Appendix 15.3

Raitts Cave Archaeological Evaluation Report

Raitts Cave
Lynchat, Kingussie
Highland

Archaeological Field Evaluation
Data Structure Report
Project No: 759

April 2018

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Raitts Cave
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Archaeological Field Evaluation Data Structure Report

Project No: 739

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Executive Summary

This report sets out the results of an archaeological field evaluation undertaken by Orkney Research Centre for Archaeology (ORCA) on land adjacent to Raitts Cave Souterrain, to the north east of Kingussie.

The work was undertaken in order to identify the presence or absence of archaeological remains and to ascertain if any such remains were associated with the Scheduled Ancient Monument in advance of the proposed A9 dualling in the vicinity of Raitts Cave.

Following consultation with the Local Authority Archaeologist and in line with best practice, the field evaluation consisted of a programme of excavations from 23 October to 11 November 2017 within the land taken for the proposed dualled A9 highway.

The results of the fieldwork identified archaeological features within two locations on the site.

The remains of a structure were identified at the eastern end of the study area. The structural remains are associated with deposits containing material derived from human activity, with evidence for burning and a small number of ceramics. Radiocarbon dating of material recovered from the palaeoenvironmental samples has indicated that at least some of this activity occurred during the later medieval period. The environmental data also provides some information regarding the usage of nearby woodland resources.

A series of features which appear to represent stone-revetted earthworks, which may be related to General Wade's Military Road, were identified within the west extent of the evaluation area.

A significant proportion of the Site to the south of the Souterrain has been affected by intensive ploughing. However, the presence of earthworks on the west side of the development area, appears to have preserved some features and deposits, within discrete pockets throughout the Site.

Contents

1 Introduction

This report was commissioned by CHJV on behalf of Transport Scotland and forms the Data Structure Report (DSR) for an archaeological field evaluation carried out at on land adjacent to the Raitts Cave scheduled monument (hereafter referred to as 'the Site'). This project was undertaken as part of the A9 Dualling Project 9: Crubenmore to Kincraig DMRB Stage 3 Preliminary Ground Investigation (GI) works contract.

The archaeological works comprised the excavation of six evaluation trenches within the land taken for the proposed dualled A9 highway (**Figure 1**). The fieldwork was carried out between the 23 October and the 11 November 2017.

The evaluation followed a programme of geophysical survey intended to inform the trial trench design. All works were carried out in accordance with a Written Scheme of Investigation (WSI) for the works (Mulcahy 2016), and the ORCA Standard operating procedures as set out in the ORCA Field Manual (2013).

This report has been prepared in accordance with the standards and guidance specified by the Chartered Institute of Archaeologists (CIfA).

1.1 Outline of the Proposed Development

The proposed development of the Site for the A9 Dualling Project 9: Crubenmore to Kincraig DMRB Stage 3 will involve the widening of the A9 northbound road situated directly to the south of the Site. The widening will include ground disturbing works which have the potential to disturb previously unknown archaeological features within the investigation area. The archaeological investigations will assist in the development of design options and mitigation strategies for the development.

2 Site Location, Topography and Geology

Raitts Cave (The Souterrain) is a Scheduled Monument located 1 km to the west of Lynchat and approx. 2km to the north east of Kingussie, covering an area of approx. 0.55ha. It is located 100m north of the existing A9 (on the northbound carriageway) at NGR NH 77670 01942. (See **Figure 1**)

The Site is situated on the south side of the field in which the souterrain is located, along the boundary with the northbound A9. The Site is within improved agricultural land with frequent undulations and possible bedrock outcroppings on a south facing slope between 243 and 253m above Ordnance Datum (mAOD).

The Site is bounded to the north by the scheduled area around the souterrain, to the east by a public access track, to the south by the northbound A9 road and to the west by an agricultural track and treeline.

The solid geology is loch Laggan Psammite Formation with an overlying drift geology of Ardverkie till formation (http://mapapps.bgs.ac.uk/geologyofbritain/home.html).

3 International and European Legislation

Two international conventions which concern cultural heritage are of relevance to this study. The **European Convention on the Protection of the Archaeological Heritage (revised)**, also known as the *Valletta Convention*, (ratified by the UK government in 2000) contains provisions for the identification and protection of archaeological heritage both under water and on land, preferably *in situ*, but with provisions for appropriate recording and recovery if disturbance is unavoidable. The **European Landscape Convention** (ratified by the UK government in 2006), promotes the protection, management and planning of landscapes in Europe, including the historical and cultural aspects of landscapes.

3.1 UK and Scottish Legislation

The primary piece of UK legislation concerning archaeology is **The Ancient Monuments and Archaeological Areas Act 1979**, concerning sites that warrant statutory protection due to being of national importance and are Scheduled under the provisions of the Act. The Act is administered in Scotland by Historic Environment Scotland (HES).

Such sites or areas may include any "monument which in the opinion of the Secretary of State is of public interest by reason of the historic, architectural, traditional, artistic or archaeological interest attaching to it". A monument is defined within the Act as:

> "*any building, structure or work above or below the surface of the land, any cave or excavation; any site comprising the remains of any such building, structure or work or any cave or excavation; and any site comprising or comprising the remains of any vehicle, vessel or aircraft or other movable structure or part thereof*" (Section 61 (7)),

with the additional definition of "*any thing, or group of things, that evidences previous human activity*" derived from section 14 of the **Historic Environment (Amendment) (Scotland) Act 2011**. Under the 1979 Act Scottish Ministers are required to compile and maintain a schedule of monuments considered to be of national importance. The 2011 Amendment also adds the requirement for Scottish Ministers to compile Inventories of Gardens and Designed Landscapes and of Battlefields that appear to be of national importance.

The consent of the Scottish Ministers is required before any works are carried out which would have the effect of demolishing, destroying, damaging, removing, repairing, altering, adding to, flooding or covering up a Scheduled Monument. Under the provisions of the 1979 Act (and as amended by the 2011 Act), it becomes an offence to carry out, without the prior written consent of the Scottish Ministers (Scheduled Monument Consent), any works which would have these effects.

In addition, impacts of proposed development works upon the setting of a Scheduled Monument form an important consideration in the granting or refusal of planning consent to conduct development works.

The **Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997** and subsequent amendments, governs the listing and protection of buildings and areas of special architectural or historic interest. Works which will alter or extend a listed building in a way which would affect its character or its setting and demolition works require listed building consent. Works requiring listed building consent may also require planning permission. The Act requires planning authorities, when determining applications for planning permission or

listed building consent, to have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. There is a presumption against demolition or other works that will adversely affect a listed building or its setting. Similarly, it is the duty of the planning authority to pay special attention to the desirability of preserving or enhancing the character and appearance of a Conservation Area when exercising their powers under planning legislation.

> "*Councils have the power to designate as Conservation Areas, areas of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance. It is the responsibility of the council to ensure that any new development should be sympathetic to the special architectural and aesthetic qualities of the area, particularly in terms of scale, design, materials and space between buildings. Councils have a statutory obligation to compile a list containing particulars of any area which has been designated as a conservation area which is available for public inspection.*" (Orkney Council Website)

The **Scottish Planning Policy (SPP) 2014** sets out Scottish Ministers' vision and strategic policies for the historic environment. The planning system should promote the care and protection of designated and non-designated historic environment assets, related settings and the cultural landscape. It recognises that archaeological sites and monuments are an important, finite and non-renewable resource that should be protected and preserved in situ when possible. Change should be sensitively managed in order to best avoid or minimise adverse impacts on the fabric and setting of heritage assets.

The **Historic Environment Scotland (HES) Policy Statement 2016** provides guidance, detailing how HES fulfils its regulatory and advisory roles and how it expects others to interpret and implement SPP 2014. Key principles include that

> "*there should be a presumption in favour of preservation of individual historic assets and also the pattern of the wider historic environment; no historic asset should be lost or radically changed without adequate consideration of its significance and of all the means available to manage and conserve it*".

The Annexes to the Policy list the criteria for determining whether historic assets (such as monuments, battlefields, buildings) are of national importance.

In addition, **Planning and Archaeology (Planning Advice Note (PAN) 2/2011)** advises that in determining a planning application the desirability of preserving a monument (whether scheduled or not) is a material consideration with the objective being to assure the protection and enhancement of monuments by preservation in situ, in an appropriate setting. When preservation in situ is not possible, recording and/or excavation followed by analysis and publication of the results may be an acceptable alternative.

The Cairngorms National Park Local Development Plan 2015, includes policies highlighting the need to ensure that the historic and cultural heritage and its setting is protected and enhanced.

Detailed non-statutory guidance on the setting of historic assets is provided by HES's **Managing Change in the Historic Environment** guidance series (Setting: 2016), to be found at their website and to which planning authorities are directed in HES Policy Statement 2016.

4 Archaeological Background

A detailed summary of the archaeological and historical background for the site is included in the WSI (CH2M 2016). A summary of the archaeological background is provided here.

4.1 Prehistoric Period

A souterrain, possibly Iron Age in date, along with an associated settlement is located *c* 100m north of the A9 road. The monument comprises a curved underground structure constructed from large stone slabs to form a U-shaped vaulted passage. The souterrain is *c* 25m long by 1.3m wide and up to 2.2m high, with an entrance in the northwest side. The functions of souterrains are not clear, with theories ranging from underground storage, to defensive refuges, to ritual activity.

4.2 The Medieval Period

There are no known sites dating to the Medieval Period within the development area.

4.3 The Post Medieval and Modern Period

Directly to the west and southeast of the proposed development area are sections of a track representing the remains of an 18th Century military road, part of a system started by General – later Field Marshal - George Wade and completed by Major William Caulfield.

This road network, sometimes referred to as General Wade's Military Roads or Wade's Way, was constructed in the mid-18th Century to aid the British Government's campaign against the Jacobite rebels, following the uprising in 1715. The road linked the Central Lowlands with a series of fortified barracks located at strategic points across the Highlands, such as the Ruthven Barracks situated *c* 2km to the southwest.

Examination of 1st edition Ordnance Survey maps (Inverness-shire Sheet LXXXVII) dating to 1872 show that the earthworks associated with the road appear to have been truncated at the edge of the field boundary that forms the study area long before the construction of the A9 northbound road.

4.4 Previous Investigations

A recent geophysical survey of the Raitt's Cave souterrain and surrounding environs indicates that the underground structure could extend further than is currently known and that features relating to an overlying structure are present (CFJV 2016). Traces of earthworks in the area around the souterrain may relate to a contemporary settlement.

5 Fieldwork Aims and Objectives

5.1 General Considerations

The purpose of an archaeological field evaluation as defined by CIfA (2014a) is to

> *determine, as far as is reasonably possible, the nature of the archaeological resource within a specified area using appropriate methods and practices.*

A field evaluation is further defined as:

> *a limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site… . If such archaeological remains are present, field evaluation defines their character, extent, quality and preservation, and enables an assessment of their significance in a local, regional, national or international context as appropriate.*
>
> *This definition and Standard do not include chance observations, which should lead to an appropriate archaeological project being designed and implemented, nor do they apply to monitoring for preservation of remains* in situ.

The CIfA guidelines states that:

> *the purpose of field evaluation is to gain information about the archaeological resource within a given area or site (including its presence or absence, character, extent, date, integrity, state of preservation and quality), in order to make an assessment of its merit in the appropriate context*.

An evaluation should thus augment any previous desk-based assessment, and provide sufficient material information upon which to base informed decisions regarding archaeological mitigation, including its character, extent and appropriate strategies to be employed, if required. An archaeological field evaluation may result in the need, therefore, for further archaeological action. Under these circumstances, a further written scheme of investigation would usually be required in order to comply with planning conditions.

5.2 Site-Specific Objectives and Research Questions

This statement sets out the approaches taken in dealing with the archaeological resource of the site.

Objectives for the archaeological trial trenching are:

- Identify the presence or absence of any buried archaeological remains;
- Identify if any buried archaeological remains are associated with the Scheduled Monument;
- Identify if any buried archaeological remains are part of a settlement associated with the Scheduled Monument;
- Identify, investigate and record any such archaeological remains;
- Establish the preservation of any buried remains and provide a chronology of the archaeological phasing within the Post-Excavation Assessment report;
- Determine (so far as possible) the stratigraphic sequence and dating of the deposits or features identified;
- Assess the value of any archaeological remains found;
- Disseminate the results through reporting.

6 Fieldwork Methodology

All works were carried out in accordance with the WSI for the works (Mulchay 2016) and the ORCA standard operating procedures as set out in the ORCA Fieldwork Manual (2013), with the guidelines as set out by the Chartered Institute for Archaeologists (2014a; b) and in line with industry current best practice.

All excavated areas were initially machine excavated to the upper level of apparent archaeological features or deposits. All potential features and deposits of archaeological interests were investigated by means of hand cleaning and targeted for further excavation. All trenches, regardless of the presence or absence of archaeological features were cleaned by hand. All trenches and archaeological features were recorded by means of pro-forma record sheets, scale drawings and photographs.

7 Fieldwork Results

All context numbers are given in **bold** following their description. Excavations areas are identified by their geotechnical trial trench number and by their ORCA trench number.

7.1 TT9-3-100: Trench 1

Trench 1 (**Figure 2**; **Plates 13** and **14**) was located between NGR NH 77640 01852, at 244mAOD, in the west and NH 77662 01864 at 246mAOD, to the east. The trench measured 25m by 1.8m, orientated southwest-northeast, and was situated across a possible oval earthwork (feature 001) and embankment (feature 002).

The trench was partially stripped of turf by a 360^0 tracked excavator with a flat-bladed ditching bucket. Within the vicinity of earthwork features 001 and 002, the turf layer was stripped by hand in order to avoid disturbing archaeological features directly below the turf layer.

The topsoil and turf layer **101** was present to a depth of between 0.1 - 0.15m across the entire trench and was comprised of reddish brown sandy silt. The topsoil partially overlay all deposits and features exposed in the trench, and directly sealed a deposit, **111**, of reddish brown sandy silt with abundant inclusions of large root material in the central area of the trench. This deposit is the fill of an irregular shaped cut **110**, extending beyond the north trench edge. A central baulk was left across the trench in this location in order to investigate this feature without disturbing features to the east. Cut **110** extends 1.6m from the north trench edge to the south by 0.9m from the north-south bulk to the east and varies in depth from 0.5-0.12m deep. This feature is likely to represent a tree bowl or significant root disturbance.

