N18 Ennis Bypass
and N85 Western Relief Road

Site AR124, Clareabbey, Co. Clare

Final Archaeological Excavation Report

for Clare County Council

Licence No: 04E0022

by Graham Hull

Job J04/02

(NGR 134456 175394)

14th August 2006

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Summary

Site name: N18 Ennis Bypass and N85 Western Relief Road, Site AR124, Clareabbey, Co. Clare

Townland: Clareabbey

Parish: Clareabbey

Barony: Islands

County: Clare

SMR/RMP Number: N/A

Planning Ref. No: N/A

Client: Clare County Council, New Road, Ennis, Co. Clare

Landowner: Clare County Council, New Road, Ennis, Co. Clare

Grid reference: 134456 175394 (OSI Discovery Series, 1:50,000, Sheet 58. OS 6" Clare Sheet 33)

Naturally occurring geology: Alluvial light grey clayey silt (0.1m to 0.3m) over yellowish mottled clay

TVAS Ireland Job No: J04/02

Licence No: 04E0022

Licence Holder: Graham Hull

Report author: Graham Hull

Site activity: Excavation

Site area: 625m^2

Sample percentage: 100%

Date of fieldwork: 6th to 9th February 2004

Date of report: 14th August 2006

Summary of results: A burnt stone spread and an underlying unlined trough, were excavated and have been radiocarbon dated to the early Bronze Age.

Monuments identified: Early Bronze Age burnt stone spread and trough

Location and reference of archive: The primary records (written, drawn and photographic) are currently held at TVAS Ireland Ltd, Ahish, Ballinruan, Crusheen, Co. Clare.

Report edited/checked by: Kate Taylor ✓14.08.06

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Final Archaeological Excavation Report

By Graham Hull

Report J04/02q

Introduction

This report documents the final results of an archaeological excavation of an early Bronze Age burnt stone spread and associated trough (Site AR124) on the route of the N18 Ennis Bypass and N85 Western Relief Road at Clareabbey, Co. Clare (NGR 134456 175394) (Fig. 1). The excavation forms part of the Ennis Bypass Archaeological Contract 7.

A preliminary archaeological report for this site was produced in May 2004 (Hull 2004).

The National Monuments Act 1930 (as amended) provides the legislative framework within which archaeological excavation can take place and the following government publications set out many of the procedures relating to planning/development and archaeology:

Framework and Principles for the Protection of the Archaeological Heritage (DAHGI 1999a)

Policy and Guidelines on Archaeological Excavation (DAHGI 1999b)

Code of Practice between the National Roads Authority and the Minister for Arts, Heritage, Gaeltacht and the Islands (NRA/MAHGI 2001)

Project background

As part of the National Roads Authority scheme for upgrading the N18 Limerick to Galway Road, Clare County Council, in consultation with NRA Project Archaeologist Sébastien Joubert, requested a series of archaeological investigations along the route of the proposed Ennis Bypass and a Western Relief Road. The proposed scheme has an overall length of 21km and involves the construction of a 13.8km eastern bypass of Ennis from Latoon, north of Newmarket-on-Fergus, to Cragard, north of Barefield. The Western Relief Road is 7.1km long and is to link Killow and Claureen (Fig. 1).

A number of sites of archaeological interest were known to lie on the route of the new roads and the mitigation strategy agreed by the Project Archaeologist and the national licensing authorities for these sites was preservation by record, i.e. full archaeological excavation. Further sites, without surface expression, were located as the result of intensive test trenching along the course of the road (03E1291 Hull 2003 and 03E1293 Roger 2004). As preservation *in situ* was not a reasonable option, the resolution strategy for these new sites was also preservation by record.

The archaeological excavation and post excavation work were funded by Clare County Council through the National Roads Authority and part-financed by the European Union under the National Development Plan 2000-2006.

Location, topography and geology

The site was located in the townland of Clareabbey, parish of Clareabbey, barony of Islands, approximately 2km south-east of Ennis town centre (the O'Connell Monument) and was centred on NGR 134456 175394 (Figs 1 and 2).

The CPO (Compulsory Purchase Order) took up only a small section of a much larger field that was wet and became boggier towards the north.

