Scheduled Monument Consent:
Report on Handling

HISTORIC ENVIRONMENT SCOTLAND | ÀRAINNEACHD EACHDRAIDHEIL ALBA

Case information

Reference/Case ID	201601848

Scheduled Monument	Burnswark or Birrenswark Hill, fort & Roman camps		
Index no	M667	**Grid Ref**	NY187787 318700.0000 578700.0000

Date of Application	05 July 2016	**Application Received**	06 July 2016
Summary of proposed works	Targeted excavation of three trenches		

1. Summary recommendation

This report recommends approval of proposals for targeted excavation at this monument, due to the likely resulting benefits, provided in the form of a significant contribution to our understanding of the monument and Roman Scotland.

2. Background

Burnswark Hill is the location for a large hillfort that originated in the Early Iron Age (around 800 BC). The fort was defended by earth ramparts and contained timber roundhouses. The site also includes two Roman camps on opposing sides of the fort; the South camp and the North camp. This juxtaposition is unique.

There are mounds at entrances to the South camp, which are interpreted as platforms for firing ballista (stone or metal projectiles). There have been four excavations at the site during the 19th and 20th centuries. These have resulted in a singular assemblage of ballista from the monument. The camps and fort survive as impressive earthworks.

The monument is nationally important because the survival of two Roman camps on either side of a native hillfort is unique. The nature of the site remains the subject of intense debate among Roman archaeologists. This debate focuses on whether the earthworks were the result of a Roman siege of a native settlement or a series of practice works. The resolution of this question is highlighted as an important aim in the Scottish Archaeological Research Framework (ScARF).

The proposed work involves targeted excavation at three locations on the monument as part of a project that has been running since 2013. Section 42 consent for a non-invasive metal detector survey and geophysical surveys has previously been granted (Cases 201207617 and 201501711).

The metal detector survey detected a large number of likely lead ballista (at least 650) and other possible metal objects. In order to confirm the accuracy of the survey consent was granted to hand excavate two trenches across the rampart of the hillfort in 2015 (Case 201502906).

The excavation confirmed the accuracy of the survey and a number of ballista were recovered from over the ramparts. Chemical analysis of these and others already in museum collections suggests that they were made using lead from a single source, likely to have been in Germany.

Other important results included experimental archaeology that has suggested one type of ballista may have been used like ‘grapeshot’ and had holes to make a noise that would intimidate enemies. The results of geophysical survey undertaken in 2015 suggested that the South camp did not contain buildings that would be typical of a Roman fort.

The 2015 excavations did not recover any material suitable for direct, radiocarbon dating because of the nature of the deposits exposed in the hillfort. Reliable confirmation of the date of activity at the monument, and hence its position in the chronology of Roman operations in southern Scotland remains a key research objective.

The project works through a partnership model involving: the Trimontium Trust, University of Glasgow, Dumfries and Galloway Museums Service, Live Borders Museums and Galleries, Keltenwelt am Glauberg Research Centre and Goethe University.

The project also involves public outreach. This includes engagement through social media, with a Facebook page reaching up to 14,000 people. The project has also engaged with local heritage groups, metal detectorists and members of Combat Stress (a Veterans’ mental health charity). During the 2015 excavations an open day was held that attracted 150 visitors and was covered in local print media and by Borders television. A project film is being made for distribution to local schools and museums.

The results of the project so far have been delivered at six archaeological conferences in Scotland, England, Ireland and Germany. The project has featured as the cover story of Current Archaeology (a popular magazine covering archaeology) and this led to further national print and broadcast media coverage, including BBC Radio 4’s Today, The Times, and the World Service.

An exhibition has been created in liaison with Dumfries and Galloway Council’s museum service. This launched in June 2016 and will tour museums in southern Scotland over the next 18 months. Schools are to be contacted with regard to undertaking site and museum visits as part of Level 1/2 Curriculum for Excellence History.

A Research Design and Written Scheme of Investigation (WSI) have been submitted in support of the application. These set out the full background, justification, scope and methodology for the proposed works. The contents have been discussed in advance with Heritage Management. A revised WSI was submitted during the application in order to address issues raised by Heritage Management.

3. Proposals

Project Justification

The non-invasive metal detector survey carried out as part of the project has added considerably to our understanding of the monument by providing new information on the extent, location and nature of the important metalwork assemblage associated with it.

The excavations would test and confirm the results of the metal detector survey in the South and North camps, which have not been tested previously. They would provide information on the vulnerability of a range of metalwork to change, through corrosion or other processes. The applicant states this accords with the Policy Statement Key Principles (paragraph 1.10).

The proposed excavations are noted to affect a very limited sample of a large monument (less than 0.01% by area). The three trenches have been specifically designed to target a range of survey targets at each location. It is suggested that this is a minimal level of intervention.

