

Archaeological excavation of a rock-cut pit containing charcoal and antler fragments at Fairfield, Co. Galway, on the route of the N6 Loughrea Bypass

Licence No. 04E1532



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1. Summary

During a programme of archaeological centre-line testing (03E0505) in advance of the construction of the proposed N6 Loughrea Bypass, a small sub-oval or irregular cut was noted. The feature lay approximately 1.4 km east-north-east of Loughrea town adjacent to the existing N6 road in a landscape of level or very slightly undulating pasture fields. The pit was partly excavated at that time to ascertain that it was indeed an archaeological feature, a specific licence was then sought to fully excavate the feature.

The pit measured 1.6 m (east to west) by 1.18 m and a maximum 0.87 m in depth and was cut into bedrock. The pit took the form of a very simple cut, sub-oval or irregular in plan, with a concave base. The cut extended some 0.15 m to 0.18 m into the sandstone bedrock. A very simple stratigraphy was evident within the pit, the primary fill being the most informative. This took the form of silty-clay containing a very large amount of charcoal, animal bone (some apparently butchered) and saw-cut antler. Fire damage to the sides of the pit and stone within the fill suggested it had been used for cooking. The bone and antler were generally unburnt, though a small amount of burnt bone was found in the primary fill. Subsequent fills took the form of light-yellow redeposited till containing frequent small stones and gravel; light-brown silty-clay containing decayed limestone; mid-brown silty-clay containing stone; and mid- to dark-brown silty clay containing gravel and occasional stones and charcoal flecks. There is no obvious evidence with which to date the feature but radiocarbon dating of bone or antler samples is proposed, pending appropriate licences from the National Museum of Ireland.

All but the primary fill of the pit were cut by the insertion of a cultivation furrow of probably post-medieval or early modern date. The furrow measured 1.21 m in maximum width, 0.18 m in depth and not less than 11 m in length. The cut was filled by light- to mid-brown silty-clay containing gravel, stone and a small amount of oyster shell. No ceramics or other diagnostic materials were noted within the fills.

A 10 m x 10 m area was stripped around the pit during initial testing in an attempt to locate any related features. This area was expanded to some 30 m x 30 m during full excavation. No associated features were evident.

2. Introduction

The author, on behalf of Galway County Council NRDO, for the National Roads Authority, undertook the excavation of the site at Fairfield, Loughrea, Co. Galway. Excavations took place over two (2)-day period on the 16th and 17th of December 2004. The following report describes the proposed road project, the existing environment at the site and the results of excavation.

2.1 Purpose of excavation

Archaeological excavation of the site was carried out in advance of the construction of the proposed N6 Loughrea Bypass. The proposed Bypass will extend around the north side of this historic market and cathedral town in east Galway. It will relieve traffic congestion on the existing N6 Galway to Dublin road, which currently passes through the town, and will thus enhance the environment and amenity of the town itself as well as being a very significant contribution to infrastructural development under the National Development Plan 2000-2006.

The brief of the archaeological work was to investigate an archaeological feature identified during the final phase of test-trench excavation for the proposed Bypass (access had been previously denied by the landowner). Test trenching was carried out by Jerry O'Sullivan (licence number 03E0505) at the end of September 2004 during which a small rock-cut pit was found. A geophysical survey had previously been undertaken by ArchaeoPhysica (Roseveare, A. and Roseveare, M. 2003); this indicated broad ridge cultivation traces in the field where the pit was subsequently discovered.

The pit itself could not be identified definitively on the geophysics plot, though a dark anomaly did appear in the vicinity of the cut.

2.2 Site location and existing environment

The site lies at NGR: 163856, 217155, approximately 1.4 km east-north-east of Loughrea town adjacent to the existing N6 road (Fig. 1, Fig. 2).

The general landscape of the excavation site consists of level or very slightly undulating pasture fields within low drystone dykes. There is a modern farmstead immediately adjacent to the field where the pit was found on the east side and, elsewhere, some residential housing and light industrial development along the adjacent main road.

Several recorded monuments lie in adjacent townlands within 1 km of the site. These include a school (GA 105:102), ringforts (GA 105: 34, 41, 50, 51 & 99), a lime kiln (GA 105:44), a field system (GA 105: 103), a ruined medieval church (GA 105: 49) and a 'hut site' (GA 105: 219).