Topsoil in the field was 0.15m thick and overlay a deposit of alluvial light grey clayey silt (0.1m to 0.3m) that in turn overlay yellowish mottled clay.

The field was used as pasture and the archaeological deposits were seen to lie at approximately 2.3m above OD.

Archaeological background

As part of the environmental assessment process for the road scheme, Clare County Council commissioned desk-based and walkover surveys that formed part of an Environmental Statement (Babtie Pettit 2000) and an archaeological study for the Environmental Impact Statement (Doyle 1999). A total of 36 sites of known or potential cultural heritage significance were identified along the entire route of the proposed Ennis Bypass and Western Relief Road.

Earthwork and geophysical survey were undertaken on potential archaeological sites and invasive testing and excavation took place in 2002 and 2003 on some of the above ground sites affected by the proposed road (Aegis 2002, IAC 2003, Geoquest 2002, Earthsound 2003).

A systematic programme of testing, along the new road route, involving the mechanical excavation of a central linear trench with offsets, took place in Summer/Autumn 2003. Twenty-two previously unknown sites, including cremation cemeteries, burnt stone spreads, enclosures and brick clamps were found (03E1291 Hull 2003 and 03E1293 Roger 2004). Monuments dating from the Bronze Age to the modern period were found.

Earlier phases of archaeological intervention on newly constructed stretches of the N18 (Dromoland to Carrigoran), to the immediate south of this road project, have demonstrated that the locality has a rich range of prehistoric and later monuments (99E0350 Hull and Tarbett-Buckley 2001).

Recent archaeological work on the BGE Gas Pipeline to the West in the neighbourhood of the new road route has tended to support the picture of continuous human activity in Co. Clare from the Neolithic and even becoming intensive from the Bronze Age. A number of burnt stone spreads and burnt mounds were excavated near the route of the new road in the summer of 2002 (MGL 2002).

A small burnt stone spread and possible trough were revealed during testing (03E1291 Hull 2003). These archaeological features were allocated the number AR124 and are the subject of this report.

Similar prehistoric burnt stone spreads and a medieval pit cluster were identified during testing and later excavated in neighbouring fields as part of this road project (AR121 04E0031 Taylor 2006a; AR122 04E0032 Taylor 2006b; AR123 04E0019 Hull 2006a; AR125 04E0023 Hull 2006b).

Excavation aims and methodology

A licence to excavate was granted to Graham Hull by the National Monuments Section of the Department of the Environment, Heritage and Local Government, in consultation with the National Museum of Ireland, on behalf of the Minister for the Environment, Heritage and Local Government. The licence number is 04E0022.

The aims of the excavation were to:

1) Preserve by record all archaeological deposits and features within the excavation area
2) Produce a high quality report of the findings

The fieldwork took place between 6th and 9th February 2004 and was directed by Graham Hull, supervised by Astrid Lesley Nathan and assisted by Jamie Parra Rizo, Tim Dean and Elisabeth Dos Santos.

The excavation area was rectangular, centred on the burnt stone seen during testing and examined 625m^2. Topsoil and overburden were removed by a 15 tonne, 360º, tracked machine, operated under direct and continuous archaeological supervision. The spoil was visually scanned for artefacts.

A full written, drawn and photographic record was made following procedures outlined in the TVAS Ireland Field Recording Manual (First Edition 2003).

Excavation results (Figs 2 to 4 and Plates 1 to 3)

A complete context list is given as Appendix 1.

Topsoil and ploughsoil were removed by machine. The topsoil was between 0.40m and 0.45m thick and was a soft, dark brown, almost peaty, loam. Below the topsoil, naturally deposited yellowish grey clay was observed.

Beneath the topsoil and on top of the geological deposits an amorphous burnt stone spread, deposit 3, was recorded. This spread measured 8m (south-west to north-east) by 3m (Plate 1). A small part of the burnt stone material lay outside the CPO. The burnt spread was composed of fire-cracked and charcoal-darkened limestone pieces and was 0.25m thick in the centre (Plate 3). A modern field drain, 7, had cut the spread.

Stratigraphically earlier than the spread, was a circular flat-bottomed pit or trough, 5. This feature had a diameter of 0.45m to 0.50m and was 0.25m deep (Plates 1 and 2). The base was flattish and the trough contained burnt stone with charcoal, 4, that was identical to the overlying spread.

