Tender MR/2016/06

NA CLACHAN AORAIDH, ‘FOUR-POSTER’: TENDER AND PROJECT DESIGN

Client: Forestry Commission Scotland

Produced by: Clare Ellis of Argyll Archaeology

August 2016

Site location: North of Loch Tummel, Perthshire NN838 620

INTRODUCTION

A programme of archaeological works is proposed at Na Clachan Aoraidh, four-poster monument, Loch Tummel, Perthshire (Fig. 1). The four-poster is a Scheduled Monument, SM1572. All the proposed works described below will occur within the scheduled area and as such any ground breaking works will be subject to Schedule Monument Consent (SMC). The Project Design below has been written in order that it may be used as supporting documentation to any application for SMC. The works, as described below, will be funded by Forestry Commission Scotland.

ARCHAEOLOGICAL BACKGROUND

The site is referred to as Na Carraigean Edintian or Na Clachan Aoraidh 'the stones of worship' (Burl 1988, 187). It is located on the moorland of Meall nan Clachan some 424m O.D on the north side of Loch Tummel in Perthshire. The site was first surveyed by Coles (1908) and later by Watson (1915). The standing stones comprise four boulders of quartziferous schist forming a quadrilateral some 3.2m x 3.6m; the stones are graded with the tallest occurring in the SW corner and these are set on the circumference of a circle which is some 4.3m in diameter (Burl ibid), although all but one of the stones are now leaning. The stones are set on a low mound or platform formed from cairn material and which is roughly 16.5m x 8.85m in diameter. The platform appears to be kerbed by smaller stones, though few are these are currently visible. There is a slightly hollow in the centre of the mound, thought to be the result of undocumented activities of earlier antiquarians. In recent years a bonfire within the hollow may have caused further damage to the monument. The site is set on a prominent ridge with dramatic views.

The site was subject to topographical and a geophysical survey, including magnetometry and resistivity (Archaeological Services Durham University) and lazer scanning (AOC Archaeology), the results of which were used to produce a 3D visualization of all elements of the site (Carvers & Hale 2012). A stone kerb or revetment was detected encircling the standing stones and outside of which was an arc of low resistance consistent with a ditch; this feature appears to resemble the ditch which encircled the natural mound of the four-poster at Lundin Farm South-East (Stewart 1967). Within the platform two negative magnetic anomalies were interpreted as voids, possible caused by cists or stoneholes. Within the slightly sunken centre was a positive magnetic anomaly which could be detecting the backfill of an antiquarian excavation. On the south side of the platform another curvilinear positive magnetic anomaly was thought to be the fill of another ditch and which may well be the remains of a ring-ditch. Also on the south side of the platform a possible stone wall/dyke was detected and an equally stony rectangular feature was recorded on the eastern side of the four-poster platform.