110 cuts a deposit of orangey brown sandy silt, present throughout the trench and overlain by topsoil deposit **101**. Topsoil deposit **101** also overlay a spread of tightly packed stones **102**, both sub-angular and rounded in shape, measuring between 0.5 - 0.25m long. The stone spread extended from the southwest end of the trench 2.3m into the excavation area. The edge of the deposit dropped away slightly to the northeast and was sealed by the subsoil deposit **103**. The edge of this feature visible in the trench would suggest a northwest-southeast alignment, and it appears to continue on the north and south sides of the trench. This orientation and extent of this deposit does not appear to relate to the presence west end of the sub-rectangular earthwork of Feature 001.

The subsoil deposit **103** partially overlays the mixed deposit of reddish brown and yellowish brown sandy silt **105** within the central portion of the trench where the excavation area encompasses the north-south side of the sub-rectangular earthwork feature 001. The deposit contains frequent inclusions of rounded and sub-angular stones measuring up to 0.55 by 0.3 by 0.35m. The edges of this deposit are very mixed and poorly defined due to root disturbance, most significantly in the vicinity of cut **110**.

Within the east half of the trench, topsoil **101** overlays a further deposit of tightly packed stones **104** in a linear arrangement, measuring 2m wide by 2.5m long across the full width of the trench on a northwest to southeast alignment. The deposit is comprised of *c* 80% rounded cobble stones measuring on average 0.15 by 0.1 x 0.1m, 10% sub angular cobbles measuring 0.3 by 0.26 by 0.18m and 10% sandy silt soil matrix. A sondage excavated through the cobble material revealed that this deposit was between 0.14 and 0.22m thick. The western edge of the feature is comprised of a greater concentration of larger, squarer stones forming a crude face with the cobble surface rising up before dipping to the east, where it is less well-defined. The edges of this deposit align with earthwork feature 002, which was observed to the north and south of the trench.

The topsoil deposit also overlay deposit of very mixed, stony reddish brown sandy silt **106**, comprised of up to 50% sub-rounded cobble stones up 0.3 by 0.25 by 0.2m in size. Deposit **106** merges with a deposit with very similar composition **107** to the east, though with noticeable less stone inclusion. This material extends to the southwest side of cobble spread **104**, which overlay and directly sealed deposit **107**, though the relationship with this material was uncertain due to the amount of bioturbation and root disturbance in this part of the trench.

On the west side of stone spread **104**, the deposit merges with a layer of reddish brown sandy silt **108**, with significantly fewer inclusions of small cobble stones. There were a number of large boulders within this area which appear to be derived from the natural glacial till (as observed within trenches to the east); however, the matrix surrounding these boulders is significantly disturbed and mixed, so an anthropogenic origin for this material cannot be discounted.

The cobble feature **104** associated with earthwork Feature 002 would appear to represent a stone revetment for an earthwork or a possible bedding layer for a raised trackway of road surface. Similar feature **102** is likely to be associated with less well-defined earthworks to the south of the trench location which are likely to have been disturbed by modern farming activity. The stony material to the east and west of this feature are disturbed by root action and bioturbation, but may represent the degradation of an earthwork bank relating to Features 001 and 002.

7.2 TT9-3-101: Trench 2

Trench 2 (**Plate 12**) measured 10m by 10m with the corners located at NGR NH 77675 01869 (NW corner), NH 77685 01876 (NE corner), NH 77686 01861 (SE corner) and NH 77676 01859 (SW corner), rising from 245.5mAOD at its south edge to 248mAOD at the northern extent. The trench was situated on the southeast side of a large stone heap.

The trench was excavated by a 360^0 tracked excavator with a flat bladed ditching bucket with occasional hand excavation in the vicinity of large boulders and stony deposits. The trench was cleaned by hand in order to investigate the archaeological potential of features.

A number of large boulders or bedrock outcroppings **204** were encountered within the northern and central portion of the trenches, comprised of angular psammite stone measuring up to 1.2m long by 0.5m wide and protruding through the upper layer of the glacial till **203** to a height of 0.4m. The larger boulders are generally surrounded by smaller fractured angular stones which are tightly packed and occasionally having an obvious join to the larger boulder/outcropping.

The upper layer of the natural glacial till **203** had a variable composition from pale yellowish grey sand to orangey brown stony deposit. This layer was encountered at a uniform depth of 0.2m below ground level, with the exception of the northwest corner of the excavation area where the ground level drops away to the east to 0.4mbgl. A deposit of orangey brown sandy subsoil **202** fills this slight hollow in the natural extending 2m to the east from the west trench edge and 1m to the south from the north trench edge.

Subsoil **202** is overlain by topsoil deposit **201**, which was comprised of a reddish brown sandy silt, present throughout the whole trench and generally overlaying the glacial till **203** and boulder spreads **204**.

No features of archaeological interest were encountered within this trench.

7.3 TT9-3-102: Trench 3

Trench 3 (**Plate 11**) was located between NGR NH 77697 01877, at 244mAOD, and NH 77718 01863, at 247.5mAOD. The trench measured 25m by 1.8m, orientated northwest-southeast.

The excavation encountered the upper level of the glacial till **302** at a depth of between 0.2-0.25m throughout the entire trench. The glacial till was comprised of a mixed orange and yellowish brown sandy deposit with abundant inclusions of angular stone. The glacial till was overlain and directly sealed by topsoil deposit **301**, comprised of reddish brown sandy silt throughout the whole trench.

No features of archaeological interest were encountered within this trench.

7.4 TT9-3-103: Trench 4

Trench 4 (**Figure 3**; **Plate 10**) was located between NGR NH 77731 01879, at 245.5mAOD and NH 77756 01876, at 244mAOD. The trench measured 25m by 1.8m, orientated east-west.

The excavations encountered the upper layer of the glacial till **403**, composed of yellow and orangey brown sand throughout the trench at an average depth of 0.50mbgl. In the west end of the trench, the glacial till was overlain by a mixed deposit of reddish brown sandy silt and orangey brown sand **404** at a depth of between 0.3 and 0.49mbgl. This deposit extended 2.4m into the trench from the west end, and contained a large number of stones, varying in size from 0.05 by 0.05 by 0.05m to 0.5 by 0.4 by 0.3m. The larger stone in this deposit protruded into the topsoil with raised areas visible within the turf layer. The stony material does not appear to form cohesive feature, thought there is a suggestion that they are orientated in a roughly north-south alignment.

Stone spread **404** was in turn overlain and sealed by a deposit of reddish brown sandy silt with a slight orange hue, forming a consistent deposit throughout the trench at a depth of 0.26mbgl. This deposit generally overlay the natural glacial till throughout the majority of the trench. This deposit was in turn overlain by topsoil **401**, which was comprised of reddish brown sandy silt, present throughout the entire trench.

Stone spread **404** potentially represents an eroded dyke or earthwork feature, though it is also possible that this stone spread represents natural boulders having eroded out of a ridge in the glacial till. The lack of any anthropogenic inclusions within the associated deposits would suggest that this feature is not archaeological in nature.

7.5 TT9-3-104: Trench 5

Trench 5 (**Figures 4** and **5**; **Plates 2-9**) was located between NGR NH 77777 01882, at 243.5mAOD, and NH 77801 01890, at 243.7mAOD. The initial excavation area measured 25m by 1.8m, orientated east-west. The excavation area was extended to the west by 5m to NGR NH 7771 01880 (243.5mAOD). A conjoining north-south trench was excavated to the north between NGR NH 77780 01884 (243.5mAOD) and NH 77776 01894 (243.7mAOD). A second conjoining north-south trench was excavated to the south, measuring 10m by 1.8m, between NGR NH 77784 01883 (243.4mAOD) and NH 77787 01874 (242.9mAOD).

The topsoil and turf layer **501** was comprised of reddish brown sandy silt to an average depth of 0.1mbgl. Within the west end of the excavation area, the turf layer overlay a stone feature **503**, and deposit of orangey brown sandy silt **502**, which extended approximately 11m to the east and appears to butt stone feature **503**. At the eastern extent of the excavation area, the turf layer overlay the upper layer of the glacial till **508**, encountered at a depth of between 0.2 and 0.09mgbl. The glacial till was comprised of very stony orangey brown sand.

The stone feature **503** was composed of angular psammite boulders, ranging in size from 0.6 by 0.4 by 0.3m to 0.1 by 0.1 by 0.05m, within a reddish brown sandy silt matrix. The feature extended *c* 1.2m from southwest to northeast originating in the east end of Trench 5, curving slightly to the east in the south end of the north trench extension. Although there does not appear to be a clearly defined edge or face to this feature, a number of the larger stones are set on edge, potentially defining the outer and inner edge of a wall.

The north side stone feature **503** was butted by a deposit of reddish brown stony sandy silt **517** at an average depth of 0.2mbgl. This deposit extended 6.9 from the north edge of **503** to the north, where it overlay the glacial till **508** at a depth of 0.48mbgl at the northern extent of the north trench extension.

A sondage was excavated on the south side of feature **503** measuring 0.6m wide by 1.4m long through subsoil deposit **502** to investigate feature **503**. The sondage identified that subsoil deposit **502** was 0.1m deep, overlaying a deposit of more compacted reddish brown sandy silt **515** at an overall depth of 0.2mbgl.

A cut, **504** in deposit **515**, parallel with stone feature **503** would suggest a sunken nature to the possible structure. The line of the cut was situated between 0.2 and 0.3 to the south of **503**, containing frequent medium sized angular stone within a deposit of mid greyish brown sandy silt **505**. Deposit **515** extended 5.6m to the east where it overlay a deposit of mixed reddish brown and dark grey sandy silt **510**, containing frequent inclusions of small and medium angular stone and occasional tabular psammite boulders varying in size between 0.6 by 0.4 by 0.2m and 0.1 by 0.1 by 0.1m. This deposit measured 2.3m wide and extending 4.8m long on a northwest to southeast alignment from the north trench edge to the southeast, potentially extending beyond the east edge of the south trench extension.

The east side of **510** merges with a deposit of reddish brown sandy silt with abundant inclusions of small and medium sized angular stones and frequent charcoal flecking **511**. This layer was encountered at average depth of 0.1mbgl.

A 5.7m long by 0.5m wide sondage was excavated through **511** and showed it to be between 0.05 and 0.08m deep. The sondage also revealed that **511** overlay a deposit of greyish brown sandy silt with frequent inclusions of small and medium sized angular stones and frequent charcoal flecking **512**, extending from the west end of the sondage 5.2m to the east.

Deposit **512** was cut by a possible posthole **513**, which was only partially visible within the north side of the sondage. The half of the cut visible in the trench suggests that **513** is circular in plan, measuring 0.38m wide by 0.18m deep. The fill of the posthole was a deposit of dark brown sandy silt **514** with frequent inclusions of carbon flecking and occasional inclusions of small to medium angular stone and a single large rounded cobble. Deposit **512** overlay the glacial till **508**.

Deposit **510** continued into the northern portion of trench 5 and potentially to the southeast beyond the limit of excavation. To the south of the edge of **510**, subsoil deposits **502** dropped away sharply onto a deposit of dark greyish brown sandy silt with frequent inclusions of carbon flecking **521**, similar in composition to **512**, at a depth of 0.33mbgl. This deposit extended 7.39m from the southern extent of the excavation to the north where it overlay the glacial till **108** within a small area at the north end of the southern extension at a depth of 0.39mbgl. The glacial till is cut in this location by sub-circular post hole **518** with steep regular sides. The posthole measured 0.7m wide north-south by 0.5m wide east-west by 0.3m deep and was filled by a deposit of dark brown sandy silt **519** with occasional inclusions of small angular stone. At the base of the cut, the fill contained a number of angular and rounded cobbles, which area likely to represent packing stones.

In the western trench extension, a 1m wide sondage was excavated through subsoil deposit **502** and **515** for the whole length of the trench extension. The excavation encountered boulders measuring up to 0.5 by 0.5 by 0.4m within the subsoil deposits, though it was not clear within the excavation area whether they related to the remains of a structural feature or represented boulders within the natural. The sondage identified a deposit of dark greyish brown sandy silt **516** with abundant inclusions of angular stones and frequent carbon flecking, similar in composition to fill of possible construction cut **505**.

Deposit **516** extended 1.4m to the west and overlay a dark greyish brown sandy silt deposit with patches of orangey brown sand and frequent carbon flecking **520**. This deposit extended 3.5m to the west at a depth of between 0.45 and 0.5mbgl and overlay the glacial till **508**, which was visible in western extent of the excavation area.

At the eastern extent of the excavation area, a possible bedrock outcropping **509**, was visible protruding through the glacial till **508** at a depth of 0.16mbgl. The outcropping was situated within a natural undulation **506**, forming a north-south orientated furrow filled by a stony deposit of reddish brown sandy silt **507**.

A number of artefacts were recovered during hand cleaning of trench 5, including early prehistoric ceramics from deposit **510** and **512**, and a stone tool from subsoil deposit **502**.

It is likely that stone feature **503** represents the remains of a structure, with stony spread **510** also representing the remains of structural features, possibly damaged by intensive ploughing. Features 512 and **518**, interpreted as postholes, may also be components of a structure. The deposits are likely to represent anthropogenic soil deposits, potentially relating to the occupation of a domestic structure. The preservation of negative features such as postholes highlights the potential for preservation of archaeological remains which are more likely to have survived intensive ploughing and bioturbation.

7.6 TT9-3-105: Trench 6

Trench 6 (**Plate 1**) was located between NGR NH 77824 081895, at 241.5mAOD, and NH 77849 01892, at 242.4mAOD. The trench measured 25m by 1.8m, orientated east-west.

The excavation encountered the upper level of the glacial till **603** at an average depth of 0.58m throughout the entire trench. The glacial till was comprised of a mixed fine-grained pale yellow sand with frequent inclusions of boulders. The glacial till was overlain and directly sealed by a deposit of mid-reddish brown sandy silt **602** from a depth of 0.29mbgl. This deposit was present throughout the trench, with a small area of carbon flacking at the east end of the trench. This deposit merged with the reddish brown silty sand of the topsoil **601**, which was present throughout the trench.

No features of archaeological interest were encountered within this trench.