The edge of the CPO formed the northern limit of archaeological investigation. The exposed section indicated that a possible second trough, 8, may be present outside the road-take. This feature had a maximum observed width of 0.3m and was at least 0.1m deep (Plate 3).

Finds

No artefacts were recovered during the excavation.

Samples

A catalogue of samples is given as Appendix 2.

A bulk soil sample of the trough fill, 4, was taken. This sample has been floated and then wet sieved through 300micron and then 2mm sieves in order to recover charred plant remains and small finds. Significant pieces of charcoal and burnt stone were recovered.

Large pieces of charcoal were also recovered from the burnt stone spread, 3.

Identification of stone by Dr. Martin Feely,

Introduction

TVAS delivered a plastic bag containing four stone samples taken from three deposits from AR122, a burnt spread site. The four stone samples were identified using a Nikon incident light binocular microscope. Each stone sample in each sample bag has been given a letter and the description of each stone is matched below to that letter.

Results

Table 1: Rock types

Cut	Deposit	Sample	Identification
5	4	1	4 stones: a) A quartz pebble b) Coarse sandstone c) Medium grained sandstone d) Micaceous sandstone

Fragmentation of stones

I see nothing exceptional about the stone samples and the average size of each stone is quite small <100mm to pebble size. They represent material I would expect to encounter in glacial debris. I cannot say that they are smaller fragments of larger heated stones dropped into cold water.

Discussion

In general the stone samples from the Ennis Bypass are either sandstone or limestone. The sandstones are of three main types: a common sandstone, a micaceous variety which has visible “shiny” flakes mica and finally a pebbly variety like a fine conglomerate. The limestone samples all have visible fossiliferous material similar to that found in the Lower Carboniferous limestones of Ireland.

Additional “stone” varieties include fragments of the mineral calcite, quartz and fine grained igneous rocks. The sandstone samples most likely represent Devonian sandstones while there is little doubt that the limestone is Lower Carboniferous in age. This is not surprising as both geological periods are represented by rock exposures in the west and southwest of the country. Glacial debris commonly contains disaggregated blocks of both rock types. The fragments of calcite and quartz probably formed part of geological structures termed veins, which transect existing rocks. The igneous varieties may represent samples of Carboniferous volcanic rocks but this is speculative.

Charred plant macrofossils by Val Fryer

Introduction

Two samples were taken for the extraction of the plant macrofossil assemblages, one from the trough (sample1), and one from the stone spread (sample 2).

Methodology

The samples were floated and wet sieved by TVAS Ireland Ltd, and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16, and the plant macrofossils noted are listed below on Table 2. All plant remains were charred.

The density of material within the assemblages is expressed in the table as follows: x = 1 – 10 specimens and xxx = 100+ specimens.

Results

Small to medium sized charcoal fragments formed the sole component of both assemblages (Table 2).

Table 2: Charred plant macrofossils

Sample No	1	2
Cut No	5	
Deposit No	4	3
Charcoal <2mm	x	x
Charcoal >2mm	xxx	xxx
Sample volume (litres)	12	
Volume of flot (litres)	<0.1	<0.1
% flot sorted	100%	100%

Conclusions

These assemblages are closely paralleled by material recovered from other stone spreads and *fulachta fiadh* across County Clare and elsewhere in Ireland (Penny Johnston, pers. comm.). It is assumed that the charcoal is derived from fuel used during the heating processes.

Charcoal by Simon Gannon

Introduction

Two samples of charcoal fragments were retrieved from two contexts from the site, consisting of a burnt spread and trough. Identification of taxa of the retrieved charcoal may assist in the reconstruction of the local, contemporary woodland-environment and the use of the woodland resources by the people responsible for the archaeological features.

Methodology

In sorting fragments suitable for identification a guide size of at least 2mm in radial cross-section was used. In this sort some samples were found to contain an unusually large number of fragments and sub-samples were taken, as detailed in Analysis Results.

Initially the grain direction of the fragments was identified before fracturing across their transverse plains. Identifications were made under microscopic examination, in most cases. Further fractures were made to reveal radial and/or tangential plains in cases where identification was more difficult. Magnification of between x10 (hand lens) to x400 was used. Structural elements of the fragments were examined to allow for identification of roundwood, heartwood, and sapwood features.

