

**M3 Clonee-North of Kells Motorway Scheme
Lismullin National Monument (A042 & E3074)**

Director's Excavation Progress Report 2

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Summary

Excavation in Quadrant A is proceeding. A total of sixty-six outer enclosure postholes have been recorded, sampled and excavated in this quadrant. Prior to excavation the NE length of the outer enclosure had been identified as a key area to potentially answer questions about the chronological and spatial relationship between one of the three main elements of the enclosure – the outer ring – and a dispersed range of other features, of which there are a cluster in this area, including a pit with middle Bronze Age pottery. In summary it is not possible to stratigraphically relate these features to the post enclosure. Their size, shape and fills are broadly similar to the range of size, shape and fills of the enclosure postholes, however these are not distinctive enough for this to be meaningful. One of these features however has produced sherds of later Bronze Age pottery. The current evidence of a number of apparently dispersed features producing Bronze Age pottery of different periods, and the early Iron Age C14 dates from a selection of enclosure postholes indicates that these features represent earlier activity and are not directly related to the enclosure. On this basis the apparent complexity of the enclosure in this area may simply be an illusion created by the earlier phase or phases of activity.

The results of the topographic survey are presented.

Introduction

Site works commenced on 7 August 2007, following approval to commence from the Minister's Advisory Committee on 2 August.

As per standard procedure all works on site are recorded by reference to a grid which divides the site into 10m² areas. In addition the site has been divided into four separate areas or quadrants: Quadrant A at NE, Quadrant B at SE, Quadrant C at NW and Quadrant D at SW (Fig 1¹).

The initial site clean-back and supplementary pre-excavation plan was carried out from 7–13 August in Quadrant A. Following additional geophysical survey and soil sampling for geoarchaeological study, as described below, excavation of the planned features in Quadrant A commenced on 15 August. Excavation is proceeding in Quadrant A.

The excavation is being carried out by twenty-eight archaeologists divided into four teams, each led by a senior supervisor. Supervisory staff attend weekly site meetings to review the ongoing works.

Topographic Survey

Prior to excavation an aerial topographic survey was carried out by BKS. The results are now available onto which the motorway landtake has been superimposed along with the preliminary excavation plan of the enclosure, the souterrain and the ringditch, and the new ringditch identified by geophysical survey outside the landtake to the SW of the enclosure. They are here presented as digital terrain maps from a number of views (Figs 2-4).

Geophysical Survey

A magnetic susceptibility survey of Quadrant A was undertaken by Earthsound on 13 August. This detected a number of discreet zones which appear to relate to natural geology. At the northeastern corner the high readings appear to relate to an area of underlying boulder clay, at the northwestern corner and along the eastern side of Quadrant A the low readings refer to underlying

¹ Figure 1 Site grid and quadrant layout with preliminary pre-excavation plan of site and supplementary pre-excavation plan of Quadrant A, ACS Ltd. Please note the site grid was lifted and replaced to facilitate the geophysical magnetometer survey and this has resulted in the slight offset effect of the initial pre-excavation plan (blue) and the recent supplementary pre-excavation plan (black). This will be rectified at a later stage.

gravels and sand respectively. At the southwestern corner, the high reading may be due to the presence of the palaeosoil that is located around the inner enclosure. This soil has been left *in situ* to be excavated and recorded as part of the 'key area' identified around the inner enclosure.

Geoarchaeological sampling

Geochemical sampling

On completion of the clean-back and geophysical survey in Quadrant A and in advance of the commencement of excavation, geoarchaeological samples of approximately 200g (1 small bag) were collected from the subsoil at 5m grid intervals, on 14-15 August. Approximately 100 samples were collected from Quadrant A. The grid samples are registered in a separate geoarchaeological sample register and are being retained on site for future assessment and analysis.

Dr Steven Lancaster (Headland Archaeology Ltd) visited the site on 21 August to review the sampling methodology. A supervisor has been assigned to specifically coordinate sampling on site in accordance with the methodology agreed with Dr Lancaster, to ensure consistency of approach. In addition to grid samples, small sub-samples of all excavated archaeological deposits are being retained for geo-chemical analysis. The sampling strategy was reviewed to ensure that sufficient and appropriate samples were being retained for each requirement.

During this visit the excavated features in Quadrant A were examined. This included a box section excavated through two enclosure postholes, described below. This section had revealed a thin deposit layer between the postholes which was interpreted as a thin layer of palaeosoil and subsoil which had survived in a natural hollow. It was proposed that this palaeosoil would be sampled using a kubiena tin.

Additionally, a proportion of half-sectioned enclosure postholes were examined in order to establish their formation process. It was proposed that post-hole F3323 would be box-sectioned and sampled using a kubiena tin to include subsoil, primary and secondary posthole fills for geo-chemical analysis.

The potential buried soil within the interior is located around the inner enclosure and has not been cleaned back yet although a small portion of it extends into the quadrant currently under excavation. This soil will be sampled at a smaller grid interval of 2m. Some additional localized patches or areas of darker soil were noted in Quadrant A and it was agreed on site that these would be planned and sampled for geo-chemical analysis.

Palaeoenvironmental sampling

In accordance with the method statement, a sample of all deposits and 100% of the fill material from each cut feature in Quadrant A is being retained for dating and palaeoenvironmental purposes. These samples will be processed through a flotation tank and sieves to extract suitable material for analysis.