8 Specialist Analyses

8.1 Worked Stone

Ann Clark
Independent Lithic Specialist

SF 002 was retrieved from the Site as a potential ard point. The item was a fragment of micaceous schist which was, however, unworked and had fortuitously broken and weathered to resemble an ard point. This kind of rock weathers easily and the surface of SF 002 was abraded with no sign of flaking or pecking to indicate that it had been deliberately shaped.

8.2 Environmental Sampling

Scott Timpany PhD
Archaeology Institute, University of Highlands and Islands

8.2.1 Introduction

During the course of the excavation bulk soil samples were taken from features in order to retrieve palaeoenvironmental and archaeological materials. Environmental remains recovered from the samples may shed more light on the function of these features, providing dating evidence and provide information about the activities, economy and diet of the peoples who inhabited this site.

This report presents the results of the bulk sample assessment from the Site. A total of three bulk samples were taken from the Site (**Table A6**) and all were processed for assessment. The aims of the assessment were to:

- Assess the presence, preservation and abundance of any palaeoenvironmental materials within the samples.
- Assess the potential of the material to inform on activities associated with the exposed structural elements together with economy, wood fuels, arable farming, cultivation methods and diet.
- Assess whether a proxy-date for these features/sites/areas can be provided based on any palaeoenvironmental materials present.

8.2.2 Methodology

Samples were processed in laboratory conditions using a standard floatation method *(cf Kenward et al* 1980). All plant macrofossil samples were analysed using a stereo-microscope at magnifications of x10 and up to x100 where necessary to aid identification. Identifications were confirmed using modern reference material and seed atlases including *Cappers et al* (2006).

8.2.3 Results

The results of the sample processing are provided in **Table A7** (Retent finds) and **Table A8** (Floatation finds). Suitable material for Accelerator Mass Spectrometry (AMS) dating is also identified within each table. All plant remains were preserved through charring.

8.2.4 Discussion

The most common form of cereal grain recovered was oat (*Avena* sp.), with one hulled barley (*Hordeum* sp) grain being recovered from Sample 3 (Context **519**). This indicates a probable earliest date of early medieval for these samples. There is no evidence of crop processing and very little evidence for ruderal species.

Small amounts of hazel nutshell (*Corylus* sp.) indicate some possible gathering of wild foodstuffs but these could equally represent nuts incorporated with fuelwood collection. The charcoal material is suitable for further analysis, with some roundwood fragments that may indicate possible woodland management through the deliberate selection and cutting of branchwood. Further analysis of the charcoal has the potential to provide further information about woodland management, former woodland composition and what types and range of woodland the people inhabiting the local were resourcing for wood fuel collection. Such analysis would be of significant archaeological interest as very little research has been undertaken to date regarding wood fuel and charcoal-derived woodland composition reconstruction in Scotland for the medieval period.

8.3 Radiocarbon Dating

Material retrieved from the palaeoenvironmental samples was considered to be suitable for AMS Dating (see **Section 8.3**; **Appendix 6**). Three samples, all of charred grain (*Avena* sp.) from contexts **512**, **514** and **519**, were submitted to the SUERC Radiocarbon Laboratory at the University of Glasgow for analysis.

The results of the analyses are detailed in **Appendix 7**. The sample material was all dated to the fourteenth or early fifteenth century and it is highly likely that the features from which this material was recovered are of a similar date.

9 Discussion

9.1 Original Research Aims

The objectives of the fieldwork were to:

1) Identify the presence or absence of archaeological remains
2) Identify if archaeological remains are associated with the Scheduled Monument
3) Identify, investigate and record any archaeological remains.
4) Establish the preservation of any archaeological remains.

5) Establish a chronology and phasing of the archaeological remains.
6) Assess the value of any archaeological remains found.

9.2 Review and interpretation

Well-preserved archaeological features were identified in two of the trenches, 1 and 5, with possible evidence for less well-preserved remains in a Trench 4. There was no evidence for archaeological remains in Trenches 2, 3 and 6.

The archaeological remains identified in Trench 1 comprise of a number of revetted earthwork features formed from cobbles and redeposited natural sand. Although the exact nature of the features is uncertain, they appear to be associated with earthwork features visible in the nearby. No artefacts or deposits containing material suitable for recovery of datable material were encountered within evaluation Trench 1. The earthworks may be related to Wade's Military Road, which is situated less than 10m away to the southeast.

The level of disturbance by bioturbation and root action also made it difficult to establish any phasing for the features in relation to each other, though their similarity in form would suggest they are contemporary. The survival of these features indicates a far higher degree of preservation than was seen throughout the majority of the rest of the site, highlighting the potential for the preservation of features and deposits dating to earlier periods beneath the more extensive earthworks.

The archaeological features encountered in Trench 5 appear to represent the remains of a structure and a sequence of deposits associated with domestic activity. It is likely that the structural remains identified within the extended excavation represent the remains of a wall with the inner face on the south side. The presence of post holes to the south and east of this feature indicate a certain degree of structural complexity. The stratigraphic relationships between these features and deposits suggest that there may be multiple phases of construction and deposition on the site, though this could only be confirmed through further investigation or excavation. The extension of the excavation revealed that the spread of deposits extend 20m from the site boundary on the south side of the evaluation trench to the north and 19m from the known extent of the deposits to the east to the limit of excavation in the west, though it is likely that the deposits extend further to the west.

Examination of the ceramics recovered from deposits associated with the structure suggested they are potentially of early Iron Age or late Bronze Age date (SF 001, 003 and 004). If that is the case then it is possible that this structure was in use contemporaneously with the souterrain and its surrounding features, but also has potential to pre-date its construction.

Radiocarbon dating evidence, however, indicates that the deposits associated with postholes **513** and **519**, are of early fifteenth century date; this is mirrored by the presence of oat in the material recovered from the environmental samples. The sherd of pottery recovered from **512** (SF 004) would, therefore, also be of this later date, as prehistoric pottery and later coarse wares are difficult to differentiate on the basis of such a small data set. The features found in Trench 5 may thus be of Medieval date. The exact stratigraphic relationship between structure **503**, deposits **510** and the series of deposits including **512**, **513** and **519** could not be proven on site and the possibility remains that both prehistoric and medieval archaeological features have been preserved and identified in Trench 5.

9.3 Interpretative Issues

The findings of this report are based on the evaluation of partially exposed features. Further investigation would be required to understand the nature, extent and potential value of the archaeological sites.

10 Conclusion and Recommendations

The anthropogenic deposits identified in Trench 5 are most likely to date from the later medieval period. These deposits produced a relatively large amount of palaeoenvironmental material which has the potential to provide information about woodland composition and the economic relationship between the woodland and the people in the surrounding landscape. There has been almost no previous work undertaken to investigate wood fuel and charcoal derived woodland composition in Scotland for the medieval period.

Although thought on excavation to be of possible prehistoric date, the structure in Trench 5 may well be contemporaneous with the anthropogenic deposits from the same trench, and thus medieval (radio-carbon dating indicated a range between AD1397 and AD 1400).

Since the exact relationship between the anthropogenic deposits and the structure could not be determined, it is still possible that further investigations may indicate that the structure is prehistoric, and thus possibly associated with the Scheduled Ancient Monument. In that case the Site would be of national (high) importance. A later, medieval date, means the structure would be of regional or local (medium) importance.

The level of importance attached to the features identified in Trench 1 should be treated as uncertain at this stage. If, as proposed by this report, these features are related to the mid-17th century construction of General Wade's Military Road, they should be afforded at least local (medium) importance.

Anecdotal accounts from the current estate workers indicate that the area has been intensively ploughed in recent years and within living memory. This activity would account for the very even topography throughout the majority of the site, and the simplicity of the stratigraphic matrix throughout trenches 2, 3, 4 and 6. However, the findings of the evaluation highlight the potential for preservation of further sites and features from all periods within the development area.

The survival of anthropogenic deposits within Trench 5 are likely to be the result of the structural remains and outcropping bedrock within this area creating a "shadow" of preservation for deposits and negative features. It is therefore likely that further archaeological deposits survive within that "shadow".

The presence of the large stone heap on the west side of the Site, the stony nature of the earthworks and the proximity to the edge of the field are likely to account for the greater preservation of deposits in Trench 1.

The lack of any surface indicators for the presence of the structural remains in Trench 5 also raises the question of preservation of archaeological features beyond the evaluated areas. The nature of the geology also appears to have had the effect of masking potential archaeological features within the geophysical survey of the Site.

It is recommended that any ground disturbing works undertaken on the site should be accompanied by an Archaeological Management Plan, in order to mitigate the impact of the

development on assets of archaeological or cultural heritage significance. The Archaeological Management Plan should include the following.

- *Topographic Survey*. Several earthworks are noted in the vicinity of Trench 1, possibly associated with General Wade's Military Road to the west, and a detailed survey of these is recommended to both aid interpretation and establish their extent.
- Additional trial trenching to further define the areas of archaeology, and to inform any subsequent archaeological excavation.
- *Avoidance.* Where possible, the development should avoid ground-disturbing works within the vicinity of any features and deposits of archaeological interest. A buffer zone of at least 10m should be established around the full extent of all archaeological features.
- *Excavation*. Where avoidance of archaeological features is unavoidable, preservation in record by means of full excavation is recommended. Any excavation area must be large enough to ensure the inclusion of the full extent of all archaeological features and deposits.
    - For Trench 5, in order to ensure all known archaeological features are recorded, the minimum area to be opened for full excavation should be c.25m from the fence to the north and c.30m east–west, centred on NGR NH 77780 01885.
    - The aim of any further excavation associated with Trench 5 should be to expose the full extent and nature of all archaeological features, and to establish their complete stratigraphic sequence with a view to confirming their chronological sequence and phasing.
    - A research outline should be established, along with a sampling strategy, to focus environmental studies and to retrieve further palaeoenvironmental data with a particular focus on the themes of woodland composition and exploitation.

11 Publication and Archiving

Materials recovered during the investigation will be subject to the standard disposal procedures operated under the Treasure Trove and Bona Vacantia laws and reported to the Scottish Treasure Trove Unit or the Queens and Lord Treasurer's Remembrancer as appropriate, for disposal to an appropriate museum.

Findings have been submitted to the national record via the OASIS system (see **Section 14**), and a short report for Discovery and Excavation Scotland will be generated.

Information on the results of the report will be made public in digital form so as to be included in any further research into the archaeology, history and development of Orkney.

Archive preparation and deposition will be undertaken with reference to the appropriate repository guidelines and standards (CIfA 2014b), and, where necessary, the Museums and Galleries Commission (MGC) and the United Kingdom Institute for Conservation (UKIC) standards and guidelines. The project archive containing the original site records will be submitted to the RCAHMS or the the Highland Council Historic Environment Sites and Monuments Record (SMR), as appropriate.

12 Acknowledgements

The author would like to thank CFJV for commissioning the work. Thank you also to Bam Ritchie for their assistance with logistical support and supply of the mechanical excavator and stock fencing.