Reference material comprised a reference collection of charred samples of taxa and reference publications, *Microscopic Wood Anatomy* (Schweingruber 1990) and *The Identification of the Northern European Wood*s (Hather 2000).

Analysis Results

The results are summarized in Table 3. Classification follows that of *Flora Europae* (Tutin *et al* 1964-80). Certain related taxa cannot be securely differentiated on the basis of their anatomical characteristics and are assigned to their respective family groups as with the genera *Salix* and *Populus,*

and the genera *Craetaegus, Malus* and *Sorbus.* Provisional identifications have been given in cases where the condition of the charcoal was degraded.
The various identifications of wood taxa were consistent with taxa from the following groups:

Broadleaf taxa

Betulaceae. *Alnus* sp., alder
Corylaceae. *Corylus* sp., hazel
Fagaceae. *Quercus* sp., oak
Oleaeceae. *Fraxinus* sp., ash

Coniferous taxa
Cupressaceae. *Taxus* sp. yew.

Table 3: Number of identified charcoal fragments per sample

Sample	Cut	Deposit	Context type	*Alnus*	*Betula*	*Corylus*	*Corylus/ Alnus*	*Fraxinus*	Pomoideae	*Prunus*	*Quercus*	Salicaceae	*Taxus*	*Ulmus*
1	5	4	Trough fill	-	-	-	-	6	-	-	-	-	-	-
2		3	Burnt spread	1	-	8	5	20	-	-	-	-	9	-

(r: roundwood)

Discussion

Anatomical characteristics from charcoal fragments do not allow for identification of individual species in every case. Several species belong to groups of species, species of genera, of sub-families and of families that cannot be separated anatomically (Schweingruber 1990 and Hather 2000). It is possible that a narrow range of species and, occasionally, one or two species can be indicated with a degree of confidence due to established factors, principally their native status and history of introduction by people (Huntley and Birks. 1983, Peterken 1996 and Scannell and Synott 1987). The following section places the given charcoal based taxa identifications in the context of defined tree species allowing for implications related to their environmental characteristics and possible use by ancient peoples to be drawn. Reference works consulted include Goldstein *et al* 1984, Huntley and Birks 1983, Kelly 1998, Mitchell 1978, O'Sullivan 1996, Rackham 1976-90, Raftery 1996, Scannell and Synott 1987 and Tutin *et al* 1964-80.

Taxa descriptions

Alder

The sole native species is *Alnus glutinosa*, Common Alder, Irish fearnóg (family – Betulaceae).
Environment indications. Tolerant of nearly all soil types including relatively infertile soils, such as ironpan and peaty soils. Particularly tolerant of water logged conditions and is often a streamside tree. Has the ability to 'pioneer' into previously disturbed land. Native distribution throughout Ireland.
Uses in antiquity. A hardwood suitable for a variety of artefacts and smaller structural timber. Tends to harden when in contact with water and therefore suitable for making piles etcetera. It burns quickly when used for firewood but has been found suitable for charcoal production.

Ash

There is a single native species, *Fraxinus excelsior*, ash, fuinseog (family - Oleaceae).
Environmental indications. Requiring deep, fertile, moist but well drained, soils. Grows well in mixed stands when not shaded. Widespread throughout Ireland.
Uses in antiquity. A strong but elastic wood suitable for many purposes including structural timber (not where in prolonged contact with water or soil). Coppices readily. Burns well even when green, partly due to low water content.

Hazel

There is a single native species, *Corylus avellana*, hazel, coll (family - Corylaceae).
Environmental indications. Botanically a shrub, but does not flower and fruit without sunlight, so is really a canopy tree preferring woodland edges and clearings though it bears moderate shade and is also found as understorey, typically in oak woodlands. Fairly tolerant of poor soils but does not grow on acid soils and preferring chalky, fertile, deep soil. Growing throughout Ireland.
Uses in antiquity. A tough and flexible wood, useful for small implements and small structural elements. Also grows easily in coppice-like form producing rods suitable for wattle and basketry type structures. Makes useful firewood.