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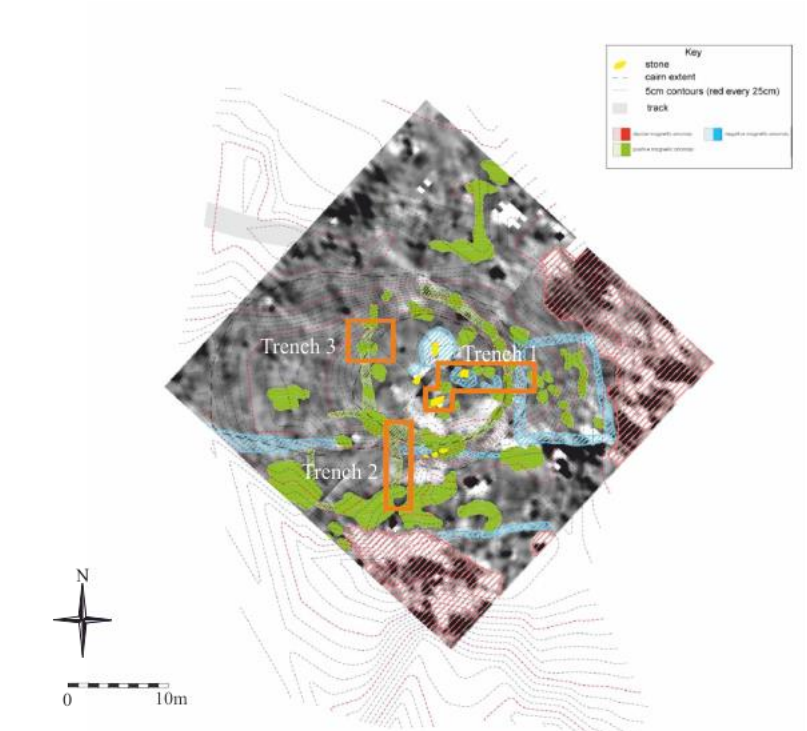
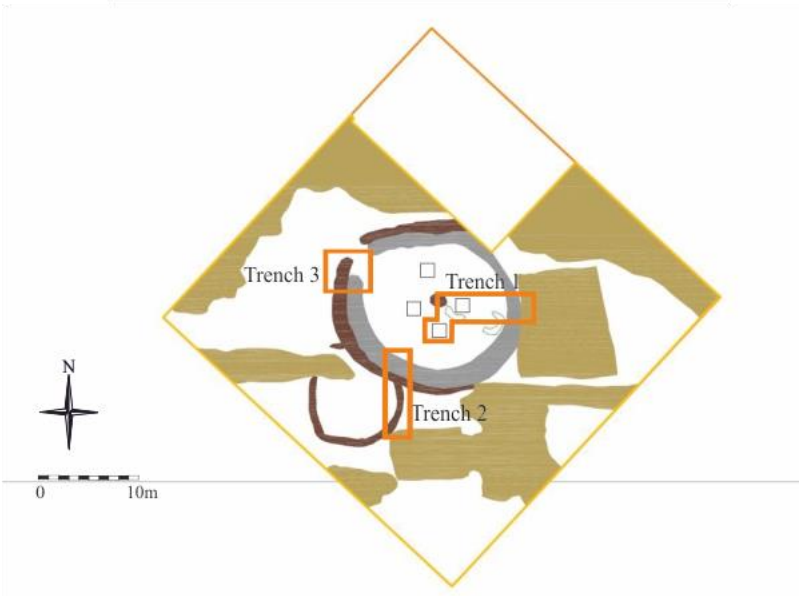


Na Clachan Aoraidh, contour plan with interpreted magnetometry data (©AOC Archaeology) with superimposed trench locations.



Na Clachan Aoraidh, composite interpretation of the archaeology (© AOC Archaeology) with superimposed trench locations

Fig. 1. Proposed trench locations shown in orange.

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Na Clachan Aoraidh four-poster and its place within current research priorities

One of the research questions posed by ScARF is 'when and exactly why were four-posters built?' (ScARF 2012); this question succinctly summarising how little is known about these monuments.

General characteristics

Burl (1988, 8) suggests that the standing stones of four-posters lie on the circumference of a true circle and are therefore a manifestation of a stone circle. The four standing stones form a rectangle, or some version of a rectangle, usually no bigger than 6 x 5m and some appear to be roughly aligned on cardinal points. On some sites the standing stones are clearly graded in height (e.g. Na Clachan Aoraidh, Burl 1988, 187**)**. There are also examples where a smaller kerb of stone occurs between the standing stones. Others exhibit a kerb of stone that edges the platform or mound upon which many of these sites sit (e.g. Na Clachan Aoraidh, Burl 1988, 187**)**. The platform or mound has often been enhanced with the addition of cairn material (e.g. Lundin Farm, Stewart 1967). Cupmarks also occur on small number of sites (e.g. Carse Farm, Stewart & Barclay 1997) and these are more often observed on the south-eastern stone; while some other sites have a cupmarked stone nearby. They tend to be rather small monuments but do show great variation in size. Four-posters occur throughout Scotland but there is a significant concentration of these monuments in Perthshire. Finally four-posters tend to occur in highland locations (but not exclusively) with views to the south or west.

A large number of the monuments have at least one fallen stone and Burl (1988, 39) suggests that this is due to the deliberate slighting of a single stone probably in order to transform a 'heathen' monument into something more acceptable to Christians; Carse Farm North and Carse Farm South appears to be two such Christianised sites (Stewart 1964).