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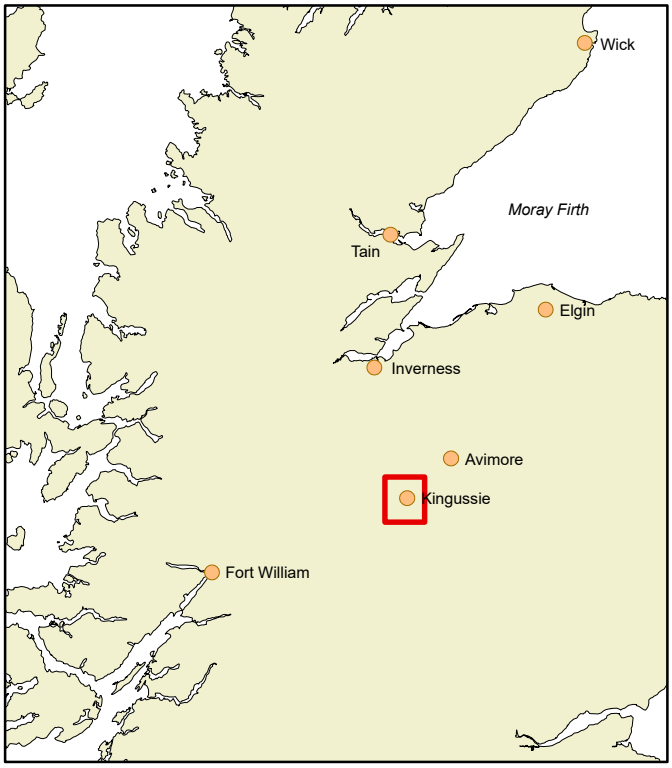
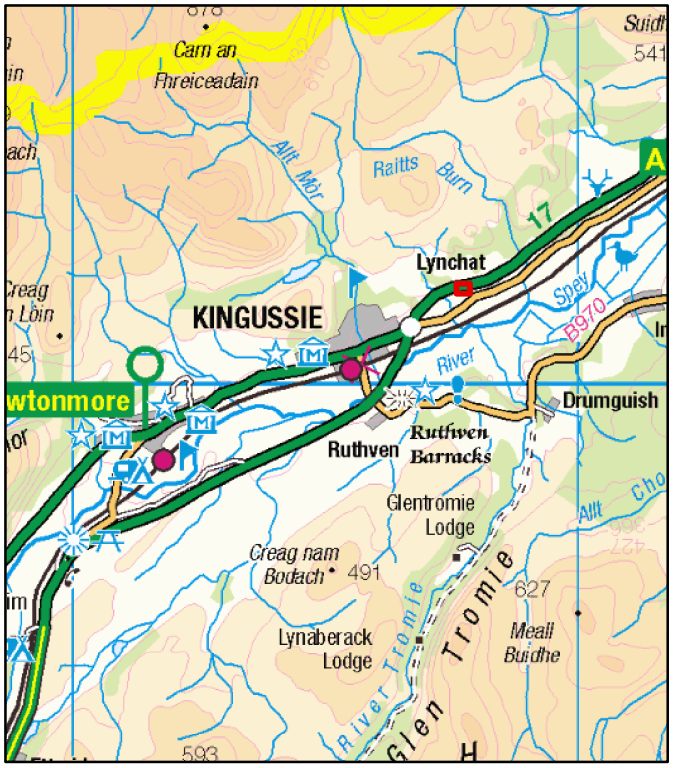
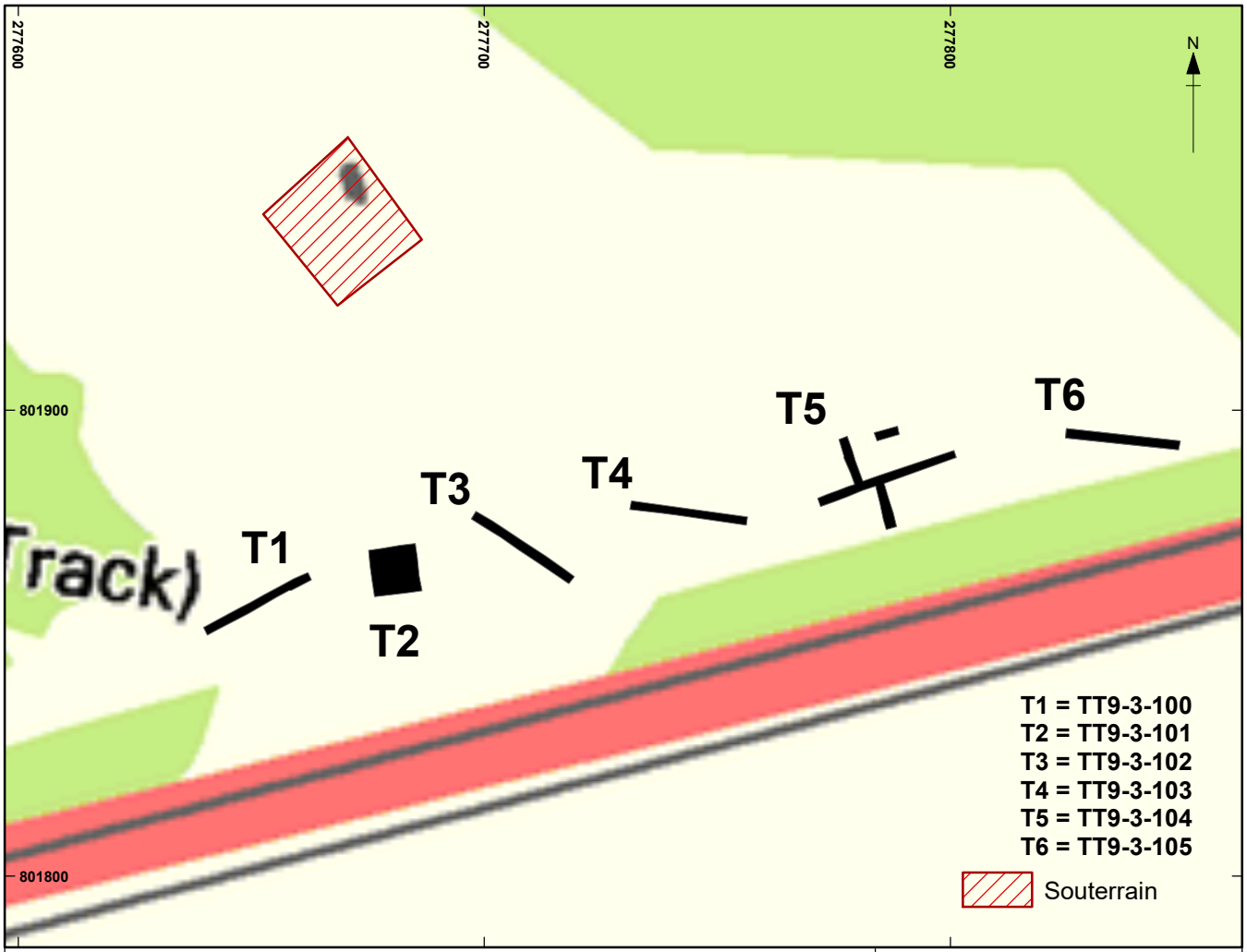
14 NMRS OASIS Form

Title		Raitt's Cave, Kingussie. ORCA 739
Source Organisation	**Name and Address**	Orkney Research Centre for Archaeology Orkney College East Road Kirkwall OrkneyKW17 2PT
	Contact Person*	Pete Higgins Orkney Research Centre for Archaeology Orkney College East Road Kirkwall OrkneyKW17 2PT
Creator(s)	**Name(s) and contact details**	Pete Higgins
Project Description		This scheme of works comprised and archaeological field evaluation undertaken by Orkney Research Centre for Archaeology (ORCA) on land adjacent to Raitts Cave Souterrain, to the north east of Kingussie from 23rd of October to 11th of November 2017. The work was undertaken in order to investigate possible archaeological features identified by geophysical surveys in advance of the proposed A9 dualling in the vicinity of Raitts Cave. The evaluation consisted of six trial trenches excavated between the Scheduled Area of the Souterrain and the current location of the A9 road. The fieldwork identified well-preserved archaeological features within two locations on the site. Within Trench 5 At the east end of the Site the evaluation identified the remains of a possible prehistoric structure and associated anthropogenic deposits with evidence for burning and including ceramics and worked stone tools. In Trench 1, the evaluation identified a series of features, which appear to represent stone-revetted earthworks. A significant proportion of the Site to the south of the souterrain appears to have been affected by intensive ploughing. However, the presence of earthworks on the west side of the development area, appears to have preserved some features and deposits, within discrete pockets throughout the Site.
Subject**	**Keyword(s)**	Project Type: Field evaluation Methods: "Targeted Trenches" Monument and find keywords: STRUCTURE EARTHWORKS POTTERYARD
Location**	**Point(s)**	NH 77670 01942
	NMRS Map and Site Number(s)	CANMORE ID 14077
	Place	Site: Raitts Cave, Lynchat, Kingussie Parish: KINGUSSIE AND INSH County: HIGHLAND Postcode: PH21 1LU
Dates	**Project Dates**	Start date: 23-Oct-2017 End date: 11-Nov-2017
	Subject Periods	Prehistoric Uncertain







X:\ORCA\ORCA Projects\HIGHLAND\1704\739\A095\Geomatics\GIS\Figures\739 Figure 1.mxd

ORCA Orkney Research Centre for Archaeology

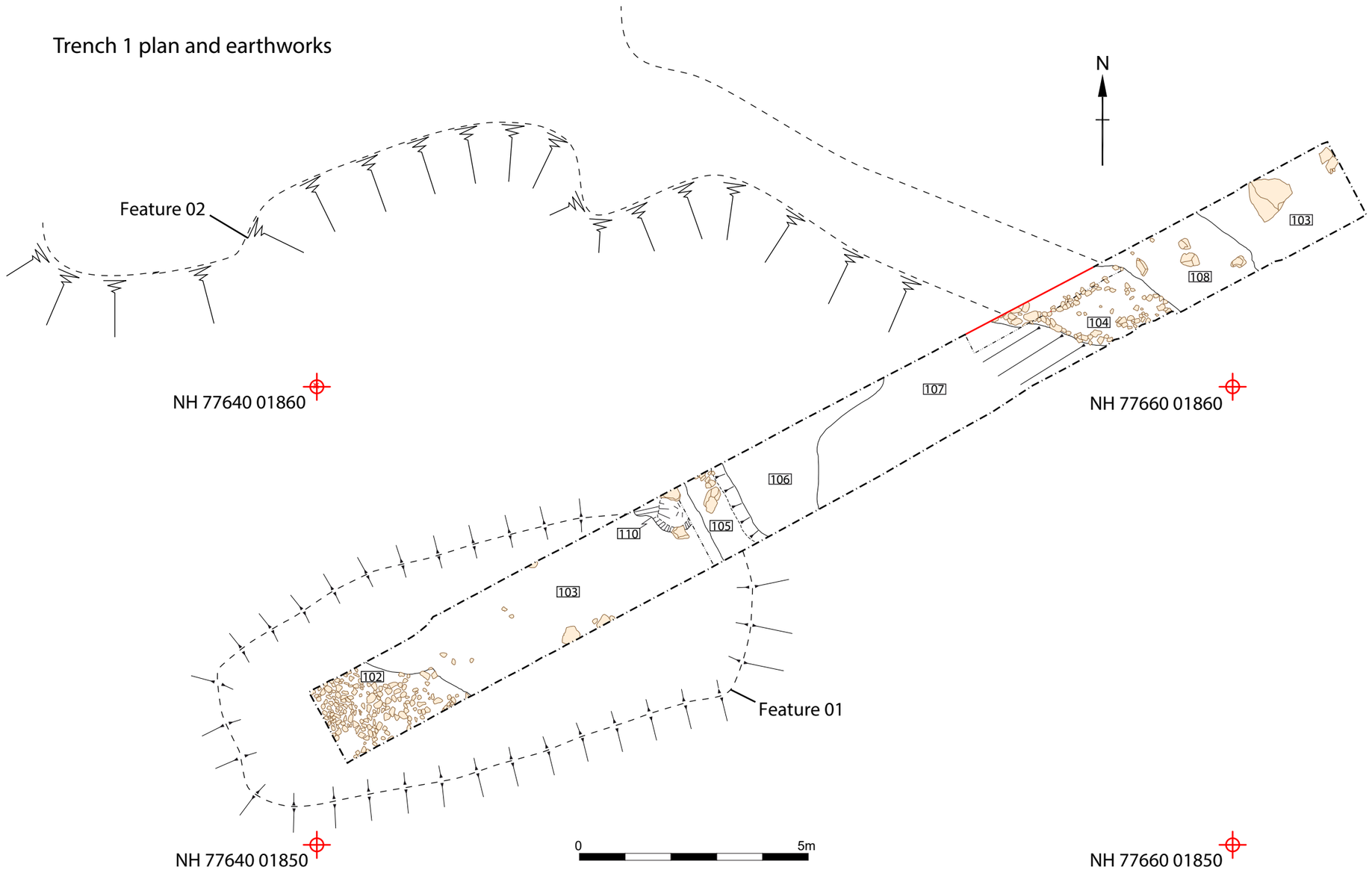
Orkney College, East Road, Kirkwall, KW15 1LX

0 50m

Figure 1. Site and Trench Locations

Project Name: Raitt's Cave		
Project No: 739	Scale @A4 1:1,500	
Date: 11/2017	Initial: CB	Rev. No. 1.0

Trench 1 plan and earthworks



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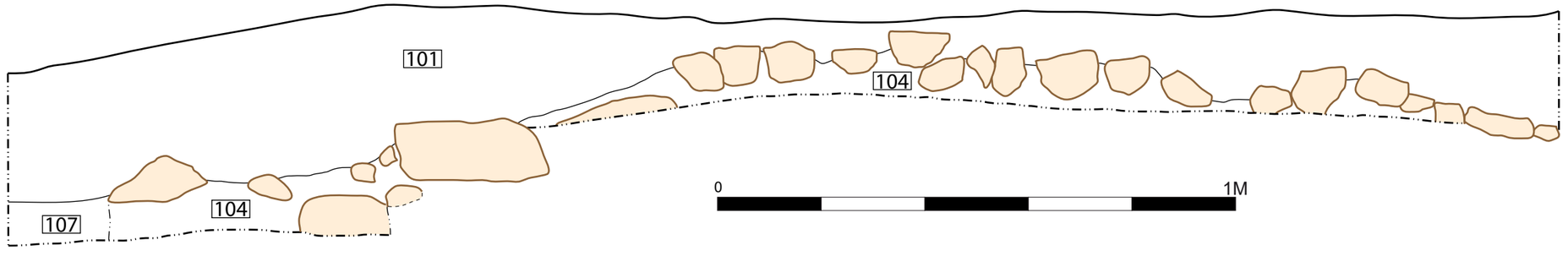
SW

Southeast facing section

SE



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- Section line
- Earthwork feature
- Limit of excavation
- Tree bowl
- Stone
- Cobble feature
- Nation Grid Refference point

Figure 2. Trench 1 (TT9-3-100)

Revision No.02

Project Name	Raitts Cave Evaluations
Project No.	739
Date	01/12/2017
Creator	RB
Scale	**Plan 1:100 Section 1:10 @ A3**

