mid-ex during removal of (306) – (309)	1:20
3005	Tr 3	N-facing section (W end) of Tr 3	1:10
3006	Tr 3	Overlay after removal of rubble (307) + (308)	1:20
3007	Tr 3	E facing elevation of wall [313]	1:10
3008	Tr 3	Post-ex plan of Tr 3 (overlay of sondages + walls)	1:20
3009	Tr 3	Post-ex – overlay – final sondage	1:20

Trench 4

Drawing No.	Area	Details	Scale
4001	Tr 4	Tr 4 plan of [401] [405] [406] after removal of (400)	1:40
4002	Tr 4	Mid-ex plan of (415) (414) (413), [405] (412), (402)	1:20
4003	Tr 4	Elevation plan of inner face of [401] showing (410) (416) (409)	1:20

4004	Tr 4	N-facing section of E end of Tr 4 (slumped rampart under face)	1:20
4005	Tr 4	Post-ex plan of Tr 4 across W of trench and core	1:20
4006	Tr 4	Elevation of outer rampart wall face	1:10
4007	Tr 4	Section drawing of W end of Tr 4 – Post-ex	1:20
4008	Tr 4	Section drawing of core in Tr 4 – Post-ex	1:20

APPENDIX 4: FINDS REGISTER

Trench 1

Finds No.	Trench	Context No.	Description
1	Tr 1	Spoil heap 102	Hammerstone
102	Tr 1	102	Flake of worked agate
103	Tr 1	102	Vitrified stone
104	Tr 1	102	Flake of worked agate
105	Tr 1	102	Several flakes of worked quartz
106	Tr 1	102	River worn pebble
107	Tr 1	102	Flake of worked quartz
108	Tr 1	102	Charcoal
109	Tr 1	102	Burnt bone
110	Tr 1	104	Flake of quartz
111	Tr 1	104	Metal
112	Tr 1	102	Heated affected / vitrified stone
113	Tr 1	105	Stone
114	Tr 1	107	Stone
115	Tr 1	102	River worn stone
116	Tr 1	106	Rounded pebble
117	Tr 1	107	Smooth stone
118	Tr 1	107	Quartz core
119	Tr 1	102	Stone
120	Tr 1	109	Sandstone bead
121	Tr 1	109	Stone
122	Tr 1	111	Vitrified stone
123	Tr 1	110	Stone
124	Tr 1	114	Chert
125	Tr 1	114	Quartz chip
126	Tr 1	111	Stone
127	Tr 1	107	Tooth
127	Tr 1	117	Stone
128	Tr 1	117	Bone
129	Tr 1	110	Bone
130	Tr 1	116	Stone
131	Tr 1	117	Stone
132	Tr 1	118	Bone toggle?
133	Tr 1	118	Charcoal chunk – plank?
134	Tr 1	116	Flint flake
135	Tr 1	116	Stone
136	Tr 1	118	Tooth / animal jaw
137	Tr 1	116	Flint flake
138	Tr 1	123	Bone
139	Tr 1	123	Bone
140	Tr 1	123	Worked quartz?
141	Tr 1	123	Quartz – worked?
142	Tr 1	123	Quartz / flint flake
143	Tr 1	123	Bone
144	Tr 1	123	Worked quartz
145	Tr 1	123	Tooth
146	Tr 1	119	Small quartz pebble
147	Tr 1	121	Smooth cobble – worked?
148	Tr 1	U/S	Daub / burnt clay / pot

Trench 2

Finds No.	Trench	Context No.	Description
201	Tr 2	201	Burnt bone
202	Tr 2	213	Animal bone
203	Tr 2	207	Possible rubbing stone
204	Tr 2	218	Animal tooth
205	Tr 2	210	Animal bone
206	Tr 2	221	Lithic
207	Tr 2	225	Animal bone
208	Tr 2	202	Burnt bone
209	Tr 2	202	Chert
210	Tr 2	225	Burnt bone
211	Tr 2	225	Animal bone
212	Tr 2	U/S	Slag

Trench 3

Finds No.	Trench	Context No.	Description
301	Tr 3	307	Worked stone disc
302	Tr 3	316	Animal bone
303	Tr 3	316	Worked stone?
304	Tr 3	303	Modern bottle glass
305	Tr 3	314	Worked stone?

Trench 4

Finds No.	Trench	Context No.	Description
400	Tr 4	400	Modern glass fragments
401	Tr 4	400	?heat affected stone
402	Tr 4	407	Possible smoothed / abraded stone
403	Tr 4	412	Modern glass sherds
404	Tr 4	407	Vitrified material
405	Tr 4	412	Vitrified material
406	Tr 4	412	Vitrified stone
407	Tr 4	409	Vitrified material
408	Tr 4	409	Possible hammerstone
409	Tr 4	409	Vitrified stone
410	Tr 4	412	Vitrified material
411	Tr 4	402	Vitrified stone
412	Tr 4	403	Vitrified material
413	Tr 4	403	Vitrified material
414	Tr 4	413	Bone
415	Tr 4	409	Possible vitrified stone
416	Tr 4	409	Possible vitrified stone
417	Tr 4	409	Possible firecracked cobble
418	Tr 4	409	Possible vitrified stone
419a	Tr 4	409	Possible vitrified stone
419b	Tr 4	409	Possible vitrified sandstone
419	Tr 4	421	Possible vitrified material
420	Tr 4	420 /422	Vitrified material
421	Tr 4	409	Possible vitrified stone