Date

Scottish four-poster stone monuments have consistently yielded Early Bronze Age artefacts including collared and cordoned urns, bucket-shaped urns, food-vessels, jet artefacts and a bronze awl (Burl 1988, 31). However, the excavation record of these monuments remains largely unpublished. The only possible four-poster site in Scotland which has been radiocarbon dated is that of Park of Tongland where the cremation pits beneath the cairn material dated to the 17th to 20th century BC and the overlying cairn material to 16th to 19th century BC (Russell-White *et al* 1992, 320). It is clear that more of these monuments need to be radiocarbon dated and as Sheridan (2005) notes in reference to the date of the cremated bone from the base of a standing stone at Ballymeanoch, Kilmartin Glen that 'any opportunity to obtain dates for similar 'primary'-looking material from other stone settings should be taken'.

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The contemporaneity of the various structural elements of the four-poster monument has also been questioned (Russell-White et al 1992, 321). The monument at Park of Tongland had two phases of construction, the first comprised cremation pits and the erection of two standing stones and the second phase comprised the erection of two further standing stones and the placement of cairn material over the cremation pits. Significantly, the cairn material covered one of the first-phase broken off standing stones and so only three of the four stones could have stood at the same time, so the site may not be a true four-poster, rather a flat cemetery marked by two standing stones that evolved into a kerb cairn with three standing stones (Russel-White et al 1992, 321). Similarly at Lundin Farm South-East one of the cremations was interred after the initial erection of one of the standing stones, but before subsequent attempts to pack and prop the stone back upright after it had collapsed and damaged the open ditch (Stewart 1967, 136 -138). Stewart (ibid) commented that the stone setting was different from the others and the erection of this stone may have been an afterthought though it is probable that no great period of time elapsed between the various construction and interment phases. With reference to Park of Tongland Russell-White *et al* (1992, 321) noted that the monument was multi-sequenced though not multi-period and this may also prove to be the case for other four-poster monuments.

Function(s)

The limited archaeological evidence seems to indicate that four posters may have originated as structures in which cremated bodies were interred (e.g. Stewart 1967, 130 & Russell-White et al 1992, 320), although Burl (1988, 52) argues that they were not burial-places, nor observatories but certainly late stone circles and shrines in which rituals were performed to safeguard the peoples' lives. Therefore, it is not clear whether they were primarily mortuary monuments or more complex features like recumbent stone circles which clearly served more than one ritual purpose (ScARF 2012). However, certainly from 20th century BC cremation was an increasing popular means of disposing of the dead (ScARF 2012). Excavation at Park of Tongland (Russell-White *et al* 1992) and to a less extent the excavation at Lundin Farm (Stewart 1967) indicates that these monuments were used as communal cemeteries within which the cremated remains of a number of individuals were interred and then sealed with soil and cairn material. There seems to be no evidence that these were designed as the place of burial of a special individual and about which later cremation burials were then placed. However, there may well have been some social differentiation even within communal cemeteries, as indicated at Lundin Farm where there was a central pit, but unfortunately it only yielded a few teeth and therefore cannot be definitively identified as a burial pit (Stewart 1967, 136). Similarly the central pit at Park of Tongland had been previously excavated and no significant material was forthcoming during the more recent excavation of the monument (Russell-White *et al* 1992, 314).

A few of the Perthshire four-posters, such as Fortingall North-East and Lundin Farm contained probable ash deposits comprising burnt soil, charcoal and burnt bone (Stewart 1967, 131 & Burl 1988, 169). This material may represent in situ burning and the remains of

pyre material or alternatively secondary ash derived from a funerary pyre and which was deliberately deposited within the monument. Further clarification on the nature and mode of formation of such deposits is desirable.

The funerary nature of four-posters may also be displayed in the deposition of white quartz pebbles which were one of the few finds from Lundin Farm (Stewart 1967, 131), and Clach Na Tiompan (Burl 1988, 153). White quartz in the form of stones, chippings and crystals has a long tradition of being connected with the dead from the Neolithic period right through the early modern period (Thompson 2005). Thompson (2005, 132) suggests that its appeal is in its light refracting and reflecting quality echoing the sun, moon and fire and it may have long been associated with housing the spirits, a means of connection between this and the after-world. At Park of Tongland there was also a clear differentiation between the colour of the stone used to build the cairn and that used to construct the kerb (Russell-White et al 1992, 315). The study of the lithology of some Scottish stone circles has revealed complex patterns which have led to the suggestion that the construction phase of the monument is just as important as the finished article and the type and source of the stones utilised may be imbued with ritual meaning and tribal identification (e.g. Richards 2013). It is not known if the use of colour specific stone at Park of Tongland is a one-off or reflects a pattern repeated in other four-poster monuments.