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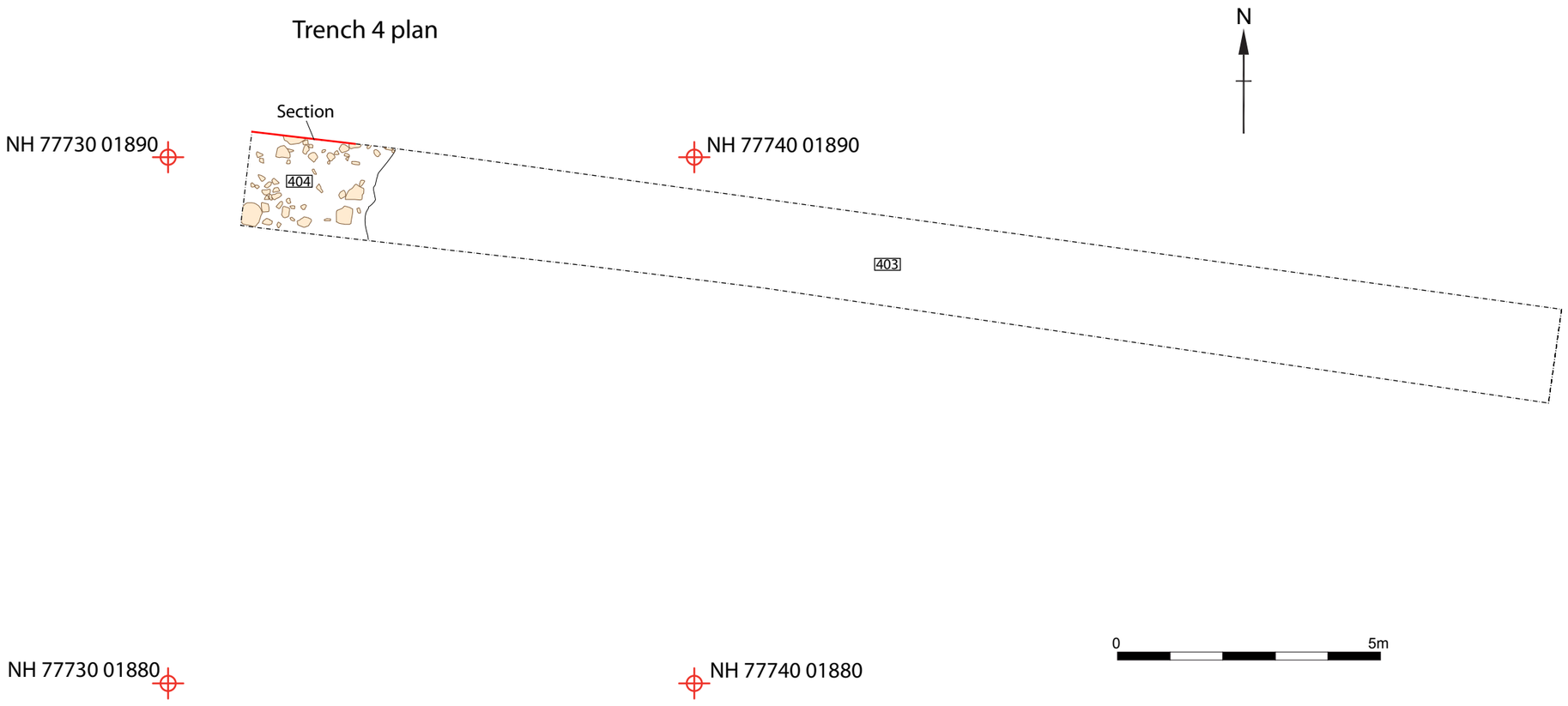
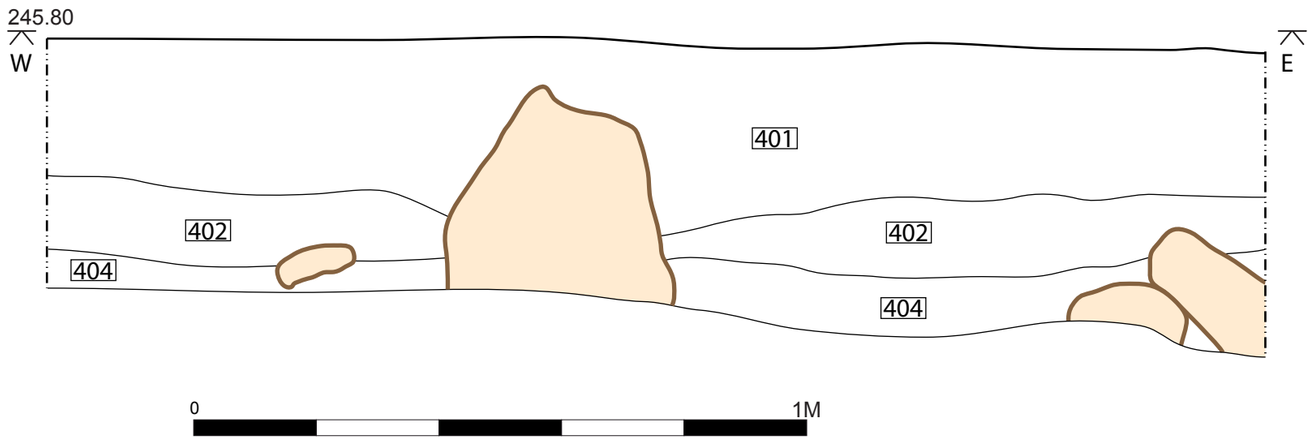
ORCA Site plan and survey

Trench 4 plan



South facing section



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Limit of excavation

Stone

Nation Grid Refference point

Figure 3. Trench 4 (TT9-3-103)

Revision No. 01	
Project Name	Raitt's Cave
Project No.	739
Date	01/12/2017
Creator	RB
Scale Plan 1:100 Section 1:10 @ A3	

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ORCA Site plan and survey

ORCA
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N

- Site boundary
- Limit of excavation
- Post Hole
- Bedrock
- Structural feature
- Anthropogenic deposits
- Nation Grid Refference point

0 5m

Figure 4. Trench 5 (TT9-3-104)

Project Name	Raitts Cave
Project No.	739
Date	01/12/2017
Creator	RB
Scale 1:100 @ A3	Revision No.02

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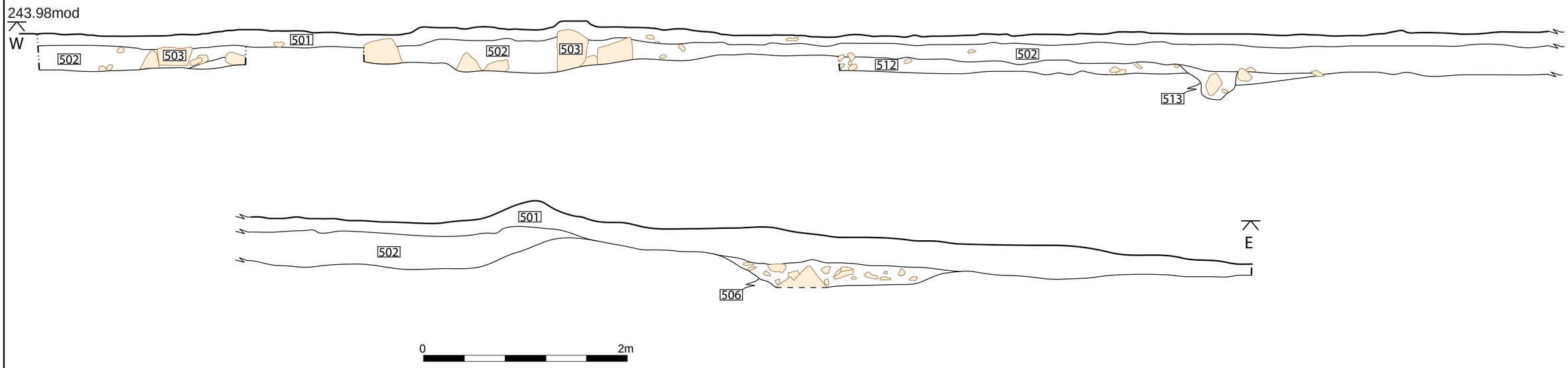
ORCA Site plan and survey

Section 01



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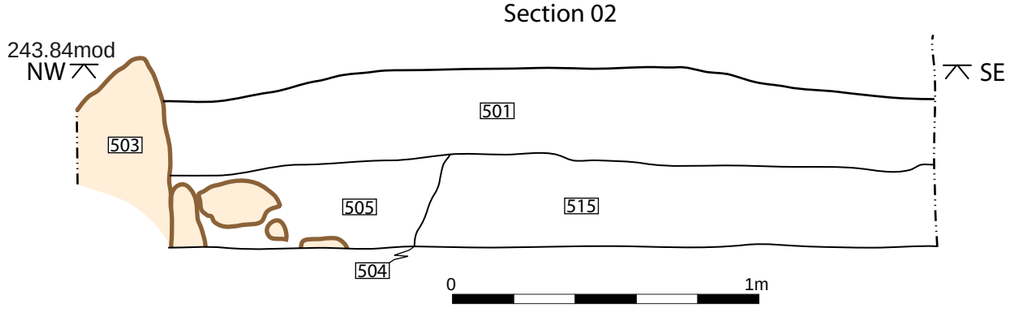
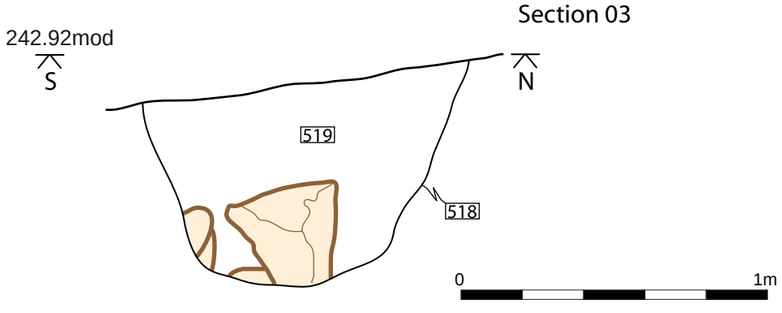
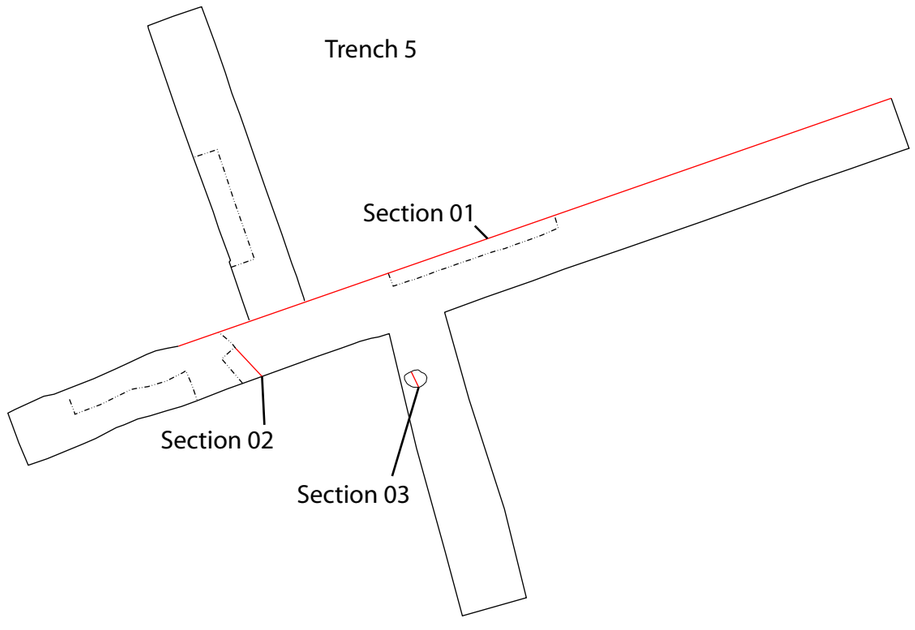


Section 03





Section edge

Section line

Stone

Datum level

Figure 5. Trench 5 (TT9-3-104) Sections | Revision No.01

Project Name	Raitt's Cave
Project No.	739
Date	01/12/2017
Creator	RB
Scale	**Section 1: 1:20 Section 2&3: 1:10 @ A3**

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ORCA Site plan and survey

Plate 01: Trench 6
Post Excavation
View facing southeast

Plate 02: Trench 5
Stony deposit **510**
View facing west

Plate 03: Trench 5
Features **503** and **510**
View facing east

Plate 04: Trench 5 Posthole **513**. View facing north

Plate 05: Trench 5 north extension; Feature **510** View facing north

Plate 06: Trench 5 west extension. View facing east

Plate 07: Trench 5 south extension. View facing north

Plate 08: Trench 5 post hole **518**. View facing west

Plate 09: Trench 5
Deposit **512**
View facing west

Plate 10: Trench 4 Stone feature **404**. View facing southeast

Plate 11: Trench 3
Post excavation
View facing southeast

Plate 12: Trench 2 Post excavation. View facing southwest

Plate 13: Trench 1
Feature **104**
View facing southeast

Plate 14: Trench 1 Feature **102** View facing southwest

Appendices

Appendix 1 Context Register

Table A1 – List of context identified on-site.

Context	Subdivision	Type	Description
101	Trench 1	Deposit	Topsoil
102	Trench 1	Deposit	Cobble spread west end of trench
103	Trench 1	Deposit	Subsoil
104	Trench 1	Deposit	Cobbled feature/ surface
105	Trench 1	Deposit	Mix of sandy silt and sand forming earthwork bank of Feature 001
106	Trench 1	Deposit	Spread of stones within sandy silt to east of **105**
107	Trench 1	Deposit	Similar to 106, but with very little stone material
108	Trench 1	Deposit	Sandy silt and boulder deposit east of **104**
109	Trench 1	Deposit	Yellow/ grey sand natural
110	Trench 1	Cut	Tree-bowl
111	Trench 1	Fill	Fill of tree-bowl
201	Trench 2	Deposit	Topsoil
202	Trench 2	Deposit	Subsoil
203	Trench 2	Deposit	Yellow/ grey sand natural
301	Trench 3	Deposit	Topsoil
302	Trench 3	Deposit	Yellow/ grey sand natural
401	Trench 4	Deposit	Topsoil
402	Trench 4	Deposit	Subsoil
403	Trench 4	Deposit	Yellow/ grey sand natural
404	Trench 4	Deposit	Matrix of sandy silt and sand containing number of large- to boulder-sized stones
501	Trench 5	Deposit	Topsoil
502	Trench 5	Deposit	Subsoil
503	Trench 5	Structure	Denuded/ robbed-out stone at west end of trench
504	Trench 5	Cut	Northeast-southwest orienatted cut containing **503**
505	Trench 5	Fill	Fill of **504** / packing material around **503**
506	Trench 5	Cut	Natural undulation orientated north-south
507	Trench 5	Fill	Stoney fill of **506**
508	Trench 5	Deposit	Yellow/ grey sand natural
509	Trench 5	Deposit	Bedrock outcropping
510	Trench 5	Deposit	Spread of large stones
511	Trench 5	Deposit	Spread of stoney material east of **510**
512	Trench 5	Deposit	Spread of dark coloured material east of **511**

Context	Subdivision	Type	Description
513	Trench 5	Cut	Probabale post hole associated with **512**
514	Trench 5	Fill	Fill of posthole **513**
515	Trench 5	Deposit	Material similar to **502** cut by **504**
516	Trench 5	Deposit	Stoney deposit in carbon-rich material (W extension of trench)
517	Trench 5	Deposit	Stoney deposit in carbon-rich matrix (N trench extension)
518	Trench 5	Cut	Possible posthole (S trench extension)
519	Trench 5	Fill	Fill of **518**
520	Trench 5	Deposit	Carbon-rich deposit (W extension of trench)
521	Trench 5	Deposit	Carbon-rich deposit (S trench extension)
601	Trench 6	Deposit	Topsoil
602	Trench 6	Deposit	Subsoil
603	Trench 6	Deposit	Yellow/ grey sand natural

Appendix 2 Photographic Register

Table A2 - Photographic register.