The results of the project to date are of recognised national and international significance. This is clearly demonstrated by the range of project partners and by examples of engagement with the archaeological community and general public.

The proposed excavations are necessary to meet the aims and objectives of the Research Design, which have been designed to address issues set out in Scotland's national archaeological research framework (ScARF). These include the impact of Rome, interaction with the indigenous population and the chronology and military methodology of the Roman expansion into Scotland.

It is noted that the proposed excavations would train local volunteers in a variety of skills; building capacity for groups to undertake their own projects. It would also increase public understanding of the historic environment through lectures, social media, print and broadcast media, a touring museum display and open days.

For all the above reasons the project is stated to be consistent with the vision set out by the Scottish Government in 'Our Place in Time: the Historic Environment Strategy for Scotland' (2014).

Strategy for proposed works 2016

It is proposed to complete the systematic metal detecting survey. This has an existing Section 42 consent granted in 2012 (Case 201207617) and included here for context.

Targeted archaeological excavation of three small trenches is proposed. These would seek to confirm the nature of signals recorded during the metal detecting survey and establish the presence of ballista bullets in both North and South camps. This is aimed at understanding the stratigraphic location of the survey signals, and the nature of the ballista in both camps in relation to the native hillfort. One trench in the South camp would be positioned to maximise the potential to encounter stratified deposits that may contain material suitable for radiocarbon dating. This would be aimed at establishing the monument's place in the chronology of Roman Scotland, which is a key research aim.

One trench would measure 5m x 2m in the North camp. This is intended to bracket a statistically significant group of metal-detected targets.

A second trench in the South camp would measure 10m x 1.5m and extend back from the rampart. It is intended to confirm the relationship of probable 'dropped' ballista with the rampart of the camp and obtain a suitable selection of stratified 'ballista' for analysis. The size of the trench has been designed to reflect the signals recorded during the metal detecting survey, and is the minimum required to obtain a representative sample of probable ballista. The trench has also been designed to examine the deposits comprising the ramparts, any former ground surface and test for the presence of an intra-mural road. These would be likely to be securely stratified deposits that may contain material suitable for radiocarbon dating. Establishing a secure date for the main phase of activity at the monument would be an important contribution to understanding its significance and is a key research aim.

Another trench (6 x 4m) is proposed to the rear of the ramparts of the South camp. This is intended to test a range of metal detecting signals and to establish the nature, survival and condition of non-lead metalwork on the site. The size of the trench has been designed to reflect the signals recorded during the metal detecting survey whilst minimising the resulting level of intervention. The results are intended to allow assessment of the threat of loss through decay of a variety of metalwork.

Ballista recovered from both camps would be chemically analysed to allow confirmation (or otherwise) of whether the activity across the monument was all contemporary or derived from a wider timeframe. This chemical analysis is non-destructive.

It is also proposed that the trenches may recover material suitable for radiocarbon dating by examining contexts, such as the rampart, that may be viewed as secure. This would also provide important information with regard to understanding the monument's place in the chronology of Roman Scotland.

Written Scheme of Investigation

Excavation technique
The excavation is projected to run from 20 August 2016 to 4 September 2016.

Trenches would be hand-excavated under archaeological supervision. Up to fifteen volunteers would be working at any one time with supervision provided by five experienced archaeologists. Each trench would have a nominated supervisor drawn from the pool of experienced archaeologists.

Trenches would be excavated stratigraphically and archaeological deposits and features would be hand cleaned. Excavation would continue until either clean geological deposits or archaeological deposits not suited to excavation in narrow trenches were encountered.

If deposits exceed a safe working depth consultation with Historic Environment Scotland Heritage Management (HES HM) would be undertaken to consider measures necessary to proceed to a greater depth. Consultation would also be undertaken with HES HM if remains or artefacts of an unexpected or complex nature are exposed.

The excavation would be undertaken in recognition of the need for minimal intervention to achieve the stated objectives. It would also take account of the resources available and the need to re-instate the area of excavation as it was prior to excavation. These factors would be evaluated by the team of experienced archaeologists as the excavation progresses.

Standards and guidance
All works would adhere to the Chartered Institute for Archaeology's Standards and Policy Statements and Code of Conduct, and relevant HES guidance.

In accordance with policy on the excavation of human remains, the local constabulary and Dumfries & Galloway Council Archaeology Service would be notified should articulated *in situ* human remains be uncovered in the course of excavations.

Recording
All recording would be done using a single context recording method on *pro forma* sheets.

Archaeological drawings of deposits, features and trenches would be created using standard scales and related to National Grid and Ordnance Datum by digital survey.

All contexts, small finds and environmental samples would be given unique numbers. Photographs would include record and general images recorded with a suitable level of information.