AIMS AND OBJECTIVES

The primary aims of the project are to:

1. Evaluate the damage upon the archaeological deposits caused by an illegal fire pit
2. Ascertain the extent and nature of surviving archaeological deposits
3. Ensure the continued protection of surviving features
4. Enhance the historic environmental record

The main objectives/research questions are:

1. What is the nature, depth and extent of damage caused by the illegal fire?
2. How was the platform built, what materials were used and is any phasing of construction evident?
3. Was the site de-turfed prior to its construction or does a buried old ground surface survive?
4. Is the platform surrounded by a ditch?
5. When was the ditch dug and was the ditch deliberately backfilled or did it silt up with time?
6. Is there an entrance into the monument on the northwestern side?

7. What is the nature and mode of construction of the kerb edging the platform and can any variation about the circuit of the monument be observed?
8. Is there any pattern to the geology of the various stone elements of the monument, i.e. lithology and/or colour differentiation?
9. Are the standing stones contemporary with the platform, kerb and ditch or are any of these elements earlier than others?
10. Has either orthostat been shaped – 'keeled' (Stewart 1964 & Stewart & Barclay 1997)?
11. Were the orthostats set in a socket-hole?
12. Is there phased stone packing around the orthostats?
13. Is the central clover-shape, evident in the resistivity survey, a stone spread?
14. Was the monument originally covered by turf?
15. Did the cremation of human remains take place within or adjacent to the monument?
16. Are the two magnetic anomalies upon the platform cist burials? Are there other discrete burials?
17. Is the central hollow a backfilled antiquarian trench? And if so what is the extent of damage to archaeological deposits?
18. Is the sub-circular anomaly on the southwest side of the platform an earlier ring-ditch cemetery or something else?
19. What is the stratigraphic relationship between the main 'four-poster' monument and the 'ring-ditch'?
20. Are the linear features on the south and southwestern side of the monument the footing of stone walls or forestry plough marks or something else?
21. What is the nature of the rectangular anomaly on the east side of the monument?
22. Does the monument or monuments date to the early Bronze Age?
23. Do the artefacts recovered relate to the use of the monument or represent something else?

METHODOLOGY

Stage one: excavation

Trench locations
The location of the excavation trenches will be tied in with Ordnance Datum (Fig. 1).

Excavation
The turf and topsoil will be removed by hand and stacked to the sides of the trenches in anticipation of backfilling following the excavation. Excavation will follow a sample-excavation strategy in order that as much of the archaeological resource is preserved *in situ* while ensuring that the objectives and research questions listed above are addressed.

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Trench 1: This trench will measure no more than 12m E/W and 4m N/S, but may be smaller if it becomes apparent that the issues to be addressed can be resolved within a smaller area (Fig. 1). The trench has been located over two small negative magnetic anomalies which may be stone features or voids such as a cist. The trench also encompasses two of the standing stones and portion of the central hollow and a portion of the area of the illegal fire. A useful portion of the platform is located within the boundary of this trench, as is the probable encircling kerb and a small portion of the rectangular feature, visible as a negative magnetic anomaly, which is located on the east side of the monument. It is proposed that the whole of this trench will be subject to a turf and topsoil strip. However, it is very unlikely that all the archaeological deposits within this trench will be subject to excavation. It is anticipated that a section across this half of the monument will be excavated along the northern edge of the excavation area in order that the full depth of deposits can be evaluated; care will be taken to ensure that the standing stone is not undermined (it currently leans towards the centre of the monument). Elsewhere within the main trench it is anticipated that there may be the need for smaller sondages. The location and size of these sondages will be determined once the first significant archaeological horizon or horizons are revealed in order that the objectives of this trench can be addressed while minimizing physical disturbance of the archaeological deposits.

Exploration of the orthostats and associated deposits will be conducted in such a manner that they will not be moved or undermined or put at risk of falling. However, where possible the nature of any packing, presence or absence of a socket-hole and shaping of the stone will be explored. Particular care will also be taken to ensure that no mixing and contamination of carbon from the modern fire occurs while sampling deposits.