Frame	Subdivision	Description	Direction of shot
1	Trench 6	Pre-excavation shot	SE
2	Trench 6	Pre-excavation shot	NW
3	Trench 6	Working shot - machine excavation	NW
4	Trench 6	Working shot - machine excavation	NW
5	Trench 6	Working shot - machine excavation	SE
6	Trench 6	Working shot - machine excavation	SE
7	Trench 6	Plan view of bioturbation	NE
8	Trench 6	Plan view of bioturbation	NE
9	Trench 6	SW-facing section of sample trench section (N)	NE
10	Trench 6	SW-facing section of sample trench section (N)	NE
11	Trench 6	SW-facing section of sample trench section (S)	NE
12	Trench 5	Pre-excavation shot	SW
13	Trench 5	Pre-excavation shot	SW
14	Trench 5	Pre-excavation shot	NE
15	Trench 5	Pre-excavation shot	NE
16	Trench 5	Plan view of stone spread **503**	NE
17	Trench 5	Plan view of stone spread **503**	NE
18	Trench 5	Plan view of stone spread **503**	SE
19	Trench 5	Plan view of stone spread **503**	SE
20	Trench 5	Plan view of cut **506**	N
21	Trench 5	General view of cut **506**	SW
22	Trench 5	General view of cut **506**	SW
23	Trench 5	General view of cut **506**	SW
24	Trench 5	General view of cut **506**	NE
25	Trench 5	General view of cut **506**	NE
26	Trench 5	General view of cut **506**	S
27	Trench 5	General view of stone material **510**	SW
28	Trench 5	General view of stone material **510**	SW
29	~	Earthworks and boulder debris at west end of Site	NW
30	~	Earthworks and boulder debris at west end of Site	NW
31	~	Earthworks and boulder debris at west end of Site	SE
32	~	Earthworks and boulder debris at west end of Site	S
33	~	Earthworks and boulder debris at west end of Site	NE

Frame	Subdivision	Description	Direction of shot
34	~	Earthworks and boulder debris at west end of Site	NE
35	~	Embankment and revetment at west end of Site	W
36	~	Detail of stone in embankment	NW
37	~	Detail of stone in embankment	N
38	Trench 5	General view of stone spread **503**	E
39	Trench 5	General view of stone spread **503**	NE
40	Trench 5	General view of rise on north-side of Trench 5	NE
41	Trench 5	Working shot - trowelling	~
42	Trench 5	Stone spread **503** within deposit **502**	NE
43	Trench 5	Stone spread **503** within deposit **502**	NE
44	Trench 5	Stone spread **503** within deposit **502**	E
45	Trench 5	Stone spread **503** within deposit **502**	E
46	Trench 5	Stone spread **503** within deposit **502**	E
47	Trench 5	Stone spread **503** within deposit **502**	E
48	Trench 5	Southwest-facing section of sondage showing cut **504**	NE
49	Trench 5	Southwest-facing section of sondage showing cut **504**	NE
50	Trench 5	Southwest-facing section of sondage showing cut **504** – detail	NE
51	Trench 5	Southwest-facing section of sondage showing cut **504** – detail	NE
52	Trench 5	Plan view of sondage showing cut **504**	NE
53	Trench 5	Plan view of sondage showing cut **504**	NE
54	Trench 5	Plan view of cut **503** and deposit **502**, adjacent to **503**	NE
55	Trench 5	Plan view of cut **503** and deposit **502**, adjacent to **503**	NE
56	Trench 5	Plan view of deposits **510** and **515**	N
57	Trench 5	General view, west-end of Trench 5	SE
58	Trench 5	Plan view of deposits **510** and **515**	E
59	Trench 5	Southwest-facing section of cut **506**	NE
60	Trench 5	Southwest-facing section of cut **506**	NE
61	Trench 5	Southwest-facing section of cut **506**	SE
62	Trench 5	Southwest-facing section of cut **506**	SE
63	Trench 5	Working shot - planning	~
64	Trench 5	Working shot - planning	~
65	Trench 5	Working shot - planning	~
66	Trench 5	Working shot - removal of baulk in **510**	NE
67	Trench 5	Working shot - removal of baulk in **510**	NE
68	Trench 5	General shot - Trench 5	NW

Frame	Subdivision	Description	Direction of shot
69	Trench 5	General shot - Trench 5	NW
70	Trench 5	General shot - Trench 5	SE
71	Trench 5	General shot - Trench 5	SE
72	Trench 5	General shot - Trench 5	E
73	Trench 5	General shot - Trench 5	E
74	Trench 4	Pre-excavation shot	NW
75	Trench 4	Pre-excavation shot	SE
76	Trench 5	Plan view showing SF 003 *in-situ* and location of SF 001	N
77	Trench 5	Plan view showing SF 003 *in-situ* and location of SF 001	E
78	Trench 5	Plan view of deposits **510** and **515**	NE
79	Trench 5	Plan view of deposits **510** and **515**	NE
80	Trench 5	Plan view of deposits **510** and **515**	NE
81	Trench 5	Plan view of deposits **510** and **515**	NE
82	Trench 5	Plan view of deposits **510** and **515**	NE
83	Trench 5	Plan view of deposits **510** and **515**	NE
84	Trench 5	Plan view of deposit **511**	NE
85	Trench 5	Plan view of deposit **511**	NE
86	Trench 5	Plan view of deposits **511** and **512**	NE
87	Trench 5	Plan view of deposits **511** and **512**	NE
88	Trench 5	Plan view showing east-edge of **511** and natural **508**	NE
89	Trench 5	General shot - Trench 5	NW
90	Trench 5	General shot - Trench 5	NW
91	Trench 5	General shot - Trench 5 showing deposit **512**	NW
92	Trench 5	General shot - Trench 5 showing deposit **512**	NW
93	Trench 5	General shot - Trench 5 showing deposit **511**	NW
94	Trench 5	General shot - Trench 5 showing deposit **511**	NW
95	Trench 5	General shot - East-end of Trench 5	NW
96	Trench 5	General shot - East-end of Trench 5	NW
97	Trench 5	General shot - East-end of Trench 5	NW
98	Trench 5	General shot - East-end of Trench 5	NW
99	Trench 5	General shot - East-end of Trench 5	NW
100	Trench 5	General shot - East-end of Trench 5	SE
101	Trench 5	General shot - East-end of Trench 5	SE
102	Trench 5	General shot - East-end of Trench 5	SE
103	Trench 4	General shot - Southeast-end of Trench 4	NW
104	Trench 4	General shot - Southeast-end of Trench 4	NW
105	Trench 4	General shot - Trench 4	SE

Frame	Subdivision	Description	Direction of shot
106	Trench 4	General shot - Trench 4	SE
107	Trench 5	Sondage through deposits **511** and **512** (E)	NE
108	Trench 5	Sondage through deposits **511** and **512** (Centre)	NE
109	Trench 5	Sondage through deposits **511** and **512** (W)	NE
110	Trench 5	Sondage through deposits **511** and **512** - General shot	SE
111	Trench 5	Sondage through deposits **511** and **512** - General shot	SE
112	Trench 5	Plan view of posthole **513**	NE
113	Trench 5	Sondage through deposits **511** and **512** - General shot	NE
114	Trench 4	Plan view of stone spread **404**	SE
115	Trench 4	Plan view of stone spread **404**	SE
116	Trench 4	Plan view of stone spread **404**	NE
117	Trench 4	Plan view of stone spread **404**	NE
118	Trench 4	Plan view of stone spread **404**	NW
119	Trench 4	Plan view of stone spread **404**	NW
120	Trench 4	Plan view of stone spread **404**	SW
121	Trench 4	Plan view of stone spread **404**	SW
122	Trench 5	Southwest-facing section of posthole **513**: post-excavation	NE
123	Trench 5	Southwest-facing section of posthole **513**: post-excavation	NE
124	Trench 5	Southwest-facing section of posthole **513**: post-excavation	NE
125	Trench 5	Plan view of posthole **513**: post-excavation	NE
126	Trench 5	Southwest-facing section of posthole **513**: post-excavation	NE
127	Trench 5	Southwest-facing section of posthole **513**: post-excavation	NE
128	Trench 3	Pre-excavation shot	NW
129	Trench 3	Pre-excavation shot	NW
130	Trench 3	Pre-excavation shot	SE
131	Trench 3	Pre-excavation shot	SE
132	Trench 2	Pre-excavation shot	S
133	Trench 2	Pre-excavation shot	S
134	Trench 2	Pre-excavation shot	SE
135	Trench 2	Pre-excavation shot	SE
136	Trench 2	Pre-excavation shot	N
137	Trench 2	Pre-excavation shot	N
138	Trench 2	Pre-excavation shot	NE
139	Trench 2	Pre-excavation shot	NE
140	Trench 1	General shot - area of Trench 1	W
141	Trench 1	General shot - area of Trench 1	W
142	Trench 1	Pre-excavation shot	SW

Frame	Subdivision	Description	Direction of shot
143	Trench 1	Pre-excavation shot	SW
144	Trench 1	Pre-excavation shot	NE
145	Trench 1	Pre-excavation shot	NE
146	Trench 1	Feature 001 - General shot across southwest bank	NE
147	Trench 1	Feature 001 - General shot across southwest bank	NE
148	Trench 1	Feature 001 - General shot across northeast bank	SW
149	Trench 1	Feature 001 - General shot across northeast bank	SW
150	Trench 1	Feature 001 - General shot across northwest bank	S
151	Trench 1	Feature 001 - General shot across northwest bank	S
152	Trench 1	Feature 001 - General shot across southeast bank	N
153	Trench 1	Feature 001 - General shot across southeast bank	N
154	Trench 1	Feature 001 - General shot across southeast bank	N
155	Trench 1	Feature 001 - General shot across southeast bank	N
156	Trench 1	Feature 001 - General shot across southwest bank	NE
157	Trench 1	Feature 001 - General shot across southwest bank	NE
158	Trench 1	Feature 001 - General shot across northwest bank	S
159	Trench 1	Feature 001 - General shot across northwest bank	S
160	Trench 1	Feature 001 - General shot across northwest bank	SW
161	Trench 1	Feature 001 - General shot across northwest bank	SW
162	Trench 1	Feature 001 - General shot across northeast bank	SW
163	Trench 1	Feature 001 - General shot across northeast bank	SW
164	Trench 1	Feature 001 - General shot across northeast bank	SW
165	Trench 1	Feature 001 - General shot across northeast bank	SW
166	Trench 1	Feature 001 - General shot across southwest bank	NE
167	Trench 1	Feature 001 - General shot across southwest bank	NE
168	Trench 1	Feature 001 - General shot across southwest bank	NE
169	Trench 1	Feature 001 - General shot across southwest bank	NE
170	Trench 1	Feature 001 - General shot across northeast bank	SW
171	Trench 1	Feature 001 - General shot across northeast bank	SW
172	Trench 1	Feature 001 - General shot across northwest bank	S
173	Trench 1	Feature 001 - General shot across northwest bank	S
174	~	Feature 002 - General shot of revetment face	N
175	~	Feature 002 - General shot of revetment face	N
176	~	Feature 002 - General shot of revetment face - detail	N
177	~	Feature 002 - General shot of revetment face - detail	N
178	~	General shot - View along General Wade's Road	W
179	~	General shot - View along General Wade's Road	W

Frame	Subdivision	Description	Direction of shot
180	Trench 3	Plan view of south-end, Trench 3	NW
181	Trench 3	Plan view of south-end, Trench 3	W
182	Trench 3	Plough scarring in northeast-facing section of Trench 3	SW
183	Trench 3	General shot - Trench 3	NW
184	Trench 3	General shot - Trench 3	NW
185	Trench 3	General shot - Trench 3	W
186	Trench 3	General shot - Trench 3	W
187	Trench 3	General shot - Trench 3	SE
188	Trench 3	General shot - Trench 3	SE
189	Trench 3	Plan view of bioturbation	NE
190	Trench 3	Plan view of bioturbation	NE
191	Trench 3	Plan view of bioturbation	NE
192	Trench 3	Plan view of bioturbation	NE
193	Trench 3	Southwest-facing sample section of Trench 3	NE
194	Trench 3	Southwest-facing sample section of Trench 3	NE
195	Trench 2	General shot - Trench 2	N
196	Trench 2	General shot - Trench 2	N
197	Trench 2	General shot - Trench 2, East end	N
198	Trench 2	General shot - Trench 2, East end	N
199	Trench 2	General shot - Trench 2, West end	NE
200	Trench 2	General shot - Trench 2, West end	NE
201	Trench 2	General shot - Trench 2	N
202	Trench 2	General shot - Trench 2	N
203	Trench 2	General shot - Trench 2, East end	N
204	Trench 2	General shot - Trench 2, East end	N
205	Trench 2	General shot - Trench 2, West end	NE
206	Trench 2	General shot - Trench 2, West end	NE
207	Trench 2	General shot - Trench 2	S
208	Trench 2	General shot - Trench 2	S
209	Trench 2	General shot - Trench 2	SW
210	Trench 2	General shot - Trench 2	SW
211	Trench 1	Pre-excavation shot of area to west of feature **105**	N
212	Trench 1	Pre-excavation shot of area to west of feature **105**	N
213	Trench 1	General shot - Trench 1, West end	W
214	Trench 1	General shot - Trench 1, West end	W
215	Trench 1	Plan view of stone spread **102**	NW
216	Trench 1	Plan view of stone spread **102**	NW

Frame	Subdivision	Description	Direction of shot
217	Trench 1	Plan view of stone spread **102**	NW
218	Trench 1	Plan view of stone spread **102**	E
219	Trench 1	Plan view of stone spread **102**	E
220	Trench 1	Plan view of stone spread **102**	E
221	Trench 5	Pre-excavation shot - North trench extension	NE
222	Trench 5	Pre-excavation shot - North trench extension	NE
223	Trench 5	Pre-excavation shot - South trench extension	SW
224	Trench 5	Pre-excavation shot - South trench extension	SW
225	Trench 5	Pre-excavation shot - West extension of Trench 5	NW
226	Trench 5C	Pre-excavation shot Trench 5C	E
227	Trench 5C	General shot - Trench 5C	W
228	Trench 5C	General shot - Trench 5C	W
229	Trench 5C	General shot - Trench 5C	S
230	Trench 1	General shot - Trench 1	E
231	Trench 1	General shot - Trench 1	E
232	Trench 1	General shot - Trench 1	W
233	Trench 1	General shot - Trench 1	W
234	Trench 1	General shot - Trench 1	W
235	Trench 1	General shot - Trench 1	W
236	Trench 1	General shot - Trench 1	E
237	Trench 1	General shot - Trench 1	E
238	Trench 1	Plan view of cobbled feature **104**	N
239	Trench 1	Plan view of cobbled feature **104**	N
240	Trench 1	Plan view of cobbled feature **104**	NW
241	Trench 1	Plan view of cobbled feature **104**	NW
242	Trench 1	Plan view of cobbled feature **104**	S
243	Trench 1	Plan view of cobbled feature **104**	S
244	Trench 1	Plan view of cobbled feature **104**	SE
245	Trench 1	Plan view of cobbled feature **104**	SE
246	Trench 1	Plan view of cobbled feature **104**	E
247	Trench 1	Plan view of cobbled feature **104**	E
248	Trench 1	Plan view of cobbled feature **104**	E
249	Trench 1	Plan view of cobbled feature **104**	E
250	Trench 5	General shot - West extension of Trench 5	SE
251	Trench 5	General shot - West extension of Trench 5	SE
252	Trench 5	Plan view of deposit **516** and sand natural **508**	SW
253	Trench 5	General shot - West extension of Trench 5	NW

