1.0 INTRODUCTION

An excavation licence is sought for limited excavations at a previously disturbed section of the Black Pig's Dyke linear earthwork at Lattone, Co. Leitrim (RMP LE005-014). The excavation is being undertaken as part of Phase 2 of the Black Pig's Dyke Regional Project, an interdisciplinary research project funded by Monaghan, Leitrim, Longford, Cavan and Roscommon county councils' heritage offices. Phase 1 of the project was completed in 2014 and involved detailed remapping of the linear earthworks which had traditionally been associated with the Black Pig's Dyke and a review of the historic and modern literary sources. The full report on Phase 1 of the project was published online¹ and it has also been the subject of an Archaeology Ireland Heritage Guide (enclosed) (Ó Drisceoil 2015). Phase 1 identified the absence of a coherent chronology for the linear earthworks of the Black Pig's Dyke as a key research gap. Phase 2 of the Black Pig's Dyke Regional Project is the provision of a new chronology for the linear earthworks of the Black Pig's Dyke. In pursuit of this the project is redating charcoal using AMS radiocarbon dating from the seminal 1982 excavations by Aidan Walsh at Aghareagh West, Co. Monaghan and Aghnaskew, Co. Monaghan. A shortlist of charcoal samples has been drawn up following an archaeobotanical assessment by Dr Susan Lyons and a final set of samples will be submitted for dating shortly, following receipt of licences to alter and export from the National Museum of Ireland. The project is also proposing to undertake limited archaeological excavations to recover samples for Optically Stimulated Luminescence (OSL) dating. OSL dating has been successfully used to date the construction of linear earthworks in the UK, such as the Wat's Dyke and the Scots Dyke.

Following a desk study eight potential excavation sites were investigated along the Leitrim (BPD-002), Longford (Dunclá) (BPD-005) and Cavan (Ardkil More) (BPD-006) sections of the Black Pig's Dyke. The Monaghan ( Scothouse) (BPD-007) section will be

¹ http://www.roscommoncoco.ie/en/Services/Heritage/The-Black-Pig%E2%80%99s-Dyke-Regional-Project/
assessed separately in October 2016 and may also be the subject of a future licence application. Previous cuttings through the earthworks such as laneways, tracks and field ditches were targeted for assessment as they could provide ready-made exposed sections. Of the eight sites visited two, Lattone, Co. Leitrim and Tromra, Co. Longford, had the good level of preservation and potential to expose substantial sections through the banks that would enable OSL dating to take place. This licence application concerns a proposed excavation at a section of the Black Pig’s Dyke, Lattone, County Leitrim.

2.0 DESCRIPTION OF SITE

The Leitrim section of the Black Pig’s Dyke is located to the east of Dough mountain in the County River valley. Its height above sea level varies from 50m-90m. The stretch begins 1km south of Lough Melvin and extends intermittently in a general northwest to southeast direction towards Lough Macnean Upper, a distance of 10.36km. It is divided into six separate RMPs: RMP LE005-005, LE005-009, LE005-014, LE008-009, LE008-012, LE009-001.

The total length of the earthworks as depicted on the second edition OS map is 3.63km and many of the gaps in the monument correspond to areas of marshy wetland. The linear ditch travels over undulating ground which primarily consists of sandstone tills. No archaeological excavations have been conducted along this section. A kilometre to the west of the dyke at Raheelin, Co. Leitrim a hoard of Bronze Age flint flakes were found in 1930 (RMP LE 008-026). The earthworks do not appear on the first edition Ordnance Survey map (1835-36) but are marked on the second edition map (1882-87) where it is shown as six separate stretches represented as a single-bank earthwork by hachures and called ‘Worm Ditch or the Black Pig’s Race’. Occasionally, dotted lines are used to represent the conjectural extent of the monument. The course of the monument is mostly unchanged between the second edition and the 25” maps (1909). Kane included this section as being part of his 'No. 1 Frontier' and he refers to it being broken up into several sections, claiming that local farmers had levelled the earthwork in the past. Kane also records that it was termed ‘Bohereen-Wan’ and the ‘Great Man's Track’. Davies also includes reference to this section and records it as running in a gentle sweep from the townland of Grubmanus Bog to Lough Macnean Upper, from bog to bog. He describes it as being about c.2.5m wide and having rock cut ditches in places.
The stretch of linear earthwork where excavation is proposed is described thus in the Archaeological Inventory of County Leitrim:

-LE005-014

This section is located in an undulating landscape. The earthwork (length c. 2km) is oriented north-south and is generally overgrown with scrub but is sometimes grass-covered and in places runs through coniferous forest. It consists of a flat-bottomed fosse (width 3m; depth 0.6m), while at some points it has naturally lower ground to east (width of top 6.5m; width of base 1.5m; depth 1-1.6m), sometimes with a field bank on the outer edge of the fosse. The north end terminates at a flat-bottomed valley but it continues c. 300m beyond that (LE005-009-), while the earthwork also continues c. 600m to south (LE008-009--).

1.22km of this section at its northern end is under heavy forestry. The line of the monument can however be made out on the Bing 2012 aerial photography in the planting pattern of the forestry and it then emerges from the forestry to form part of field boundaries for its remaining extent (935m).