Yew

The native species is yew, *Taxus baccata*, iúr (family - Taxaceae).
Environmental indications. Growing on limestone and chalk in woods and scrub, often occurring in dense shade of oak woods. Also can form pure stands in sheltered sites. Natural distribution throughout Ireland.
Uses in antiquity. A heavy, hard, durable, and elastic wood, resistant to water. Useful for structures, bows, tool handles etc. Makes good firewood.

The total range of taxa from AR124, Clareabbey, comprises alder (*Alnus*), ash (*Fraxinus*), hazel (*Corylus*) and yew (*Taxus*). The represented taxa belong to the groups of species represented in the native Irish flora and, conversely, non-native tree species such as lime (*Tilia*) and beech (*Fagus*) are not represented.

Generally, there are various, largely unquantifiable, factors that effect the representation of species in charcoal samples including bias in contemporary collection, inclusive of social and economic factors, and various factors of taphonomy and conservation (Théry-Parisot 2002). On account of these factors the identified taxa are not considered to be proportionately representative of the availability of wood resources in the environment but may be reflective of particular choice of fire making fuel from those resources.

Ash (*Fraxinus*) is the most numerous of the identified taxa and is the second most commonly represented from the total of Ennis Bypass sites. As noted above ash (*Fraxinus*) is a particularly useful fire fuel as well as being a likely commonly used structural/artefactual wood.

Conclusion

The identified taxa are consistent with the picture of wood use from most of the other Ennis Bypass sites. The charcoal of the site has probably derived from fire debris, and a particularly ready access to, and possible preference for ash (*Fraxinus*) as fire fuel is indicated.

Radiocarbon date

A single radiocarbon determination from charcoal from the fill of the trough was made by Beta Analytic Inc, Miami, Florida (Table 4).

Table 4: Radiocarbon determination

Sample material	Cut	Deposit	Sample	Lab code	Radiometric age	Calendrical calibrations
Charcoal Corylus/ Alnus	5	4	1	Beta-211560	3700±40 BP	2 sigma (95%) Cal BC 2200 to 1960 1 sigma (68%) Cal BC 2140 to 2030

The charcoal sample was from a short-lived tree species. The radiocarbon determination may, then, be a relatively accurate indicator of the date of the backfilling of the trough. This event took place between the 20th and 22nd centuries BC.

Discussion

The excavation of Site AR124 has recorded a burnt stone spread and associated trough (or troughs) dated to the early Bronze Age and using the wood from the ash tree as fuel. Burnt stone spreads are not of the same magnitude of scale as the larger, but similarly composed, *fulachta fiadh*. Burnt stone spreads lack the formal crescent shape of the *fulachta fiadh* but are found in similar watery locations and are often associated with troughs or pits. Rather than being thought of as ‘ploughed out’ or levelled *fulachta fiadh*, burnt stone spreads are becoming increasingly recognised as distinct monuments in their own right. A large number of amorphous and thin deposits of burnt stone have been recorded in the county, both on the BGE Gas Pipeline to the West, and as part of this road scheme (see below). Burnt stone spreads suggest similar, but less intense or less long lasting, activity than that currently postulated for the *fulacht fiadh* or burnt mound, perhaps with a portable container being used to hold the water.

Typically burnt stone deposits of the type seen at Clareabbey have not been considered significant enough to merit scientific dating. Burnt stone activity has been shown to date from the Mesolithic to the 1st Millennium AD with a distinct concentration in the Bronze Age (Brindley *et al* 1990). It will be instructive to add information about smaller monuments such as AR124 to the chronological corpus.

Three other deposits of charcoal-rich, burnt stone have been found nearby as part of this road project:

Site AR121 (04E0031 Taylor 2006a) was 400m to the east of Site AR124 and was characterised by a spread of burnt stone with no cut features such as troughs. A radiocarbon date from Site AR121 indicates that stone was heated in the later Bronze Age (2 sigma Cal BC 1000 to 820).

Site AR122 (04E0032 Taylor 2006b) was 120m to the south-east of Site AR124 and was characterised by burnt stone deposits and small pits or troughs. Two radiocarbon dates from Site AR122 indicate that heated stone was used to warm water there in the late Neolithic and early Bronze Age (2 sigma Cal BC 2430 to 2140 and Cal BC 1870 to 1630).

