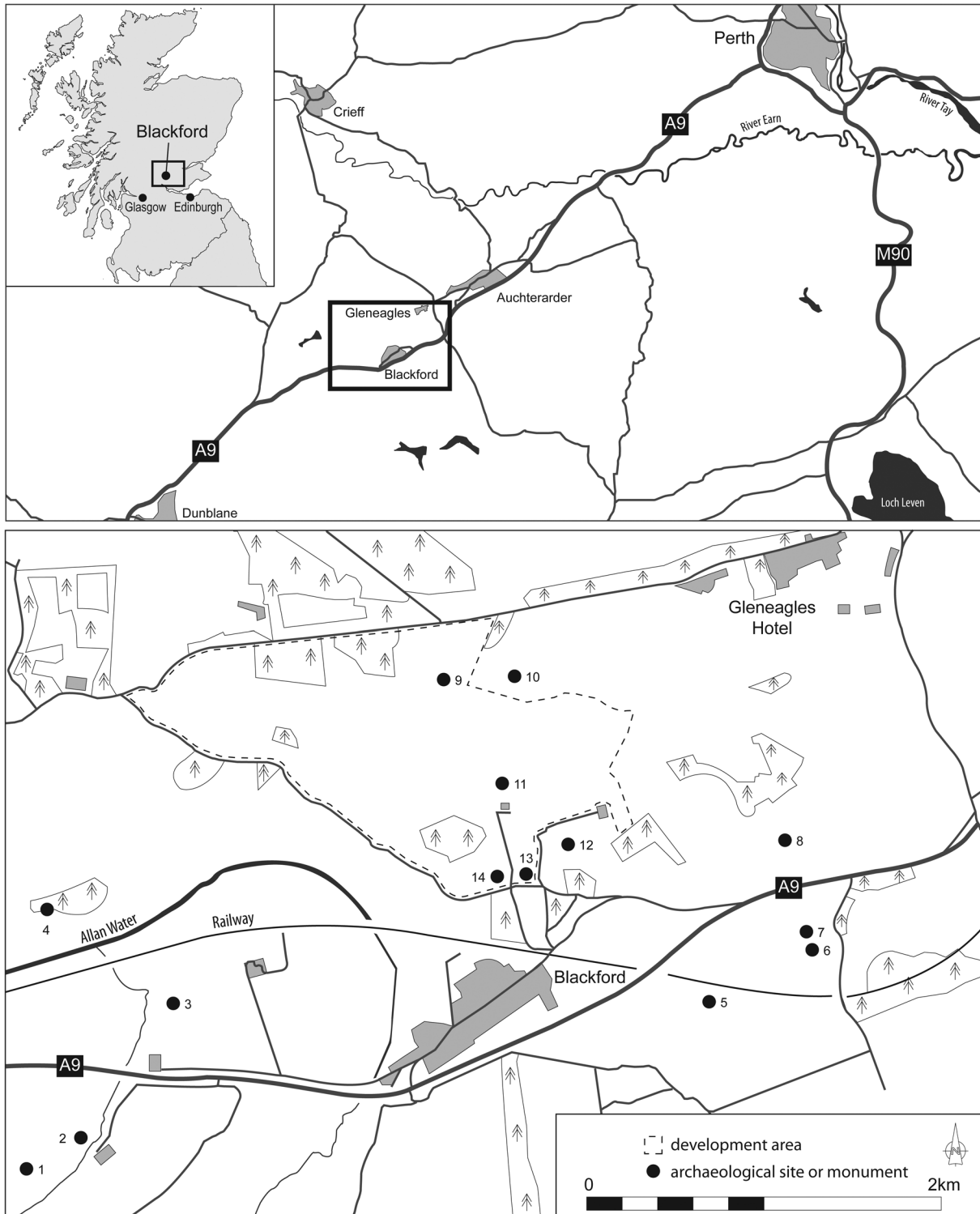


2. INTRODUCTION



Illus 1 Location plan

2.1 Project background and circumstances of discovery

Archaeological investigations in an area of land to the north of the village of Blackford (Illus 1) were required by Perth and Kinross Council – advised by Perth and Kinross Heritage Trust (PKHT) – to mitigate the effects on cultural heritage features anticipated to arise from the construction of a golf course by Ochil Developments (UK) Ltd. Within the development area were four previously recorded find-spots (see below Section 2.4, nos 9, 11, 13 and 14).