The proposed excavation site is located 110m northeast of a local public road R281, 2km north of Kiltyclougher and 1km east of the Lattone river. The field containing the potential site is well drained and relatively clear of brambles and gorse. The site is shown as a single banked section of the Black Pig's Dyke on the historic maps and a double bank is still evident on the ground and has been cut through by a former laneway that is marked on the first edition OS map and is now used as a drain/ditch. There is some tree growth on the sides of the lane but there are clear sections of what appear to be the linear earthwork banks evident under moss and undergrowth. The bank is cut to a depth of 1.4m. 1m of this is bank material. The exposed section showed the bank material is mid brown and sandy in composition (and therefore probably suitable for OSL dating) and sits over glacial till.

3.0 EXCAVATION METHODOLOGY

A single 15m x 2m excavation cutting is proposed. The cutting will follow the line of the existing laneway, which truncates across the earthwork at a right angle. The south facing section through the linear earthwork will be cleared of growth (manually) and work will concentrate on exposing the bank deposit(s). This will probably require cutting back
(manually) into the south facing section by around 0.5m, to expose a clean section. Once a section through the earthwork has been exposed it will be recorded using standard procedures (see below) and also by photogrammetry.

OSL tubes (200mm diameter) will be inserted into the section by Dr Jean Luc Schwenninger (Oxford University Research Laboratory for Art History and Archaeology) to obtain sediments for dating. The tubes and sediments will be brought to Oxford (subject to licences to export and alter from the National Museum of Ireland) and osl measurements will be made on quartz mineral grains extracted from the sediment and osl measurements made using a single aliquot regenerative dose (SAR) measurement protocol. Typically OSL dates for the Iron Age provide accuracy in the region of +/- 100 years.

GENERAL EXCAVATION METHODOLOGY

Recovery levels

All excavations will be undertaken manually using recovery methods appropriate to the contexts being excavated.

Records

All archaeological contexts will be recorded on record sheets and registers; features will be illustrated in plan and section at appropriate scales; photographs will be taken of general areas, features, artefacts and work in progress. All data will be transferred to an integrated excavation database. The archaeological archive will consist of the following:

- Directors note books
- Pro forma record sheets for features
- Pro forma record sheets for test trenches
- Pre printed registers for artefacts, samples, drawings, photographs, and levels
- Drawings on polyester drawing film (permatrace)
Artifacts/Finds Retrieval

Archaeological artefacts will be retrieved and their positions relative to the excavation stratigraphy recorded by context. All unstratified finds will be retained. On-site facilities will conform to professional standards as detailed in the Guidelines issued by the Irish Professional Conservators and Restorers Association. The position of finds of particular and special interest will be recorded in three dimensions. A metal detector (suitably licenced) will be available for use if required and to scan all of the spoil generated. Where necessary, the consultant conservator will advise on artefact conservation on site. Finds will be individually bagged (by type as appropriate) and catalogued using the National Museum of Ireland’s recommended database. All finds will be stored in secure storage in the site office and at Kilkenny Archaeology, 12 Parliament street, Kilkenny, during post-excavation works. Following post-excavation works all finds will be forwarded to the National Museum of Ireland as per the museum’s advice notes.

Samples

Where appropriate animal bone, soil and wood samples will be retained from clearly stratified contexts of archaeological significance. An inventory of samples will be prepared detailing the feature, volume, type, process option and purpose of the sample. Samples will be suitably packaged, bagged and numbered on site and processed, with a view to more fully assessing the archaeological potential and significance of features.

Survey

Archaeological feature locations will be surveyed by total station to the a site grid. The site grid will be established to the National Grid and tied into a total station survey of the existing field systems/roadway.

Post-exavation assessment

Following the completion of excavations a post-exavation assessment will be undertaken with a view to quantifying the excavation archive and producing a costed programme to bring the project to final report/publication stage.
Reporting

A preliminary report on the excavation will be lodged with the National Monuments Service and the National Museum of Ireland within four weeks of the completion of the excavation. A detailed report on the excavation will be lodged within six months of completion with the Department of Arts, Heritage and the Gaeltacht and the National Museum of Ireland. This report will be to publication standard and will include a full account, suitably illustrated, of all archaeological features, finds and stratigraphy along with a discussion and specialist reports. A concise report to a satisfactory standard will be included in the Excavation Bulletin for the year in which the licence is valid. The results of the excavation will be published in a format agreed with the project archaeologist and National Monuments Service.

4.0 STAFFING

Staff will comprise the site director and a highly experienced supervisor and surveyor and archaeological assistant.

Specialist list

Susannah Kelly, Artfact conservation
Linda Lynch, Human osteologist
Cara O Doherty, Post medieval pottery
Niamh Curtin, Medieval pottery
Joanna Wren, Clay building materials
Susan Hamilton-Dyer, Animal bone
Nikolah Gilligan, Palaeoenvironmental
Belfast C14 lab, Radiocarbon dating
Dr Jean Luc Schwenninger, OSL dating

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BARRY FITZGIBBON MA
15th October 2015
Figure 1: Site location on aerial photograph
Figure 2: Site location on OS 6-inch map and proposed location of archaeological cutting
Figure 3: Site location on aerial photograph and proposed location of archaeological cutting
Figure 4: Site location on first edition OS 6-inch map
Figure 5: Section through the linear earthwork at Lattone, Co. Leitrim, as recorded by Shane Leslie c. 1950 (NLI MS23 385)
Figure 6: Proposed excavation area from south. Traces of the bank upcast are visible in the section at the ranging rod.

Figure 7: Double bank and ditch running up to the proposed excavation site at right of picture.