2.3 Site description

The pit itself was partly excavated during testing (03E0505) to ascertain that it was indeed an archaeological feature. It proved to be sub-oval or 'key-hole' shaped in plan,

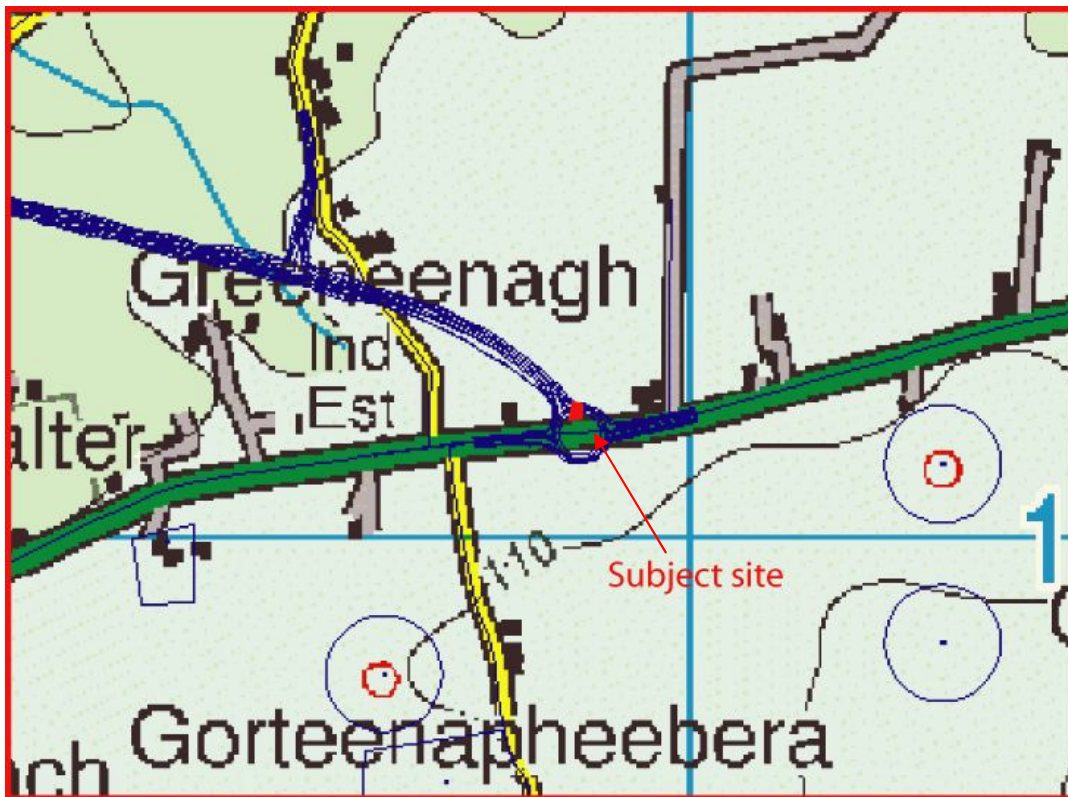


Figure 1 - Discovery Series map showing location of subject site

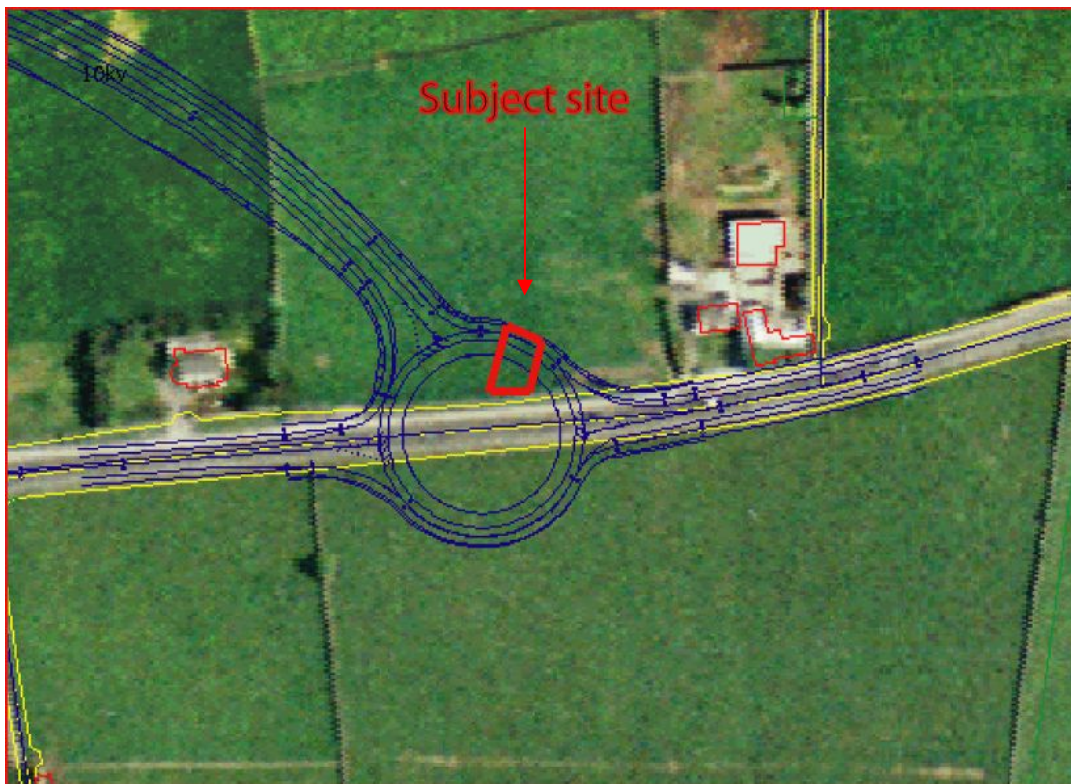


Figure 2 – Aerial photograph showing location and extent of subject site

measuring a maximum 1.6 m (east to west) by 0.87 m in depth. The pit was cut into bedrock and contained butchered deer bone and saw-cut antler fragments and a small amount of burnt bone. There was a charcoal deposit within the fill and fire damage to the sides of the pit suggested it had been used for cooking.

The pit was discovered within a machine-cut trench measuring 1.8 m in width. A larger area was opened up to ascertain whether associated features were present; none were found.

3. Archaeological and historical background

Loughrea is a rapidly expanding market town in east Galway. The town lies on the north shore of a large freshwater lake of the same name. Loughrea is the cathedral town of the diocese of Clonfert. The Cathedral is dedicated to St. Brendan.

Numerous archaeological monuments are recorded in the rural hinterland of Loughrea. These include the Turoe Stone, dating to c. 100 BC, which is located north of the town outside the village of Bullaun. A well-preserved stone circle of an earlier date is recorded at Moanmore East on the Tynagh road. A number of unexcavated ringforts, house sites and field systems are also visible in the Loughrea area. Ringforts are widespread, particularly to the north and west of the town, and there are several crannogs visible on the lake.