The initial archaeological response in 2006 was a programme of evaluation by trial trenching amounting to 5% of the two areas identified by PKHT as archaeologically sensitive. Mechanical earth-moving machines equipped with smooth-bladed ditching buckets excavated 225 trenches, amounting to 10,532m² (Illus 2, Phase 1). The evaluation covering these areas discovered two areas of prehistoric activity identified as a series of pits and probable post holes: Areas E and F (Illus 2; Curtis & McKinney 2006). In 2007, as a response to these discoveries, PKHT requested that an archaeological watching brief be undertaken on two areas where the development of the golf course required ground-breaking works. Area X was examined as a response to the archaeological features discovered during the evaluation (Curtis & McKinney 2006) and Area Y was stripped because of the proximity of the development to the Scheduled Monuments (SM Nos 7584 and 7585), which are visible as cropmarks indicative of prehistoric forts or enclosures (O’Connell & Gray 2008a). The results are presented in Section 3. A further archaeological evaluation by trial trenching was then required by PKHT, covering 5% of the remaining development area and amounting to c 41,107m² across 380 trenches (O’Connell & Gray 2008b; Illus 2, Phase 2). Six more areas with concentrations of prehistoric features were discovered. These areas, as well as those identified in the initial evaluation of 2006, were subject to subsequent archaeological excavations during 2008. PKHT requirements, the excavation methodology, results and conclusions are set out in the series of Data Structure Reports (O’Connell 2008; O’Connell & Gray 2008c–h).

Table 1 Concordance of designations of excavation areas

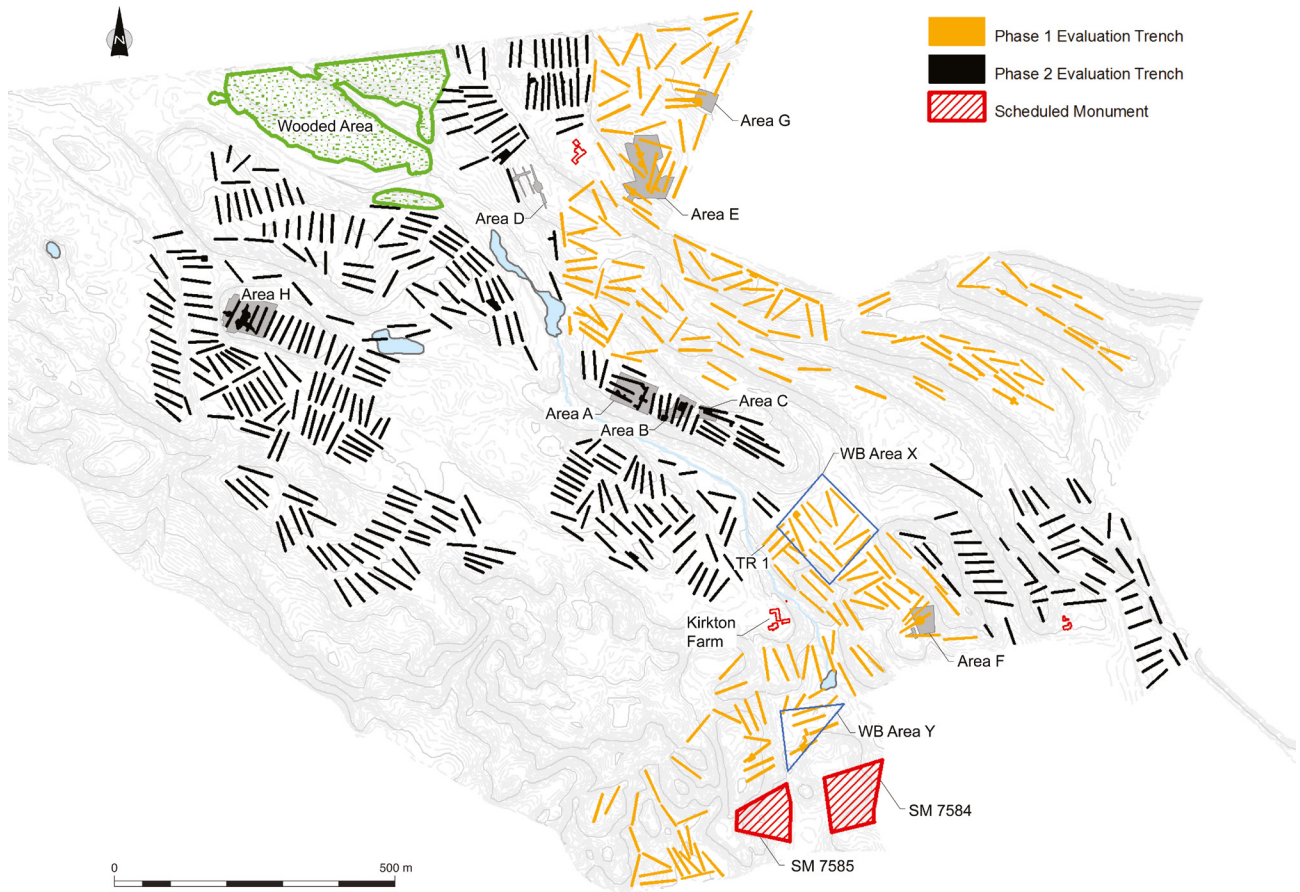
DSR designation	Area name (this report and in archive)
Watching Brief Area X	X
Watching Brief Area Y	Y
Golf Area P (Palisade)	A
Golf Area P (Houses)	B
Golf Area P (Houses)	C
Westmore House	D
Westmore House B	E
Brookfield House	F
Westmore House A	G
Golf Area H	H