Finds No.	Trench	Context No.	Description
422	Tr 4	420 /422	Heat affected cobble fragment
423	Tr 4	420 /422	Possible cobble tool
424	Tr 4	424	Animal bone and tooth
425	Tr 4	424	Charcoal
426	Tr 4	424	Quartz pebbles
427	Tr 4	413	Animal tooth
600	Tr 4	600	Possible quartz gaming piece
601	Tr 4	600	Vitrified material
602	Tr 4	600	Hazelnut shell fragments
603	Tr 4	600	Possible quartz pounder
604	Tr 4	600	Stone – probably natural
001	Tr 4	U/S	Vitrified material
002	Tr 4	U/S	Possible worked chert

Trench 6

Finds No.	Trench	Context No.	Description
601	Tr 6	600	Vitrified material
602	Tr 6	600	Hazelnut shells
603	Tr 6	600	Possible quartz pounder
604	Tr 6	600	Small spherical stone ball
605	Tr 6	600	Possible sharpening stone

APPENDIX 5: SAMPLES REGISTER

Context No.	Area	Quantity (litres)
102	Tr 1	20l
104	Tr 1	30l
105	Tr 1	20l
106	Tr 1	10l
109	Tr 1	20l
111	Tr 1	20l
113	Tr 1	30l
114	Tr 1	20l
116	Tr 1	20l
117	Tr 1	10l
118	Tr 1	10l
119	Tr 1	10l
120	Tr 1	10l
121	Tr 1	10l
122	Tr 1	10l
123	Tr 1	10l
202	Tr 2	10l
207	Tr 2	20l
210	Tr 2	50l
213	Tr 2	10l
215	Tr 2	10l
215	Tr 2	10l
217	Tr 2	10l
218	Tr 2	10l
221	Tr 2	30l
224	Tr 2	20l
225	Tr 2	20l
226	Tr 2	10l
229	Tr 2	10l
235	Tr 2	10l
237	Tr 2	20l
307	Tr 3	10l
309	Tr 3	10l
311	Tr 3	10l
314	Tr 3	10l
316	Tr 3	10l
317	Tr 3	10l
318	Tr 3	20l
320	Tr 3	20l
322	Tr 3	10l
323	Tr 3	10l
Natural	Tr 3	10l
407	Tr 4	10l
412	Tr 4	5l
413	Tr 4	10l
417	Tr 4	1l (100%)
420	Tr 4	10l
422/420	Tr 4	2.5l (100%)
423	Tr 4	10l
424	Tr 4	10l

427	Tr 4	10l
428	Tr 4	10l
429	Tr 4	?1l (“small quantity in bucket”)

APPENDIX 6: *'DISCOVERY AND EXCAVATION IN SCOTLAND'* REPORT

LOCAL AUTHORITY:	Perth and Kinross
PROJECT TITLE/SITE NAME:	Moredun Hillfort
PROJECT CODE:	23223
PARISH:	Dunbarney
NAME OF CONTRIBUTOR:	Jamie Humble and Sophie Nicol
NAME OF ORGANISATION:	AOC Archaeology Group
TYPE(S) OF PROJECT:	Excavation
NMRS NO(S):	NO11NW 23
SITE/MONUMENT TYPE(S):	Fort
SIGNIFICANT FINDS:	Stone disc-bead; Bi-polar core; Coarse stone pounders/grinders; Stone disc; Shale bracelet fragment; Iron hoop.
NGR (2 letters, 6 figures)	NO 1362 1999
START DATE (this season)	1st September 2015
END DATE (this season)	26th September 2015
PREVIOUS WORK (inc DES)	None
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	An archaeological excavation was undertaken by the Tay Landscape Partnership, with local volunteers, Perth and Kinross Heritage Trust and AOC Archaeology Group at Moredun Top hillfort. The works follow on from and compliment the earlier evaluation works completed at the adjacent site of Moncreiffe Hill, itself an Iron Age fort. The 2015 works formed the first season of an intended three year programme of excavations at the hillfort. The 2015 works comprised five trenches, which investigated the three main lines of ramparts, an annex enclosure. Within the hillfort a large flat topped mound along with a double ring hut circle were investigated. The excavation of the ramparts demonstrated that there was a complex sequence of enclosure at the hillfort. The trench excavated across the two main enclosing banks demonstrated that both of these had at least two separate phases of construction with primary earth banks being overlain by stone ramparts. A similarly long sequence of occupation deposits internal to the upper of the main rampart lines was recorded. Across all the lines of enclosure the massive and monumental nature of the dry-stone ramparts was revealed. Excavations within the interior of the hillfort focussed on a flat topped mound. Here another large dry-stone wall was exposed probably the outer wall of a monumental roundhouse. In the interior of this structure were a series of in-situ burnt deposits probably derived from the burning of structural elements of the roundhouse. Limited excavation was also undertaken at a double ring hut circle within the interior. A series of radiocarbon dates from across the site were obtained all of which dated to the 2nd half of the 1st millennium BC.
PROPOSED FUTURE WORK:	Two further seasons excavation planned along with a programme of post-excavation analyses
CAPTION(S) FOR ILLUSTRATIONS:	N/A
SPONSOR OR FUNDING BODY:	Tay Landscape Partnership
ADDRESS OF MAIN CONTRIBUTOR:	AOC Archaeology Group, Edgefield Road Industrial Estate, Loanhead, Midlothian, EH20 9SY
EMAIL ADDRESS:	admin@aocarchaeology.com
ARCHIVE LOCATION	Archive to be deposited in NMRS









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