Due to the large quantity of material being generated as a result of this extensive sampling exercise, a supervisor has been appointed, in addition to two assistants, to supervise the archiving of samples and finds.

Excavation

Excavation is being carried out in Quadrant A. Part of this quadrant corresponds with ‘the northwestern segment of the outer enclosure’ which was identified as one of three key excavation areas in the Supplemental Method Statement for Lismullin National Monument (02 August 2007).

In the northwestern segment key area, the pattern of postholes is more complex and there are a number of additional features clustered around the outer enclosure. Excavation of these features including nine pits, five stakeholes and three postholes is proceeding. No stratigraphic relationship has been recorded between the enclosure and these features. Their size, shape and fills are broadly similar to the range of size, shape and fills of the enclosure postholes, however these are not distinctive enough for this to be meaningful. One of these features however, in Grid 12, has produced sherds of what has been preliminarily identified as later Bronze Age coarse ware pottery (Eoin Grogan pers comm.).

One of the additional features identified in this key area included a pit from the surface of which numerous sherds of what has been identified as middle Bronze Age domestic cordoned urn

pottery (Eoin Grogan pers comm.) have been collected. Preliminary investigations indicated that this pit did not appear to be stratigraphically related to the outer enclosure. Considering the early Iron Age C14 date received for the stakeholes, it was considered important to verify this and attempt to establish the relationship between this pit and the site as a whole. Excavation of the pit has been completed and has confirmed that it is not possible to stratigraphically relate the pit to the post enclosure. The excavated feature is an extremely shallow depression from the fill of which further sherds of identical pottery have been recovered. It would appear that this feature had been heavily truncated.

A range of dispersed small features including pits, postholes, stakeholes and a hearth have been recorded inside the enclosure. No distinct spatial patterns have been identified. Three small shallow pit features in Grid 3 have produced sherds of what has been preliminarily identified as later Bronze Age pottery (Eoin Grogan pers comm.)

To date none of the enclosure postholes have produced any artefacts. The current evidence of a number of apparently dispersed features producing bronze age pottery of different periods, and the early iron age C14 dates from a selection of enclosure postholes appears to indicate that these dispersed features represent earlier activity and are not directly related to the enclosure.

Enclosure Postholes

Excavation of the enclosure postholes is ongoing in Grid 4, 8, 9, 11, 12 and 13. A total of sixty-six enclosure postholes have been recorded, sampled and fully excavated in these areas. The postholes have dimensions ranging between 15-23cm in diameter and between 15-23cm in depth. The postholes are generally arranged at 0.4-1m intervals and the enclosing rings 1.5-2.5m apart with apparent localized variations in their spacing.

Preliminary examination of the half sectioned postholes on site by Dr Steven Lancaster, as described above, concurs with the excavator's interpretation that the posts were most likely driven into the ground (rather than being placed into a prepared posthole) and that the clay fill surrounding the postpipe has resulted from half driven posts being manually moved to gain more purchase in the ground before being driven further. As described above, a thin section sample from a specific posthole has been proposed in order to investigate this theory further.

A thin clay layer c. 2cm deep was recorded in the box section, between the two postholes. Three possible interpretations were initially considered for this deposit:

- That it is the remains of an earthen bank, revetted by the two concentric outer rings of posts – this might imply that there was a timber facing between the posts.
- That it is a trampled ground surface - this might imply that the outer concentric rings delineated a processional routeway.
- That it is a localized concentration of buried topsoil/palaeosoil similar to the layer recorded around the inner enclosure.

However, preliminary examination of this deposit on site by Dr Steven Lancaster, as detailed above, suggests that it is unlikely to be a trampled surface or bank material. A thin section sample of both this deposit and the underlying subsoil is to be taken for further analysis. An additional box section has been excavated through two postholes in Grid 12 in order to test if the palaeosoil recorded in Grid 11 extends through this area. No evidence of a similar deposit has been identified.

Linear Ditch (F3611)

Excavation of the east-west aligned ditch is now almost completed in Quadrant A. The ditch is cut by a figure-of-eight cereal drying kiln outside the enclosure on the basis of which a date range of late Iron Age to early medieval is currently suggested. Within Quadrant A it is 33m long by 0.95m wide by 0.4m deep and contains between 2 and 4 fills. The basal fills appear to have silted up over time indicating that this feature may have functioned as a drain. A ditch terminal has been identified adjacent to the eastern boundary of Quadrant A in Grid 11 representing a short break or causeway. A corresponding terminal is visible in Quadrant B where the ditch continues its course. The intersection between this ditch and a north-south aligned linear feature (F2724) in Grid 2 are being investigated. Quarter sections have been excavated at the point of intersection between these features however the stratigraphic relationship has not yet been confirmed due to the similarity of the fills. The quarter sections have been left open to the elements in an attempt to improve their visibility.

Site Conditions

In general, conditions on site have been good since works recommenced. The sandbag cordon has assisted in keeping excessive silt from accumulating on the enclosure during heavy rainfall and this has been monitored and supplemented where necessary. A water bowser and hoses have also been provided on site and have been used to maintain optimum moisture levels in dry sunny conditions.