The unpublished reports named these excavation areas according to the overall golf development plan. For ease of reporting and archiving, the area names used during the fieldwork have been retained here and a table of concordance is provided (Table 1).

The final stage of the archaeological programme of works was a walkover survey in a wooded area on the northern boundary of the development area (Kirby 2007), where the remains of field banks and stone cairns were discovered. The subsequent evaluation of the cairns concluded that they were likely to be field clearance cairns (Hill 2008). These features remain undated and are not considered further here, although it is of course possible that the cairns could be related to the excavated prehistoric settlements.

2.2 Layout of this report

This report presents the results of the project by area and in the chronological order established through radiocarbon dating, with the exception of Evaluation Trench 1 and watching brief areas X and Y, where these have been presented sequentially due to the nature of the investigations. Each area was excavated as an isolated unit during the excavation period in order to fit in with constraints arising from the commercial development of the site, which ran in conjunction with the excavations. Although



Illus 2 Limits of the excavated area showing evaluation and excavation trench locations

they are described individually, some of the areas produced radiocarbon dates that overlapped with other areas, suggesting a degree of contemporaneity between areas. Specialist reports are included in the relevant area descriptions, but only provide basic information in these sections. The discussion brings together a number of themes to provide an overview of the entire site.

2.3 Topography, geology and location

The landscape in which the excavation was situated is characterised by undulating small foothills separated by dry valleys and streams (Illus 2). The area was open, with little tree or shrub cover. The Soil Survey of Scotland describes the soil components as characterised by brown forest soils with gleying and some humus-iron podzols, and the vegetation cover as arable and permanent pastures, acid bent fescue grassland with oak and birchwood (Soil Survey of Scotland 1982). With the exception of Areas D and Y, the areas of prehistoric activity were all centred on

top of natural knolls, providing all-round visibility, and were intervisible.

2.4 Archaeological background

There had been no archaeological work within the development area until these recent investigations. However, consultation of the Royal Commission on the Ancient and Historic Monuments of Scotland (RCAHMS) Database and PKHT’s Historic Environment Record (HER) databases identified 14 records of archaeological significance or interest including artefacts and cropmarks, recorded either as prehistoric or undated, within the area and within a c 2km radius (Illus 1). These are as follows (references in brackets are RCAHMS record numbers):

1. A Middle Bronze Age dirk of Trump’s Group 1 type (Trump 1962) added to the National Collection in 1860 (NN80NE 1).
2. A prehistoric cropmark settlement enclosed by a sub-circular enclosure with a diameter of 70m (NN80NE 10).