In all, approximately 200 sites of archaeological importance lie within a 6.5 km radius of the town, as identified by the Archaeological Survey of County Galway (Office of Public Works/University College Galway [unpublished], 1987).

3.1 Town background

The foundation of the town itself is accredited to Richard de Burgo, who made it the caput of his Lordship of Connaught in the 1230s (Otway-Ruthven 1968, 98-99). The high incidence of early medieval settlement, including several crannogs, and ecclesiastical remains in the surrounding area, suggests that Loughrea may have been an important secular and religious center prior to the Norman invasion, and it is likely to have been a central place in the pre-Norman kingdom of Hy Many or the so-called 'Kelly's Country' (O'Donovan, 1992 [reprint]).

3.2 Previous archaeological excavations

A number of excavations have been undertaken in the town in recent years, including;

St Brendan's Cathedral (Fitzpatrick 1999)

Excavations at St Brendan's Cathedral were carried out prior to development. The building was thought to occupy the site of a pre-Reformation church within the walls of the town. Five separate areas within the church were excavated. Two of these areas revealed 19th-century cobbled surfaces, but no artefacts of archaeological significance were found. Excavations in the interior of the building resulted in the recovery of

moderate amounts of scattered human remains that had been previously disturbed. It was considered likely that the construction of the present church at the beginning of the 19th century resulted in the displacement of buried human remains. While evidence for possible burials pre-dating the church was uncovered, no features, artefacts or deposits were found to suggest the existence of an earlier church building on the site.