Finds would be collected by context and small finds recorded in three dimensions where appropriate. Finds would be treated and stored in accordance with appropriate industry standards.

Bulk environmental samples would be taken from archaeologically significant contexts. A representative sample would be processed.

Provision has been made for specialist on-site advice relating to finds and environmental sampling as required.

Reporting and post-excavation
A Data Structure Report would be produced within 6 weeks of the end of the excavation. It would contain a level of information commensurate with industry standards. The report would include catalogues of artefacts and assessments by appropriate specialists. There would be summary reporting to online databases (OASIS) and publications (Discovery and Excavation Scotland).

A draft of the report would be circulated to HES HM for comment before final copies were sent to national and local repositories.

A Post-Excavation Research Design (PERD) would be prepared in conjunction with the Data Structure Report. This would recommend further analyses for the recovered material as well as providing the names and brief CVs for the appropriately qualified and experienced specialists who would carry out the works. It would also recommend the structure for the publication and dissemination of the results.

Further work is likely to focus on artefact analysis, palaeo-environmental analysis, radiometric dating and stratigraphic interpretation.

It is envisaged that the results of the project would be published in an appropriate archaeological journal or monograph. The suitable level of publication would be dependent on the significance of the project results.

A project archive would be prepared in cognisance of relevant guidelines and deposited with the National Record of the Historic Environment.

Any artefacts retrieved would be subject to standard Treasure Trove procedures.

<u>Reinstatement</u>

Following excavation the base and sides of the excavation trenches would be lined with geotextile material to differentiate excavated and unexcavated deposits. The trenches would be backfilled and the site returned to its original state.

<u>Personnel</u>
The experience and qualifications of relevant project personnel has been demonstrated in the Research Design and WSI. This includes expertise regarding Roman military activity in the Scottish Borders, archaeological fieldwork and GIS.

In particular, a Site Director and two Supervisors with appropriate and demonstrable experience have been identified. Provision for specialist advice on conservation and sampling strategies and the assessment of artefacts and environmental remains has also been demonstrated.

4. Representations received

Four representations have been received in support of the project; two from local heritage groups and two from museums.

Each focusses on slightly different issues: 1) the potential for further information to be generated and used in an ongoing public exhibition; 2) the potential to address questions relating to the nature of the monument; 3) the potential advances in understanding and benefits for public understanding and engagement, and; 4) the international significance of the project.

5. Report

a) Policy considerations

The application should be viewed with the following legislative and policy considerations in mind:

Ancient Monuments and Archaeological Areas Act 1979

Part 1 Section 2 - Control of works affecting an ancient monument.

Historic Environment Scotland Policy Statement, June 2016 (Policy Statement)

3.14. A monument is included in the schedule to secure the long-term legal protection of the monument in the national interest, in situ and as far as possible in the state it has come down to us. Scheduled monuments have an intrinsic value as monuments, not related to any concept of active use. It is the value of the monument to the nation's heritage, in terms set out in the section on Scheduling in Chapter 2 of this policy statement, that is the primary consideration in determining applications for scheduled monument consent.

3.16. Works on scheduled monuments should therefore normally be the minimum level of intervention that is consistent with conserving what is culturally significant in a monument.

3.17. As each monument will require treatment specific to its individual nature, characteristics, significance and needs, any proposed change to it must be fully and explicitly justified.

3.18. Scheduled monument consent applications must be considered in terms of the cultural significance of the monument and the impact that the proposals would have upon this cultural significance. The more important particular features of the monument are to its cultural significance, the greater will be the case against interventions which modify these features.

3.19. Extensive intervention will only be allowed where it is clearly necessary to secure the longer-term preservation of the monument, or where it will clearly generate public benefits of national importance which outweigh the impact on the national cultural significance of the monument. Such public benefits could come from, for example, interventions which make public access to scheduled monuments easier, or assist public understanding, or will produce economic benefits once the works are completed.

3.20. Where change is proposed, it should be carefully considered, based on good authority, sensitively designed, properly planned and executed, and where appropriate in the context of an individual monument, reversible.

b) Assessment

The proposals are for the archaeological hand excavation of three trenches in the North and South camps at Burnswark. The trenches would affect a total of 49 m^2 of a monument that covers some 565 000 m^2 (less than 0.01%).

The trenches would sample relatively small parts of large features (the interiors of Roman camps and parts of their ramparts). The vast majority of archaeological deposits within the monument, and its component features, would remain intact. However, some of the archaeological deposits that comprise the monument would be disturbed and the artefacts associated with them removed.

The trenches are primarily designed to provide information on the assemblage of metalwork known to be preserved below the surface of the monument. This assemblage is of international significance and may be vulnerable to change. In particular, through corrosion but also illegal metal detecting.