3. A find spot of a bronze spearhead with rivet holes, acquired by the National Museum in 1902 (NN80NE 2).
4. A cropmark enclosure (NN80NE 5).
5. A flint arrowhead, a flint knife and a scraper, found on the farm of Drumfad and donated to the National Museum in 1883 (NN90NW 4).
6. A bronze flanged axe of Coles' (1963) Class III Auchterhouse type (Middle Bronze Age) found at Drumfad (NN90NW 5).
7. Simply described as a cropmark (NN90NW 28).
8. A Bronze Age cinerary urn with only the rim and collar surviving, found in 1861 (NN90NW 14), and in 1966 a large shallow stone mortar found near the find spot during ploughing.
9. A water-worn sandstone block with pecked hollow on each face, found in 1890 at West Muir (NN81SE 6).
10. At least 21 former cairns, removed from a two-acre area within the farm of Westmuir of Drumford. A cist was found under the largest cairn. The earth around the cist purportedly showed traces of fire (NN81SE 4).
11. A small cinerary urn containing some 'black stuff', found *c* 1863 to the east of the development site (NN81SE 3).
12. A stone circle was purported to have once stood in this field, although there is no trace of this feature now (NN90NW 7).
13. Cecilmont Fort, visible as a cropmark. It comprises a D-shaped fort with two ditches and a narrow palisade trench running between them. The inner ditch is 2m wide and the outer ditch is 4m wide (NN80NE 8, Scheduled Monument 7584).
14. Another site, also designated Cecilmont Fort, visible as a cropmark and comprising a triangular multivallate enclosure with ditches 1.5m wide and 4m apart, enclosing an area of 75m by 70m (NN80NE 15, Scheduled Monument 7585).

2.5 Methodology

The detailed archaeological methodologies are set out in the Data Structure Reports (O'Connell 2008; O'Connell & Gray 2008 c–h). After the overburden was stripped using a mechanical excavator, the subsequent excavation of archaeological features was carried out by hand. All features were at least 50% excavated, or 100% if they contained artefacts, as were deposits of special interest, or where an understanding of the feature required more excavation. Two methods of palaeoenvironmental sampling were employed: bulk soil samples of contexts were collected for wet-sieving and flotation to retrieve material for radiocarbon dating, and Kubiena tins of selected contexts were taken for soil micromorphology studies. Recording was undertaken principally through written records, drawings and photography.

2.6 Chronology and radiocarbon strategy

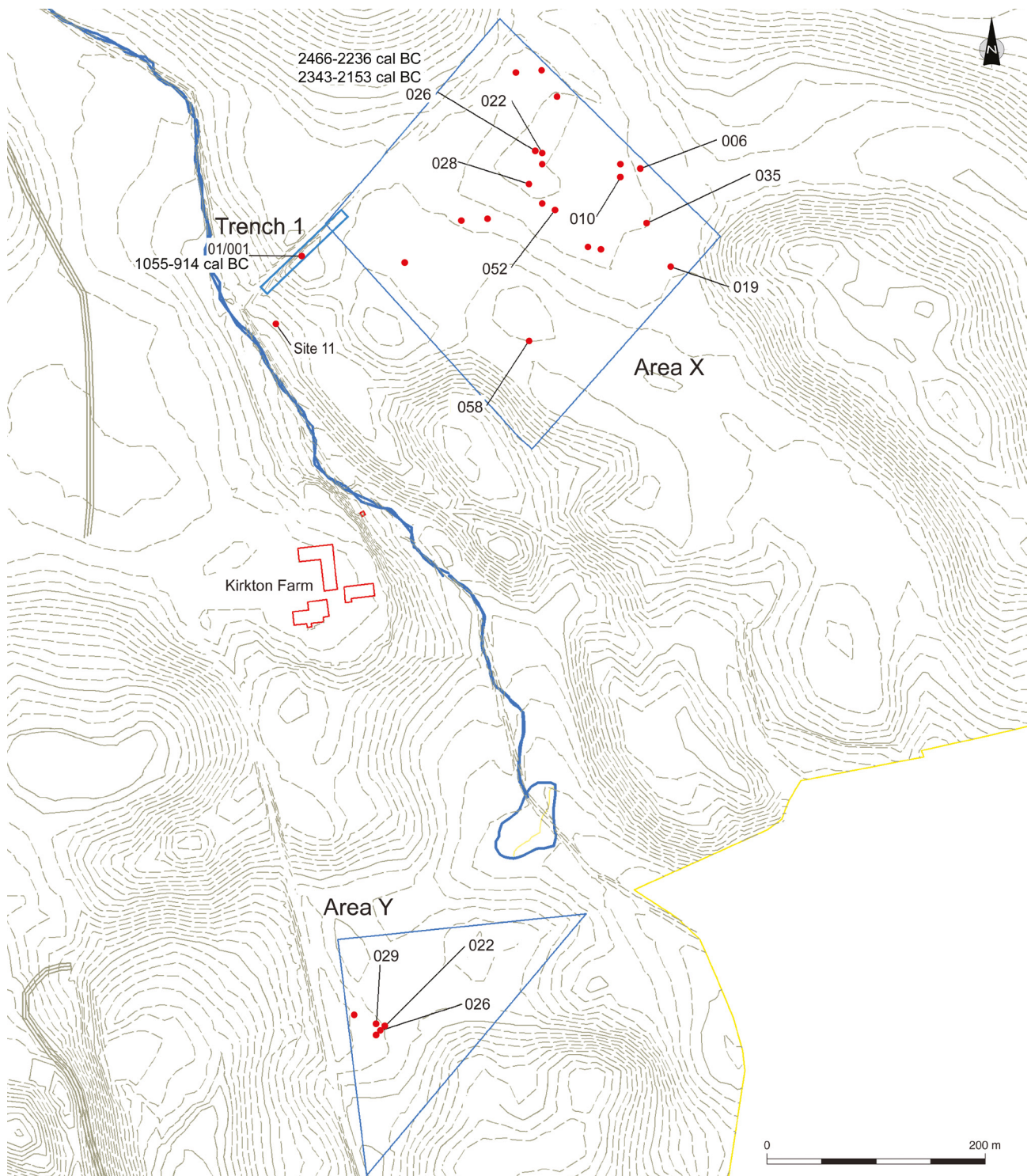
Radiocarbon dates were obtained from organic samples of burnt bone (human and animal), carbonised cereal grains and wood charcoal. This material was either collected in the field during the excavation of features, or retrieved from bulk samples collected in the field but processed later in the laboratory. Bulk soil samples of the fills of features were routinely taken to provide maximum coverage and increase the potential retrieval of dateable material. Preference for dating was given to short-lived single entity samples, according to the principles set out by Ashmore (1999).