The trench specific objectives/research questions are:

1. What is the nature, depth and extent of damage caused by the illegal fire? How has the fire affected deposits?
2. Is the central hollow a backfilled antiquarian trench? And if so what is the extent of damage to archaeological deposits?
3. How was the platform built, what materials were used and is any phasing of construction evident?
4. Was the site de-turfed prior to its construction or does a buried old ground surface survive?
5. What is the nature and mode of construction of the kerb?
6. Have the orthostats been shaped – ‘keeled’?
7. Are there socket holes associated with the two orthostats?
8. Is there phased stone packing around the orthostats?
9. Is the central clover-shape evident in the resistivity survey a stone spread?
10. Was the structure originally covered by turf?
11. Did the cremation of human remains take place within or adjacent to the monument?

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12. Are the two magnetic anomalies upon the platform cist burials? Are there other discrete burials?
13. What is the nature of the rectangular anomaly on the east side of the main monument?
14. Does the monument or monuments date to the early Bronze Age?
15. Do the artefacts recovered relate to the use of the monument or represent something else?

Trench 2: The trench will measure no more than 10m N/S and 2.5m E/W and as above the excavation area may be reduced once the targeted archaeological features are identified (Fig. 1). The trench has been located to encompasses a portion of the line of the kerb of the main monument and the possible encircling ditch, as well as a portion of the possible 'ring-ditch' and the area where the stratigraphic relationship between the two structures may be determined. In addition a small portion of one of the linear negative magnetic anomalies should be found on the eastern side of this trench and along the southern edge an area of high resistance, thought to be bedrock, can be also be investigated.

The trench specific objectives/research questions are:

1. Is the sub-circular anomaly on the southwest side of the main monument an earlier ring-ditch cemetery or something else?
2. Are there features internal to this 'ring-ditch'?
3. What is the stratigraphic relationship between the main monument and the 'ring-ditch'?
4. Is the platform of the main monument surrounded by a ditch? And if so when was the ditch dug and was the ditch deliberately backfilled or did it silt up with time?
5. What is the nature and mode of construction of the kerb?
6. Are the linear features on the south and southwestern side of the platform the footing of stone walls or forestry plough marks or something else?
7. Does the monument or monuments date to the early Bronze Age?
8. Do the artefacts recovered relate to the use of the monument or represent something else?

Trench 3: The trench will be located over the possible entrance of the main monument, demarcated by normal levels of resistivity (Fig. 1). The trench will measure a maximum of 5 x 4m and will incorporate the southern limb of the probable kerb and enclosing ditch. Entrances to monuments are often imbued with particular significance and can be particularly rich in artefactual and/or ecofactual evidence.

The trench specific objectives/research questions are:

1. Is there a definable entrance into the main monument or is the pattern observed in the survey data caused by other factors?

2. Is the platform of the main monument surrounded by a ditch? And if so when was the ditch dug and was the ditch deliberately backfilled or did it silt up with time and are the fill(s) of the terminal of the ditch significantly different from those observed in Trench 2?
3. What is the nature and mode of construction of the kerb and is it different at this location from that exposed around the circumference of the monument?

Recording
All hand excavation, sampling and recording will be according to standard procedures (Appendix 1). Variations from standard procedures are discussed below. Individual trenches will be recorded at a scale of 1:20.

Sampling strategy
Where feasible Bulk (10 litres) and Routine samples will be taken from every significant context. Other Special Samples may be taken and may include:

- large fragments of charcoal
- preserved organics (wood etc.)
- deposits rich in organic matter (e.g. buried soils, cist fills) for subsequent pollen analysis
- kubiena tins taken through key deposits (e.g. archaeological deposits affected by the recent fire, complex or puzzling stratigraphy, buried soils etc.) for subsequent micromorphological analysis.
- human bone (100% retrieval)

It is anticipated that if human remains are discovered that these will be in the form of fragments of cremated bone. Where a concentration of cremated bone (as opposed to a slight scattering throughout a given deposit) is encountered this will be fully excavated, as its preservation *in situ* once exposed to the elements cannot be guaranteed. Particular care will be taken to ensure complete retrieval of all of the bone as this will allow an assessment of the processes and rituals behind the burial of the remains to be made and also ensure any pieces of bone/teeth suitable for subsequent isotope analysis are retrieved.

Finds
All finds, other than those dating from 20th century onwards, will be recovered. All find locations will be recorded in three dimensions utilizing a Trimble EDM.