A greater understanding of this assemblage, and its significance, may inform future management of the site and hence be beneficial. This accords with Historic Environment Scotland Policy Key Principles 1.10a and b, in that conservation of any part of Scotland's historic environment should be based on sound understanding and awareness of its cultural significance.

Further analysis of the metalwork, and the stratigraphy revealed by the trenches, has the potential to significantly enhance our understanding of the nature of the monument, which appears to be unique in Roman Europe. Establishing the nature of the monument is highlighted in the Roman panel report of Scottish Archaeological Research Framework (Section 4.1). In particular, it notes that renewed fieldwork may offer resolution to a long-running academic debate.

Previous seasons of work have stimulated much public interest demonstrated by its prominence in national and social media. A museum display has been created and this could be enhanced by the proposed work. The work would also assist in building a skills base among local volunteers that may benefit the wider historic environment.

The popular appeal of the project and the international importance of the research questions it may answer have been confirmed by representations from heritage groups and museums.

The proposed works have good potential to bring considerable benefits by improving appreciation and understanding of the historic environment and this scheduled monument in particular. These aims are consistent with the Policy Statement's Key Principles, Aim Two of Scotland's Archaeology Strategy and a Strategic Priority in the Historic Environment Strategy for Scotland (B-Understand).

The excavation of three trenches would disturb archaeological remains and remove artefacts. However, the extent of the trenches is the minimum required to adequately assess the metalwork assemblage and address the project's aims.

The monument is large in size and the vast majority of the archaeological deposits within it would be unaffected. On completion the trenches would be backfilled and the monument restored to its former condition. Hence, with the exception of the removal and recording of some archaeological deposits, the monument would be unaffected.

Taking into account the scale of the site and its component features the excavation of the trenches would not materially compromise the cultural significance of the monument. The monument's archaeological value should be better understood and otherwise materially unaffected by the proposed work. The works do not, therefore, conflict with Policy Statement paragraphs 3.16 and are justified under paragraph 3.18.

The Project Design has clearly set out the aims of, and a convincing justification for, the works (Policy Statement paragraph 3.17).

We have assessed the Project Design and WSI and conclude that the work would be undertaken to an appropriate standard by an experienced Project Team with sufficient resources. Therefore, the proposed work is consistent with the Policy Statement 3.20.

c) Other material considerations, including impact of the works on Protected Species and Places

The application site does not lie in a Site of Special Scientific Interest (SSSI), Special Area of Conservation (SAC) or Special Protection Area. National Biodiversity

Network GIS data sets indicate no evidence for Protected Species in the relevant 100m grid squares.

d) Conclusion

We consider the proposals to be works as defined in Section 2 of the Ancient Monuments and Archaeological Areas Act 1979 because they would alter a scheduled monument.

The works would involve the controlled removal and recording of archaeological deposits within three targeted trenches. The area affected would be proportionately very small (less than 0.1% of the monument) and the excavations are the minimum necessary to achieve the project's objective.

The proposed work would leave the vast majority of the site's archaeological deposits intact and would not materially detract from the monument's national significance.

The work should result in considerable benefits to the public's understanding of the historic environment. The project is designed to address aims of ScARF.

The nature of the metalwork assemblage associated with the monument is uncertain and it is vulnerable to change. An improved understanding of it may help inform the monument's long term conservation.

It is concluded that the works would not compromise the long term preservation of the site (Policy Statement 3.14). Although the works are to some extent destructive this has been minimised. The overall significance of the site would not be materially diminished and the results may inform its future conservation, hence they are consistent with paragraph 3.16.

The work has been fully justified (paragraph 3.17) and because the monument's cultural significance would not be materially diminished the proposal is consistent with the Policy Statement paragraph 3.18.

The excavation would be undertaken in accordance with a WSI which we have assessed as adequate. Therefore we conclude the work has been properly planned and is likely to be executed appropriately (paragraph 3.20). Consequently, no conditions are considered necessary.

The benefits the proposed work would bring are considered to be much greater than the minimal negative effects of the removal of some archaeological deposits. The proposal is concluded to be consistent with relevant policy.

6. Recommended decision

The works proposed are considered acceptable in meeting the terms of national policy for scheduled monuments, and also accounting for other material considerations.

7. Conditions

Granted without conditions.

8. Approval

Officer	**Simon Stronach**	**Date**	**18/07/2016**
Approved by	**John Raven**	**Date**	**19/07/2016**

Annex A – list of supporting documents

- Bullets, Ballistas and Burnswark: Research Design 2016
- The Burnswark Project: Archaeological Investigations 2016 Written Scheme of Investigation Revised 13 July 2016.
- Representations from: National Museums Scotland, Dumfries and Galloway Council Museums Service, Dumfrieshire and Galloway Natural History and Antiquarian Society, The Trimontium Trust