Radiocarbon dates were assayed by the ¹⁴C Chrono Centre at Queen's University Belfast. Full details of the procedures, including sample pre-treatment and quality control, is provided in Reimer et al 2015. Calibration of radiocarbon dates was conducted using OxCal v4.1.7, using the IntCal09 calibration curve: $\delta^{13}\text{C}$ values were measured by accelerator mass spectrometry. The majority of dates derive from material selected from the bulk samples during the post-excavation phase of the work. In order to lessen the effects of possible contamination, bulk samples were taken from the bases of the lowest deposits within features, but the majority of features were shallow, heavily truncated, and contained single fill deposits. Priority was given

to material from the structural components of the houses, such as post holes or ring ditches in the absence of actual posts, in an attempt to date the construction and/or final use of these structures. An even spread of samples for dating was sought across each of the excavated areas, in order to give a broad-brush chronological overview of the site. To

tie the relative artefact chronology to the absolute radiocarbon chronology, dateable material was also sought in conjunction with artefacts.

The majority of radiocarbon dates were returned from charred cereal grains. Both domesticated taxa of barley and wheat were represented in the sample. The dates returned from these grains reflect their



Illus 3 Areas X and Y site plan

time of death, either at harvest or shortly after, and as these plants are annuals with a short lifespan, the dates they return also reflect a narrow time range from sowing to harvesting.

The dates from the cremated human bone reflect the time of death of those individuals but not necessarily the burial or disposal of the bodies. The human bone samples from Blackford were small and fragmentary, making it difficult to establish whether the samples derived from one or more individuals, or whether they were redeposited or simply heavily truncated. Therefore the dates can only be indicative of the occupation of the site as a whole.

It must be acknowledged that there are reliability issues associated with radiocarbon assays from pits

and post holes being used to infer calendar dates or periods of time for the construction or occupation of the whole structure or other suites of features, as posts could have been replaced throughout the life of the structure and dated entities lying within the fills of cut features could derive from an earlier period, becoming incorporated within the fill through a variety of taphonomic processes. Attempts were made to date samples from structural elements of the buildings but the lack of recovered suitable material meant that this was not always possible.

A relative chronology was established through the typological assessment of the artefacts, and by a comparative study of the architecture of the Blackford roundhouses.