'The Sycamores', Main St. (Jones, 2003)

Nine test-pits were hand-dug in the former private garden at the rear of an early to mid 19th-century town house known as 'The Sycamores', Main St, Loughrea. Testing was carried out in advance of the proposed extension of an adjacent carpark by Galway County Council. Topsoil contained frequent charcoal flecks, oyster shell, animal bone, pottery (possibly late Medieval, as well as post-Medieval and modern), glass and occasional metal fragments. Topsoil overlay a possible early topsoil horizon containing gravel, pockets of redeposited till, oyster shell and bone. Several features were noted; including a relatively shallow refuse pits and a stone wall with rubble core. Two water-sorted layers at the base of a test-pit near the north-wall of the garden adjacent to the town ditch suggested that the northern extremity of the garden may be composed of redeposited material. Domestic refuse, clay, gravel, stones and building debris may have collapsed or been deposited into the (originally much wider) town ditch resulting in an extended garden and a boundary wall which may stand up to several meters north of the position of the original wall delimiting the plot and the town.

A small number of further excavations have been carried out near the town.

Souterrain (Fitzpatrick 1990)

Work on Loughrea golf course revealed a souterrain running in a south-west to north-east direction. A low, narrow 'creep' led into another perpendicularly-running gallery. A single find was made: a corroded iron spearhead from near the original entrance. Finds of more recent date indicate that the souterrain was open until c. 1930.

Loughrea Wastewater Disposal Scheme (Crumlish 2000)

An area close to the main Loughrea–New Inn Road (L11) was investigated as part of the Loughrea Wastewater Disposal Scheme. The stratigraphy encountered in the area of the proposed treatment plant and the access road consisted of topsoil overlying natural subsoil and sterile, sandy-loam containing stone. The stratigraphy encountered along the outfall pipeline consisted of topsoil, tarmac and rubble fill over sandy-loam. A number of modern pottery sherds were found in the topsoil.

Archaeological Testing (O'Sullivan, 2004)

A first phase of archaeological test excavation (03E0505) along the route of the proposed Loughrea Bypass produced meager results; intermittent linear cut features or artefact scatters attributed to earlier field systems or early modern settlement. Two areas, both within the townland of Tullagh Upper, were identified that seemed to warrant further and separate excavations.

One was the site of a former enclosure (GA105:191) which had been levelled, quarried and backfilled with modern rubbish and building debris so that nothing of archaeological significance remained. The second site comprised the small group of burials lying within an early townland boundary ditch with adjacent lintelled drains. This was excavated by the author under a separate licence (03E1344). Full excavation of the area revealed several distinct phases of activity at the site: the construction of a metalled surface; the

digging of a townland boundary ditch; the burial of four complete human skeletons; the construction of a number of lintelled drains, one enclosing, or forming part of, a probable structure, and; the construction of a substantial surface over the drains.

A second phase of testing (carried out after compulsory purchase of the road corridor) was undertaken more recently. A burnt mound with adjacent features and a small rock-cut pit were identified in Greeneenagh and Fairfield townlands respectively. The first, a previously unknown burnt mound with adjacent features (licence number 04E1506), is detailed in a separate report. The second, a small rock-cut pit containing charcoal and antler fragments, is the subject of this report. All work was carried out on behalf of Galway County Council, National Roads Design Office for the National Roads Authority.

4. Results of excavation

The primary fill within the cut took the form of silty-clay containing a very large amount of charcoal, animal bone (some apparently butchered) and saw-cut antler (c. 156: 03E0505). These were initially noted in section and sampled. The secondary fill took the form of light-yellow redeposited till containing frequent small stones and gravel (c. 183: 03E0505). Light-brown silty-clay containing decayed limestone (c. 179: 03E0505) overlay this, itself overlaid by mid-brown silty-clay containing stone (c. 180: 03E0505) and a further deposit (c. 181: 03E0505) of mid- to dark-brown silty clay containing gravel and occasional stones and charcoal flecks (Fig. 3; Pl. 1).