Photographs
Photographs will be taken and stored as .jpeg files, as per RCAHMS recommendations. Photographs of the field team at work will be taken in addition to the normal photographic record for subsequent use by FSC.

Metal detecting
A metal detector will be utilized to scan each significant archaeological horizon prior to excavation.

Backfilling
Backfilling will take place on the last day of fieldwork. Each trench will be lined with terram before the excavated material is replaced. In the central area of the monument a layer of fine gravel will be placed over the terram prior to the replacement of topsoil and turf. The contours of the site, as they were prior to the excavations, will be reproduced as much as possible and no spoil will be left visible on the site.

Timetable
The fieldwork will be undertaken once Scheduled Monument Consent has been issued by Historic Environment Scotland (HES). HES will be informed of the dates of fieldwork once they have been decided. Highland Historic Environment Team will also be informed of the project and fieldwork dates.

REPORTING

The results of the archaeological works will be presented in the form of a written report which will be submitted to HES before the end of September 2016.

The interim report will be prepared in accordance with current standard HES procedural requirements and standard procedures. The report will contain the following:

- a location plan of site;
- a plan showing the location of the excavation trenches;
- trench specific plans and sections;
- summary description of methods;
- summary description of results;
- appendices to include: contexts, drawing record, photographic record, sample record, finds record;
- summary interpretation of the results
- summary conclusions

A summary report on the works and its findings will be submitted to Discovery and Excavation in Scotland to ensure compliance with standard practice. One paper copy and a digital copy of the interim report will be supplied to FCS. In addition the report will be submitted to the OASIS database. One paper copy and a digital copy of the report will be supplied to HES. A digital copy of the interim report will also be supplied to Highland Historic Environment Team.

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POST-EXCAVATION ANALYSIS AND PUBLICATION

A Costed Post-excavation Research Design will be produced on completion of the Interim Report and submitted together with the Interim Report to FCS. Following consultation with FCS a programme of post-excavation will be undertaken. The final report or publication will be produced within a year of the agreement to the Post-Excavation Research Design.

It is anticipated that the programme of post-excavation may include all or some of the following analyses and preparation of specialist reports:

- Flotation of bulk samples for retrieval of charcoal, carbonised macroplants and micro-artefacts (Dr Clare Ellis)
- Lithics (Dr Torben Bjarke Ballin)
- Charcoal identification (Dr Susan Ramsay)
- Charred macroplant analysis (Dr Susan Ramsay)
- Pollen analysis (Dr Susan Ramsay or Dr Ciara Clarke)
- Human bone (Angela Boyle)
- Isotope analysis on human bone (SUERC & Dr Kate Britton)
- Animal bone (Ms Catherine Smith)
- Bronze and coarse stone artefacts (Dr Frazer Hunter/Gemma Cruickshanks)
- Soil micromorphology (Dr Clare Ellis)
- Soil chemistry (Dr Clare Ellis)

On completion of the programme of post-excavation and if appropriate a summary paper will be produced for publication in suitable peer reviewed journal.

ARCHIVE DEPOSITION

The archive from these works will be prepared for deposition in the National Monuments Record of Scotland.

The disposal of small finds will be conducted according to the standard procedures explained in Appendix 2.

SITE ACCESS

Access will be planned and agreed in advance with Tay Forest District.

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PRODUCTION OF RISK ASSESSMENT

A risk assessment covering all aspects of the fieldwork will be produced prior to the commencement of the project and every member of staff will be required to read it prior to starting work. All staff will also be trained in safe lifting techniques. The risk assessment will be submitted to Tay Forest District prior to the commencement of on-site works.

TEAM

The project will be managed and undertaken by Dr Clare Ellis of Argyll Archaeology who is a long standing member of the Charted Institute of Field Archaeologists. She will assisted by one other experienced professional archaeologist and one assistant archaeologist. The interim report will be complied by Dr Clare Ellis.

REFERENCES

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CURRICULUM VITAE OF KEY FIELDWORK STAFF

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Current job

I run my own archaeological business which undertakes all manner of archaeological works including Consultancy, Desk-Based Assessments; Field Survey, Watching Briefs, Evaluations, Excavations and the management of Post-excavation programmes of work. In addition I provide a specialist environmental soil and sediment service comprising: consultancy for environmental sampling strategies; field recording of soils and sediments; soil micromorphology; geomorphological mapping and interpretation.