Frame	Subdivision	Description	Direction of shot
254	Trench 5	General shot - West extension of Trench 5	NW
255	Trench 5	Plan view of deposit **516**	NE
256	Trench 1	South-facing section of sondage through cobbled feature **104**	N
257	Trench 1	South-facing section of sondage through cobbled feature **104**	N
258	Trench 1	South-facing section of sondage through cobbled feature **104**	N
259	Trench 1	South-facing section of sondage through cobbled feature **104**	N
260	Trench 1	Plan view of sondage through cobbled feature **104**	W
261	Trench 1	Plan view of sondage through cobbled feature **104**	W
262	Trench 1	Plan view of sondage through cobbled feature **104**	W
263	Trench 1	Plan view of sondage through cobbled feature **104**	W
264	Trench 1	Plan view of sondage through cobbled feature **104**	W
265	Trench 1	Plan view of sondage through cobbled feature **104**	W
266	Trench 1	Plan view of sondage through cobbled feature **104**, detail of west edge	E
267	Trench 1	Plan view of sondage through cobbled feature **104**, detail of west edge	E
268	Trench 1	Detail view of west edge of cobbled feature **104**	E
269	Trench 1	Detail view of west edge of cobbled feature **104**	E
270	Trench 5	General shot - Trench 5 and north trench extension showing feature **510**	NE
271	Trench 5	General shot - Trench 5 and north trench extension showing feature **510**	NE
272	Trench 5	General shot - Trench 5 and north trench extension showing feature **510**	NE
273	Trench 5	General shot - Trench 5 and north trench extension showing feature **510**	NE
274	Trench 5	General shot - Trench 5 and north trench extension showing feature **510**	NE
275	Trench 5	Plan view of feature **510** at junction between Trench 5 and north trench extension	SE
276	Trench 5	General shot - North trench extension	SW
277	Trench 5	General shot - North trench extension	SW
278	Trench 5	General shot - South trench extension	SW
279	Trench 5	General shot - South trench extension	SW
280	Trench 5	General shot - South trench extension	NE
281	Trench 5	General shot - South trench extension	NE
282	Trench 5	Pre-excavation shot - posthole **518** in glacial till **508**	NW

Frame	Subdivision	Description	Direction of shot
283	Trench 5	Pre-excavation shot - posthole **518** in glacial till **508**	NW
284	Trench 5	Pre-excavation shot - posthole **518** in glacial till **508**	NW
285	Trench 5	Plan view of bioturbation in South trench extension	NE
286	Trench 5	Southeast-facing section of posthole **518**	NW
287	Trench 5	Southeast-facing section of posthole **518**	NW
288	Trench 5	Southeast-facing section of posthole **518**	NW
289	Trench 5	Southeast-facing section of posthole **518**	NW
290	Trench 5	General shot - Trench 5 with south and west extensions	W
291	Trench 5	General shot - Trench 5 with south and west extensions	NW
292	Trench 5	General shot - Trench 5 with south and west extensions	NW
293	Trench 5	General shot - Trench 5 with south and west extensions	NW
294	Raitts Cave	Interior of souterrain	
295	Raitts Cave	Interior of souterrain	
296	Raitts Cave	Interior of souterrain	
297	Raitts Cave	Interior of souterrain	
298	Raitts Cave	Interior of souterrain	
299	Raitts Cave	Exterior of souterrain	
300	Raitts Cave	Exterior of souterrain	
301	Raitts Cave	Exterior of souterrain	
302	Raitts Cave	Exterior of souterrain	
303	Raitts Cave	Exterior of souterrain	
304	Raitts Cave	Exterior of souterrain	
305	Trench 5	General shot - Trench 5 after backfilling	W
306	Trench 5	General shot - Trench 5 after backfilling	NW
307	Trench 5	General shot - Trench 5 after backfilling	N
308	Trench 5	General shot - Trench 5 after backfilling	NW
309	Trench 5	General shot - Trench 5 after backfilling	N
310	Trench 1	General shot - Trench 1 after backfilling	S
311	Trench 1	General shot - Trench 1 after backfilling	S
312	Trench 1	General shot - Trench 1 after backfilling	SW
313	Trench 1	General shot - Trench 1 after backfilling	SW

Appendix 3 Levels Register

Table A3 – Levels register.

Level Number	TBM	BS	IH	FS	Reduced Level	Description	Drawing Number
1	243.98	1.21	245.19	1.35	243.84	Section line	4
2	243.98	1.21	245.19	1.52	243.67	**502**	3
3	243.98	1.21	245.19	1.45	243.74	Stone in **503**	3
4	243.98	1.21	245.19	1.56	243.63	**503**	3
5	243.98	1.21	245.19	1.33	243.86	Stone in **503**	3
6	243.98	1.21	245.19	1.65	243.54	**505**	3
7	243.98	1.21	245.19	1.64	243.55	**515**	3
8	243.98	1.21	245.19	1.39	243.80	**501**	3
9	243.98	1.21	245.19	1.56	243.63	**515**	3
10	243.98	1.21	245.19	1.55	243.64	**510**	3
11	243.98	1.21	245.19	1.45	243.74	Stone in **510**	3
12	243.98	1.21	245.19	1.56	243.63	**510**	3
13	243.98	1.21	245.19	1.56	243.63	**510**	3
14	243.98	1.21	245.19	1.56	243.63	**511**	3
15	243.98	1.21	245.19	1.57	243.62	**511**	3
16	243.98	1.21	245.19	1.67	243.52	**512**	3
17	243.98	1.21	245.19	1.66	243.53	**508**	3
18	243.98	1.21	245.19	1.60	243.59	**508**	3
19	243.98	1.21	245.19	1.56	243.63	Bedrock	3
20	243.98	1.21	245.19	1.63	243.56	**507**	3
21	243.98	1.21	245.19	1.88	243.31	Base of **506**	3
22	243.98	1.21	245.19	1.67	243.52	Bedrock in **506**	3
23	243.98	1.21	245.19	1.81	243.38	Base of **506**	3
24	243.98	1.21	245.19	1.68	243.51	**508**	3
25	243.98	1.21	245.19	1.53	243.66	Ground Level E	3
26	243.98	1.21	245.19	1.23	243.96	Ground Level W	3
27	243.98	1.21	245.19	1.07	244.12	Section line	6
28	243.98	1.21	245.19	1.51	243.68	**511**	7
29	243.98	1.21	245.19	1.61	243.58	**508**	7
30	243.98	1.21	245.19	1.41	243.78	Stone	7
31	243.98	1.21	245.19	1.69	243.50	Base of sondage	7

Level Number	TBM	BS	IH	FS	Reduced Level	Description	Drawing Number
32	243.98	1.21	245.19	1.54	243.65	Stone	7
33	243.98	1.21	245.19	1.69	243.50	Base of sondage	7
34	243.98	1.21	245.19	1.75	243.44	Base of sondage	7
35	243.98	1.21	245.19	1.70	243.49	Base of sondage	7
36	243.98	1.21	245.19	1.69	243.44	Base of sondage	7
37	243.98	1.21	245.19	1.66	243.49	**512**	7
38	243.98	1.21	245.19	1.87	243.50	Base of **513**	7
39	243.98	1.21	245.19	1.54	243.53	**511**	7

Appendix 4 Drawing Register

Table A4 – Register of drawings.

Drawing Number	Drawing Type	Site Sub-Division	Description	Sheet Number	Scale
1	Section	Trench 6	Southwest-facing section - Trench 6 sample section	1	1:10
2	Plan	Trench 6	Sketch plan of Trench 6	1	1:100
3	Plan	Trench 5	Plan of Trench 5	2, 3	1:20
4	Section	Trench 5	Southwest-facing section of sondage	4	1:10
5	Plan	Trench 4	Plan of northwest end, Trench 4	5	1:20
6	Section	Trench 5	South-facing section of Trench 5	6	1:20
7	Plan	Trench 5	Plan of sondage through **511** & **512**	6	1:20
8	Section	Trench 4	Southwest-facing section - Trench 4 sample section	5	1:20
9	Plan	Trench 3	Sketch plan of Trench 3	7	1:100
10	Section	Trench 2	South-facing section of Trench 2	7	1:50
11	Plan	Trench 2	Plan of Trench 2	8	1:50
12	Plan	Trench 1	Plan of Trench 1	9, 10, 11	1:20
13	Section	Trench 1	South-facing section of sondage through cobbles **104**	11	1:10
14	Plan	Trench 5	Plan of south trench extension	12	1:50
15	Plan	Trench 5	Plan of west extension to trench	12	1:50
16	Section	Trench 5	East-facing section of posthole **518**	12	1:10
17	Plan	Trench 5	Plan of north trench extension	13	1:10

Appendix 5 Small Finds

Table A5 – List of small finds (SF).

SF Number	Site Subdivision	Context	Description
1	Trench 5	510	Possible prehistoric pottery – Body Sherd
2	Trench 5	502	Possible Worked Stone
3	Trench 5	510	Possible prehistoric pottery – Body Sherd
4	Trench 5	512	Possible prehistoric pottery – Body Sherd

Appendix 6 Ceramics

Ceramics notes from RC17, (739) Raitt's Cave, A9 Dualling
Martin Carruthers
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SF 001

The sherd is mid-brown to dark-buff in colour. Dimensions are: c.38 millimetres by c.35 millimetres and c.12 millimetres in thickness. Examination of the section of the sherd shows there are small- to medium-sized angular stone inclusions; a gritty temper added to the pot recipe. The outer surface of the sherd has been lost quite extensively but sufficient remains to show it was reasonably smoothed and fine. The internal surface of the pot is even smoother, possibly partly through use and cleaning out/scouring. Even with this loss of surface, the actual outer edges of the sherd are not thoroughly abraded indicating that surface loss and damage may have occurred prior to deposition and not as a result of subsequent disturbance.

SF 003

A large, curved pottery sherd some c.88 millimetres by c.67 millimetres, and c.12 millimetres thick. The colour is mid brown on the outer surface and a dark grey on the inner curve and both colours are present as layers in the section of the pot wall. SF 003 again contains a filler/temper of small to medium angular stones seen quite profusely in the core. A small number of organic impressions can be faintly observed on the inner surface of the sherd, and this material appears likely to be small chaff or straw fragments that will have been burnt out on firing the vessel. This sherd, though technically undiagnostic, would be consistent with the slightly better characterised pottery assemblages of the Atlantic Scotland, where it would comfortably fit into an early to Middle Iron Age framework chronologically. This sherd would have belonged to a fairly large vessel but not enough survives to make a reliable estimate.

SF 004

A fine small sherd c. 35 millimetres by c.34 millimetres and c. 4 millimetres thick. The colour is a pale brown on the outer surface and a dark grey on the inner surface. The whole of the surface of the sherd is profusely covered in tiny particles of a schistose stone type and tiny crystalline flakes of flakes possibly a gold biotite producing a sparkling effect in light, and a slightly greasy, waxy texture to the touch not unlike that produced when steatite is employed as a ceramic temper. Schistose inclusions would be consistent with the local geological measures. The sherd is finely made, smooth and thin-walled, and with only a rather gentle curve may have been a rather fine vessel in its complete form, but also larger than one might expect of such a thin-walled sherd.

SF's 001, 003, and 004, are clearly prehistoric pottery. At face value they possess fairly similar form and fabric, with small to medium grained stone inclusions of temper/filler visible in the sections and scuffed surfaces. The surface treatment of the sherds is reasonably smooth and fine, especially that of SF004.

In terms of chronology, the sherds are difficult to be very precise about given their fairly non-diagnostic character. While pottery assemblages from the Central Highlands have been less-well studies than those of the Atlantic North, these sherds should be earlier than the Late Iron Age, and are probably considerably earlier. They would not be out of place in the Early to Middle Iron Age of the first Millennium BC, but they could even be Bronze Age.

Appendix 7 Environmental Samples

Table A6 – List of samples taken.

Sample Number	Site Subdivision	Context	Description
1	Trench 5	512	Bulk Sample; anthropogenic deposit
2	Trench 5	514	Bulk Sample; fill of posthole
3	Trench 5	519	Bulk Sample; fill of posthole

Table A7 – Retent Sample Results.

Sample	Context	Feature	Sample Vol (l)	Retent Vol (l)	Stone		Burnt bone	Carbonised Material	Charred Nutshell	Charcoal		Material available for AMS Dating	Comments
					Lithics	Stone	Mammal			Quantity	Max Size (cm)		
1	512	Deposit	7.5	1.5	+	+	+	+	+	+++	1.0	Charcoal ++	Charcoal is non-oak and includes roundwood fragments, nutshell is *Corylus avellana*
2	514	Fill of posthole [513]	8	1.6			+		+	+++	1.5	Charcoal ++	Charcoal is non-oak and includes roundwood fragments, nutshell is *Corylus avellana*
3	519	Fill of posthole [518]	11	2.3	+		+	+	+	+++	1.3	Charcoal ++	Charcoal is non-oak and includes roundwood fragments, nutshell is *Corylus avellana*

Key (artefactual): + = rare (0-5), ++ = occasional (6-15), +++ = common (16-50) and ++++ = abundant (>50)

Key (environmental): + = rare (0-10), ++ = occasional (11-50), +++ = common (51-100) and ++++ = abundant (>100)

Table A8 – Flotation Sample Results.