Plate 1 – pit (c. 155) from south

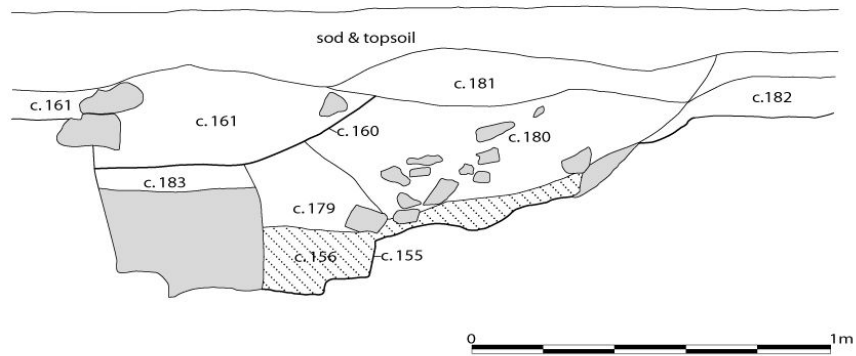


Figure 3 - south-facing section through pit

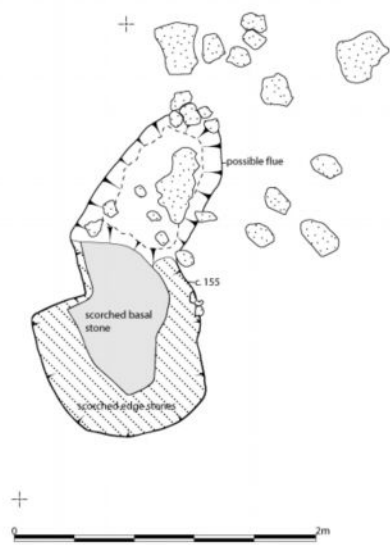


Figure 4 - plan (post-excavation) of pit

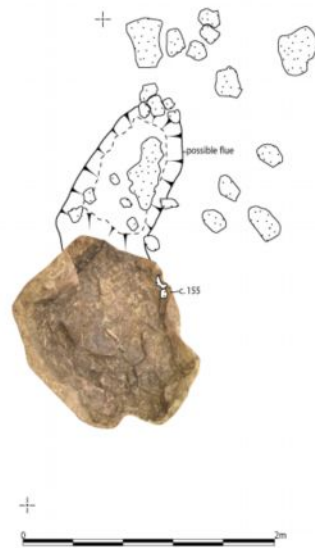


Figure 5 - plan (post-excavation) of pit incorporating photographic detail

All but the primary fill of the pit (c. 156: 03E0505) were cut by the insertion of a cultivation furrow of probable post-medieval or early modern date (c. 160: 03E0505). The furrow measured 1.21 m in maximum width, 0.18m in depth and not less than 11m in length. The cut was filled by light- to mid-brown silty-clay containing gravel, stone and a small amount of oyster shell.

The 10 m x 10 m area stripped during initial testing was expanded during full excavation to some 30 m x 30 m. No associated features were noted.



Plate 2 – detail of base of pit (c. 155)

5. Finds

No man-made finds were discovered during the course of excavations. Animal bone (some apparently butchered) and saw-cut antler were found during excavation of the site. These were found in the primary fill (c. 156: 03E0505) of the pit. A very small amount of fragmented burnt bone (Find 1; 04E1532) was found in the same deposit.

6. Soil analysis

A small number of samples were taken during the course of excavations at the site.

Apart from the organic sample (bone and antler) detailed above (132: 03E0505), another sample was taken from the primary fill (c. 156: 03E0505) within the cut.

A bulk sample (131: 03E0505) of the silty-clay containing a very large amount of charcoal (c. 156: 03E0505) was also taken. These samples were taken during the initial testing stage.

Sampling was again carried out during full excavation. Bulk samples of the silty-clay primary fill (c. 156), the light-yellow redeposited till (c. 183) and the mid- to dark-brown silty clay (c. 181) were taken (Samples 1: 04E1532, 2: 04E1532 and 3: 04E1532 respectively).

7. Summary of proposed specialist analyses

The bone and antler was sampled (132: 03E0505) for full analysis (specifically to establish whether the antler was originally shed or cut) and possible dating.

The silty-clay containing a very large amount of charcoal (c. 156: 03E0505) was also sampled (both during the testing phase and full excavation) for species analysis, possible c-14 dating and environmental analysis (flotation and visual examination of flot and retent for a statement of the main species and other inclusions present). It is proposed that later fills of the pit (2: 04E1532 and 3: 04E1532) also be scheduled for environmental analysis. The specialist examination of these fills may shed some light on the function of the pit.