Relevant Archaeological Experience

I set up Argyll Archaeology in 2005 and since that time have worked, with the exception of a couple of projects, exclusively in Argyll. I enjoy field archaeology and direct all the major archaeological excavations undertaken by Argyll Archaeology. This has exposed me to the huge diversity and surprising density of archaeological deposits and structures within this large and varied county. I have directed the excavation of sites dating to all periods, from the Mesolithic through to the Early Modern.

Specifically relevant fieldwork includes the excavation of one of two kerb cairns discovered during site preparation works for new housing on the edge of Cleigh, a small hamlet located to the south of Oban (Ellis 2010). A shallow cist like arrangement of stone was discovered in the centre of the cairn and this was set into black silt; the latter was interpreted as the remnants of an oak fired funerary pyre. On top of the cist were fragments of cremated human bone, which weighed in at 146g, indicating that it had been deliberately selected and buried as a token deposit. Around the cist water-worn cobbles had been placed in concentric rings infilling the space between the cist and the outer, larger sub-angular kerb stones. The secondary burial dated to the middle Bronze Age, 1541-1437 cal BC.

In 2015 the socket-hole and immediate area of a recently fallen standing stone at Barlea, Kintyre was excavated on behalf of Historic Scotland. The base of the stone was tooth-shaped and although this shape appeared to be entirely natural, given the observation of Stewart (Stewart 1967, 131) it may have been deliberately selected as the effect would have been very similar to the deliberately keeling of a number of fallen standing stones noted in Perthshire, including one of the stone within the Lundin Farm four-poster. A small ash deposit containing cremated bone (the bone was unfortunately too small to identify to species) had been placed up against the standing stone and this probable token cremation deposit was dated to the late Bronze Age 1134-1007 cal BC (Ellis 2015).

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Publications

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APPENDICES - METHODS APPENDICES - METHODS

2 Excavation

Open Area Excavation

2.2.1 Excavation areas will be accurately surveyed after excavation and related to the National Grid.

2.2 Undifferentiated topsoil or overburden of recent origin will be removed in successive level spits down to the first significant archaeological horizon.

2.3 All investigation of archaeological horizons will be by hand, with cleaning, inspection and recording both in plan (1:20) and section (1:10). Within each significant archaeological horizon all features will be hand excavated.

2.4 Two categories of sample are taken;
i) Standard Bulk Samples; an approximate 10 litre sample from every **significant** excavated soil context. This sample is used, through floatation sieving, to recover a sub-sample of charred macroplant material, faunal remains and artefacts
ii) Special Samples; a sample from a sediment which is determined, in field, to either have the potential for dating (wood charcoal for radiocarbon dating) or for the recovery of enhanced palaeoenvironmental information (waterlogged sediments, peat columns, etc).

2.6 The local police will be informed prior to excavation starting as human remains are expected. Human remains will be treated according to Historic Scotland's policy paper 'The Treatment of Human Remains in Archaeology'. In addition the Code of Ethics and Code of Practice produced by the British Association for Biological Anthropology and Osteoarchaeology will be adhered to.

2.7 All finds of gold and silver will be moved to a safe place. Where removal cannot be effected on the same working day as the discovery, suitable security measures will be taken to protect the artefacts from theft or damage. The recovery of such material, along with all other finds, will be reported to the Queen's and Lord Treasurer's Remembrancer.

2.8 After recording, the trenches will be covered by terram and backfilled with excavated material.

Recording

2.9 Written descriptions, comprising both factual data and interpretative elements, will be recorded on standardised context sheets.

2.10 Where stratified deposits are encountered a 'Harris'-type matrix will be compiled during the course of the excavation.

2.11 Plans will normally be drawn at a scale of 1:20. Burials will be drawn at 1:10. Other detailed plans will be drawn at an appropriate scale.

2.12 Sections of features will be drawn at 1:10, but if very long these may be drawn at 1:20.

2.13 Registers of contexts, sections and plans, finds and samples will be kept.

2.14 Photographs will be taken in .jpeg format only. Two site camera will be used, a standard digital camera for general shots and a digital SLR for publication shots. A full colour digital photographic record will be maintained. This will illustrate the principal features and finds both in detail and in a general context. The photographic record will also include working shots to represent more generally the nature of the fieldwork.