Sample	Context	Feature	Total flot Vol (ml)	Cereal grain			Other plant remains	Charcoal		Material available for AMS	Comments
				Avena sp.	*cf. Avena* sp.	*Hordeum vulgare*		Charcoal Quantity	Charcoal Max size (cm)		
1	512	Deposit	30	++	+			++++	1.1	Charred grain +, Charcoal ++	Charcoal is non-oak, with a small amount of oak and includes roundwood fragments.
2	514	Fill of posthole [513]	30	++	+		*cf. Potentilla* sp. +	++++	1.3	Charred grain +, Charcoal ++	Charcoal is non-oak, with a small amount of oak.
3	519	Fill of posthole [518]	30	+	+	+	*Sinapis/Brassica* +	++++	1.5	Charred grain +, Charcoal ++	Charcoal is non-oak and includes roundwood fragments.

Key: + = rare (1-10), ++ = occasional (11-50), +++ = common (51-100) and ++++ = abundant (>100)

NB charcoal over 0.5cm^3 is suitable for identification and AMS dating

Appendix 8 Radiocarbon Dating Certificates

Scottish Universities Environmental Research Centre
Rankine Avenue, Scottish Enterprise Technology Park, East Kilbride, Glasgow G75 0QF, Scotland, UK
Director: Professor F M Stuart Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

26 March 2018

Laboratory Code	SUERC-78032 (GU47382)
Submitter	Sean Bell ORCA ORCA, UHI Archaeology Institute, Orkney College, East Road KW15 1LX
Site Reference	Raitt's Cave (RC17 / 739)
Context Reference	C.512
Sample Reference	S.01
Material	Charred grain : Avena sp.
$\delta^{13}C$ relative to VPDB	-25.0 ‰ assumed
Radiocarbon Age BP	637 ± 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

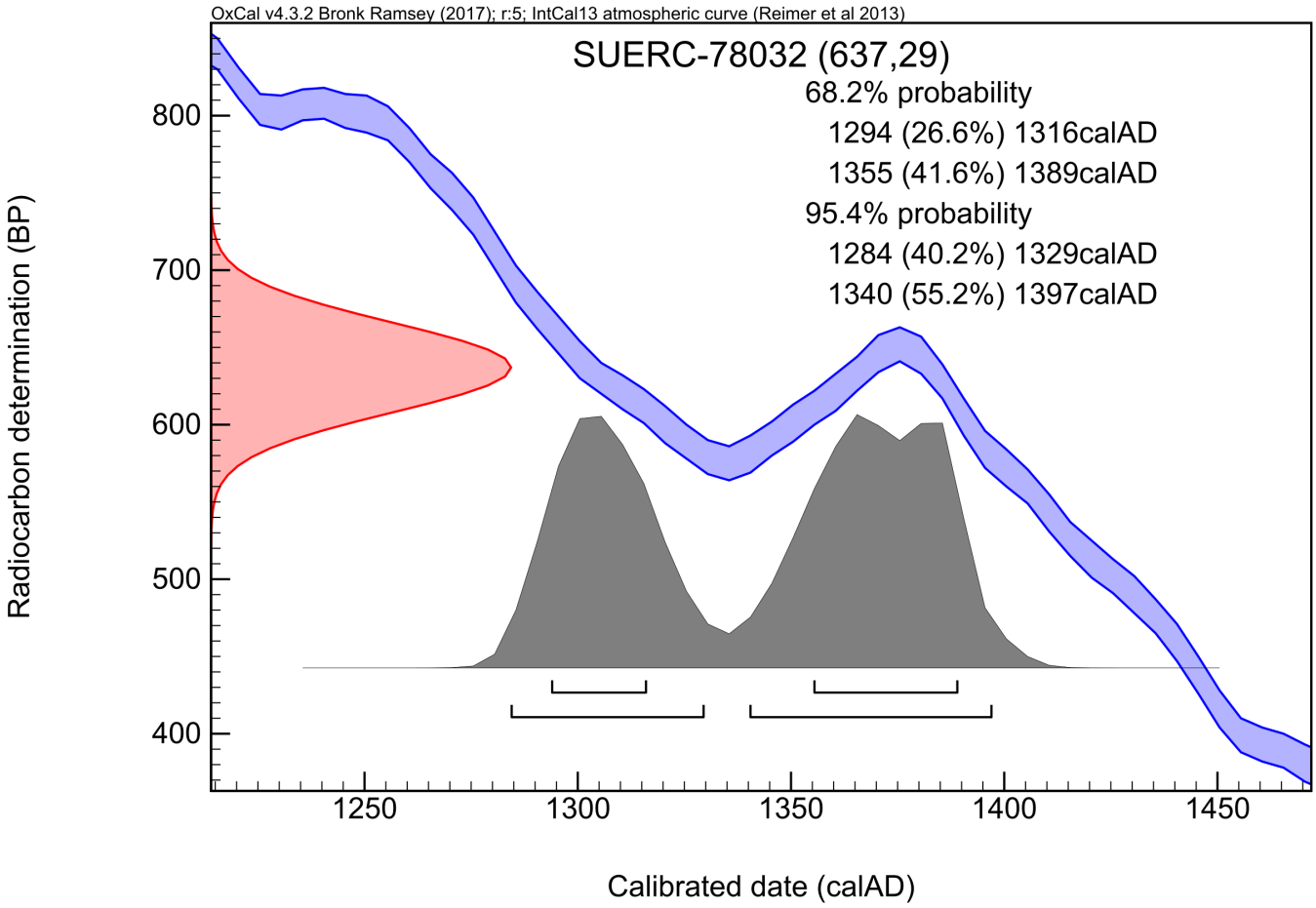
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by : E. Dunbar

Checked and signed off by : P. Nayont



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

* Bronk Ramsey (2009) *Radiocarbon 51(1) pp.337-60*

† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

26 March 2018

Laboratory Code	SUERC-78036 (GU47383)
Submitter	Sean Bell ORCA ORCA, UHI Archaeology Institute, Orkney College, East Road KW15 1LX
Site Reference	Raitt's Cave (RC17 / 739)
Context Reference	C.514
Sample Reference	S.02
Material	Charred grain : Avena sp.
$\delta^{13}C$ relative to VPDB	-25.6 ‰
Radiocarbon Age BP	603 ± 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

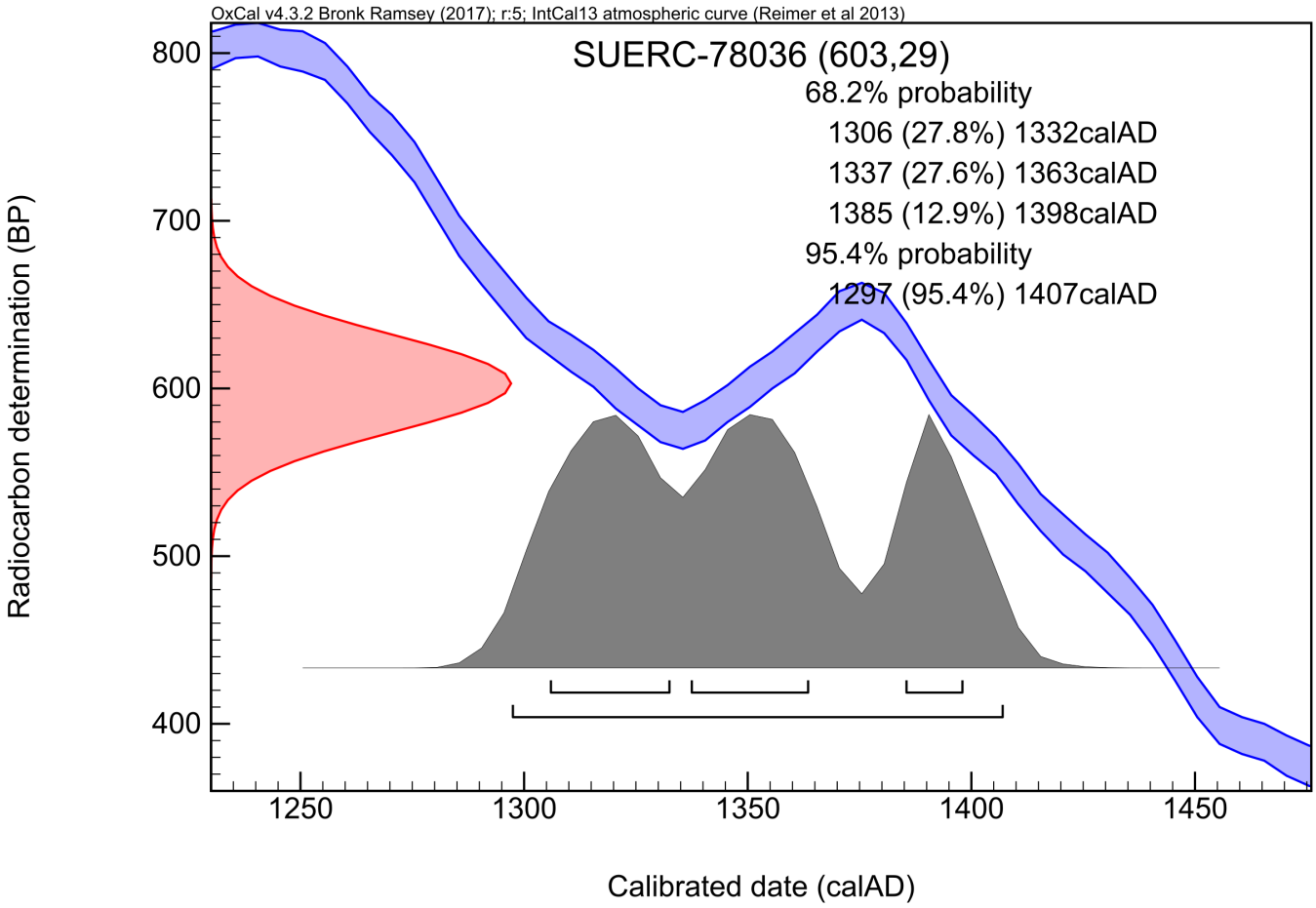
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by : E. Dunbar

Checked and signed off by : P. Nayont



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

* Bronk Ramsey (2009) *Radiocarbon 51(1) pp.337-60*

† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

26 March 2018

Laboratory Code	SUERC-78037 (GU47384)
Submitter	Sean Bell ORCA ORCA, UHI Archaeology Institute, Orkney College, East Road KW15 1LX
Site Reference	Raitt's Cave (RC17 / 739)
Context Reference	C.519
Sample Reference	S.03
Material	Charred grain : Avena sp.
$\delta^{13}C$ relative to VPDB	-24.3 ‰
Radiocarbon Age BP	618 ± 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

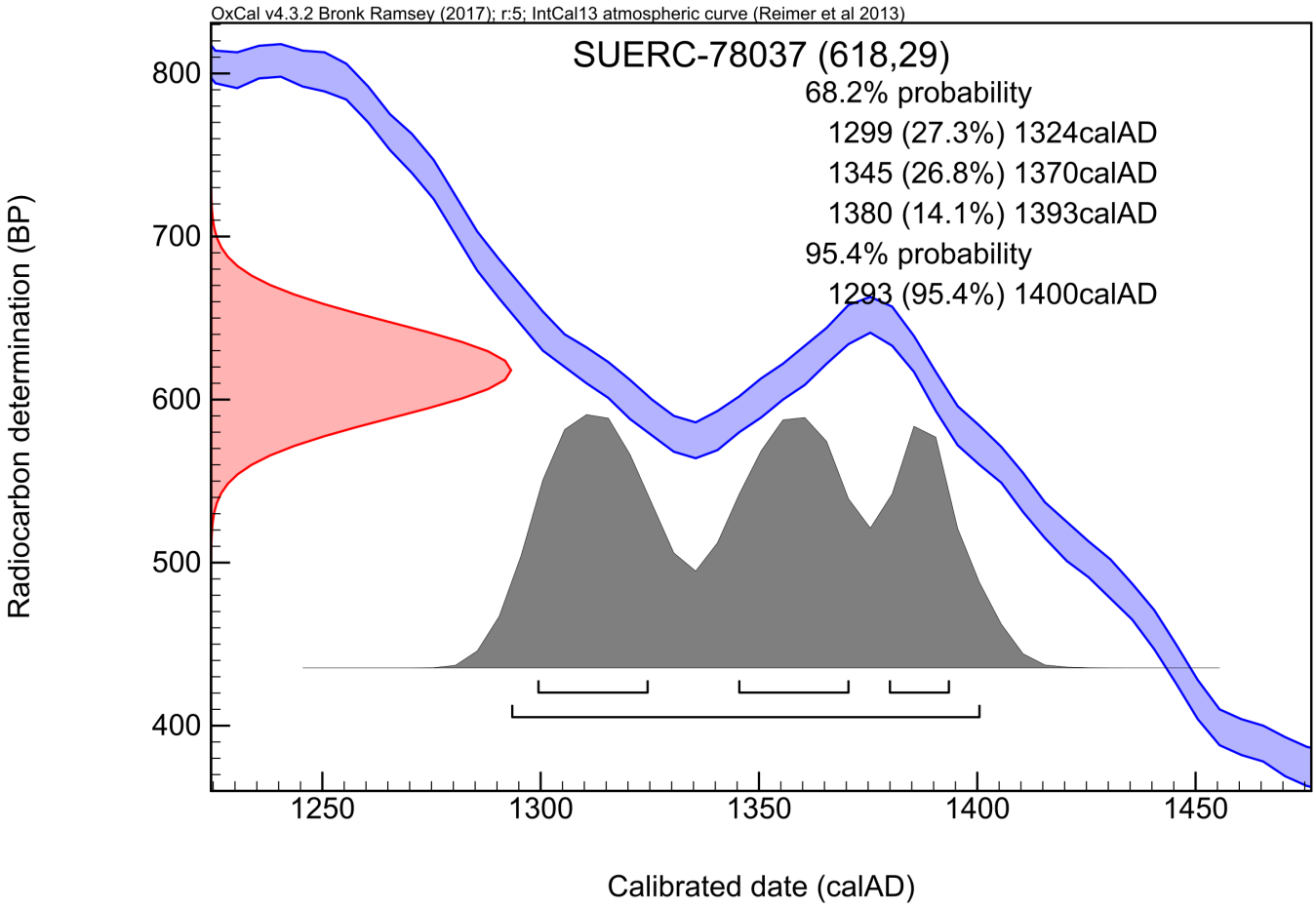
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by : E. Dunbar

Checked and signed off by : P. Nayont



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

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