The charcoal content of the deposit (c. 156: 03E0505) was also separately sampled (128: 03E0505) for possible dating.

8. Discussion

A very simple stratigraphy was evident within the pit, the primary fill being the most informative. A very large amount of charcoal was evident in this lowest fill (c. 156: 03E0505) with fire damage to the sides of the pit and stone within the fill suggesting it had been used for cooking. Organic finds (bone and antler) within the cut were unburnt, though some burnt bone was also present. The pit clearly pre-dated a furrow of probable post-medieval or early modern date. Otherwise, no dating evidence was obtained in the field. However, the bone and antler should provide ample material for a radiocarbon dating, pending appropriate consents from the National Museum of Ireland.

Upon excavation, the 'key-hole' shape of the fully-exposed cut resembled that of a corn-drying kiln, though no evidence was found to support use in this manner. Any plant remains recovered from the bulk soil samples taken might cast some light on this possible interpretation.

As stated, later fills within the pit were truncated by the insertion of a post-Medieval or early modern cultivation furrow (c. 160: 03E0505). No ceramics or other diagnostic materials were noted within the fills.

9. References

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10. Appendices

10.1 List of Contexts

Context No.	Field/Trench No.	Description	Finds	Samples
155 (03E0505)	53/1	Sub-oval or 'key-hole' shaped cut, long-axis running east to west. Steeply sloped or near-vertical sides lead to concave base. Filled by c. 156, c. 179, c. 180, c. 181, c. 182, c. 183. Cut by c. 160		
156 (03E0505)	53/1	Silty-clay containing a very large amount of charcoal and small stones showing evidence of heating. Primary fill of c. 155.	1 (04E1532)	128, 131, 132 (03E0505); 1, 2 (04E1532)
160 (03E0505)	53/1 (and extension)	Shallow, linear cut, long-axis running north-east to south-west. Gently sloping sides lead to concave base. Filled by c. 161. Cuts c. 155, c. 179, c. 180, c. 181, c. 182, c. 183		
161 (03E0505)	53/1 (and extension)	Light- to mid-brown silty-clay containing gravel, stone and a small amount of oyster shell. Fill of c. 160		
179 (03E0505)	53/1	Light-brown silty-clay containing decayed limestone. Fill of c. 155		
180 (03E0505)	53/1	Mid-brown silty-clay containing stone. Fill of c. 155		
181 (03E0505)	53/1	Mid- to dark-brown silty clay containing gravel and occasional stones and charcoal flecks. Fill of c. 155		
182 (03E0505)	53/1	Light orange-brown silty-clay containing gravel. Fill of c. 155.		
183 (03E0505)	53/1	Light-yellow redeposited till containing frequent small stones and gravel. Fill of c. 155		

10.2 List of Samples

Sample No.	Context No.	Description	Purpose of sample	No. of bags
128 (03E0505)	156	Charcoal sample from fill of c. 155	Possible c-14 dating	1 x small
131 (03E0505)	156	Silty-clay containing a very large amount of charcoal. Fill of c. 155	Species analysis, possible c-14 dating and environmental analysis (flotation and visual examination of flot and retent)	1 x large, 1 x box
132 (03E0505)	156	Butchered animal bone and deer antler from fill of c. 155	species analysis and possible c-14 dating	1.5 kg approximately
1 (04E1532)	156	Silty-clay containing a very large amount of charcoal. Fill of c. 155 -	Species analysis, possible c-14 dating and environmental analysis (flotation and visual examination of flot and retent)	2 x 2l. bags
2 (04E1532)	183	Light-yellow redeposited till containing frequent small stones and gravel. Fill of c. 155 -	environmental analysis (flotation and visual examination of flot and retent)	1 x 2l. bag
3 (04E1532)	181	Mid- to dark-brown silty clay containing gravel and occasional stones and charcoal flecks. Fill of c. 155	environmental analysis (flotation and visual examination of flot and retent)	1 x 2l. bag

10.3 List of finds

Find No.	Context	Find Type	Description
1 (04E1532)	156	Burnt bone	A very small amount of fragmented burnt bone