2.22 A register of all photographs taken will be kept on standardised forms.

2.23 All recording will be in accordance with the standards and requirements of the *Archaeological Field Manual*.

Finds

2.26 All identified finds and artefacts will be collected and retained.

2.27 All finds and samples will be treated in a proper manner and to accepted standards. Finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the guidelines set out in United Kingdom Institute for Conservation's *Conservation Guidelines No. 2*.

2.28 All recovered archaeological material in Scotland belongs to the Crown and its disposal is administered by the Queen's and Lord Treasurer's Remembrancer.

3 Excavation reports

3.1 The style and format of the excavation report will be compliant with Historic Scotland's issued guidance on Data Structure Reports. The report will include as a minimum the following;

i) A location plan of the site.
ii) A location plan of the excavation area.
iii) Plans and sections of features and extent of archaeology located. These will be at an appropriate scale.
iv) A summary statement of the results.
v) Full set of appendices: context data; sample data; drawing record; photographic record; special samples;
and finds record.

6 Specialist staff

The following specialist staff may be used on this project depending on the type of artefacts and soil samples recovered during the course of the fieldwork.

Clare Ellis	Soils and sediments analysis
Susan Ramsay	Pollen analysis
Susan Ramsay	Macroplant analysis
Ruby Ceron-Carasco	Marine shell and fish bone
Angela Boyle	Human bone
Kate Britton	Isotope analysis
Catherine Smith	Animal bone
Pieta Greaves	Artefact conservation
Torben Bjarke Ballin	Lithics
Ann MacSween	Prehistoric pottery
George Haggarty	Post-medieval pottery
Derek Hall	Medieval pottery
Anne Crone	Dendrochronology
Frazer Hunter/Gemma Crucikshanks	Metal work/coarse stone artefacts

7 General

7.1 The requirements of the Project Design will be met in full where reasonably practicable.
7.2 Any significant variations to the proposed methodology will be discussed and agreed with Historic Scotland in advance of implementation.
7.3 The scope of fieldwork detailed in the main part of the Method Statement is aimed at meeting the aims of the project in a cost-effective manner. However there may on occasions be unusual circumstances which have not been included in the programme and costing. These can include;

i) unavoidable delays due to extreme weather, vandalism, etc;
ii) extensions to specified trenches or feature excavation sample sizes requested Historic Scotland
iii) complex structures or objects, including those in waterlogged conditions, requiring specialist removal.

Health and Safety

7.4 All relevant health and safety legislation, regulations and codes of practice will be respected.

Insurances

7.5 Argyll Archaeology holds Employers Liability Insurance, Public Liability Insurance, and Hired equipment insurance.

7.6.1 Argyll Archaeology will not be liable to indemnify Forestry Commission Scotland against any compensation or damages for or with respect to;

i) damage to crops being in the area or areas of work (save in so far as possession has not been given to the Archaeological Contractor);

ii) the use or occupation of land (which has been provided by FCS by the Project or for the purposes of completing the Project (including consequent loss of crops) or interference whether temporary or permanent right of way, light, air or other easement or quasi easement which are the unavoidable result of the Project in accordance with the Agreement;

iii) any other damage which is the unavoidable result of the Project in accordance with the Agreement;

iii) injuries or damage to persons or property resulting from any act or neglect or breach of statutory duty done or committed by FCS or their agents, servants or their contractors (not being employed by Argyll Archaeology) or for or in respect of any claims, demands, proceedings, damages, costs charges and expenses in respect thereof or in relation thereto.

Copyright and confidentiality

7.8 Argyll Archaeology will retain full copyright of any commissioned reports, tender documents or other project documents under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it will provide an exclusive license to FCS in all matters directly relating to the project as described in the Method Statement.

7.9 Argyll Archaeology will assign copyright to FCS upon written request but retains the right to be identified as the author of all project documentation and reports as defined in the Copyright, Designs and Patents Act 1988.

7.10 Argyll Archaeology will advise FCS of any such materials supplied in the course of projects which are not Argyll Archaeology's copyright.

Standards

7.12 Argyll Archaeology conforms to the standards of professional conduct outlined in the Chartered Institute of Field Archaeologists' Code of Conduct, the CIFA Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology, the CIFA Standards and Guidance for Desk Based Assessments and Field Evaluations etc.

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