A burnt stone deposit (AR125, 04E0023, Hull 2006b) was located 100m south-west of Site AR124. This site was similar to those described above, but was destroyed by construction contractors and has not been dated.

The four sites (AR121, 122, 124 and 125) are sited on the flood plain of the River Fergus and, even though modern river defences have relieved much of the seasonal flooding that must have been associated with the river, are within a very wet and boggy landscape.

Approximately 2km to the west, and located next to a small river, also prone to flooding, a further seven shallow burnt stone spreads were excavated as part of this road project (AR127, 04E0028, Taylor 2006c). These stone spreads were very similar to Site AR124, in that they were amorphous and shallow. Six of the stone spreads produced radiocarbon dates focussed on the late Neolithic/early Bronze Age transition and the seventh stone spread was dated to 10th to 12th centuries BC.

Also excavated 2km the west of Site AR124, was a large crescent-shaped *fulacht fiadh* with a stone-lined trough (AR126, 04E0024, Hull 2006c). This monument was used in the late Neolithic/early Bronze Age and then re-used in the late Bronze Age.

It has been argued that *fulachta fiadh* seem to occur in the proximity of habitation enclosures (Cooney and Grogan 1994) and that these monuments may have formed part of a social 'round', in which individual family groups hosted reciprocal ceremonial activities for the local community (Grogan 2005).

The archaeological site excavated at AR124 is within the south-east part of County Clare and this region is one of the foci of recently published Discovery Programme research (Grogan 2005). *Fulachta fiadh* in the South-East Clare landblock have been shown to tend to occur in clusters and to be sited on land that was wet. The group of burnt stone sites at Clareabbey (AR121, AR122, AR124 and AR125) are certainly clustered and located on the flood plain of the River Fergus, but the usage span of the three dated sites was at least a thousand years. It might be then, that it was the wet environment that was the deciding factor, at least for this group of burnt stone sites. This said, it should be noted that the cluster of six similar burnt stone spreads at Cahircalla More (AR127) did exhibit a degree of contemporaneity, focused on the late Neolithic/early Bronze Age.

Fulachta fiadh, in general, seem to have a floruit in the middle/late Bronze Age (Grogan 2005 and Brindley *et al*. 1990). While the burnt stone spread and tough at AR124 cannot be described as a classic *fulacht fiadh* (i.e. there is no significant crescentic mound or large trough), the radiocarbon date is within this time span.

The BGE Gas Pipeline to the West and the N18 road scheme from Latoon to Ballycasey both produced dated burnt stone deposits. Further integration of the results of the radiocarbon dated burnt stone sites excavated as part of the N18 Ennis Bypass and N85 Western Relief Road and other infrastructural projects in the upper Fergus estuary would add significantly to interpreting these ubiquitous site types.

Archaeological potential off the road CPO

Only a portion of the burnt stone spread and an associated probable trough were excavated within the CPO. The remaining parts lie outside the CPO to the immediate north. Further archaeological deposits may also be present off the road CPO at the north, given the proximity of Clara Abbey and the wet ground that could contain further burnt stone spreads.

Publication plan

A summary of the findings of the excavation has been submitted to *Excavations 2004*.

Copies of this final excavation report will be deposited with the Clare County Museum and the Local Studies Library, Ennis, Co. Clare

A summary article, describing the findings of this road project has been published in the local journal *The Other Clare* (Hull and Taylor 2005).

An illustrated information brochure describing the findings of this road project has been published by Clare County Council.

The stated aim of the National Roads Authority with regard to archaeological publication is clear, (O'Sullivan 2003) and it is anticipated that the results of this excavation will be disseminated as a component of a monograph dedicated to the archaeology of the Ennis Bypass. Publication is expected to take place in 2006/7 at the latest.

The radiocarbon dated *fulachta fiadh* and burnt stone spreads excavated as part of this road project and a number of other dated burnt stone sites, excavated by the author and others on the BGE Gas Pipeline to the West (Grogan forthcoming), on the west bank of the upper Fergus estuary would make an informative article in a national journal and would provide valuable comparative data to supplement the Discovery Programme research programme. It is proposed to discuss this thematic and regional publication with the Project Archaeologist Sébastien Joubert and with Eoin Grogan.

Graham Hull MIFA MIAI
TVAS Ireland Ltd
14th August 2006

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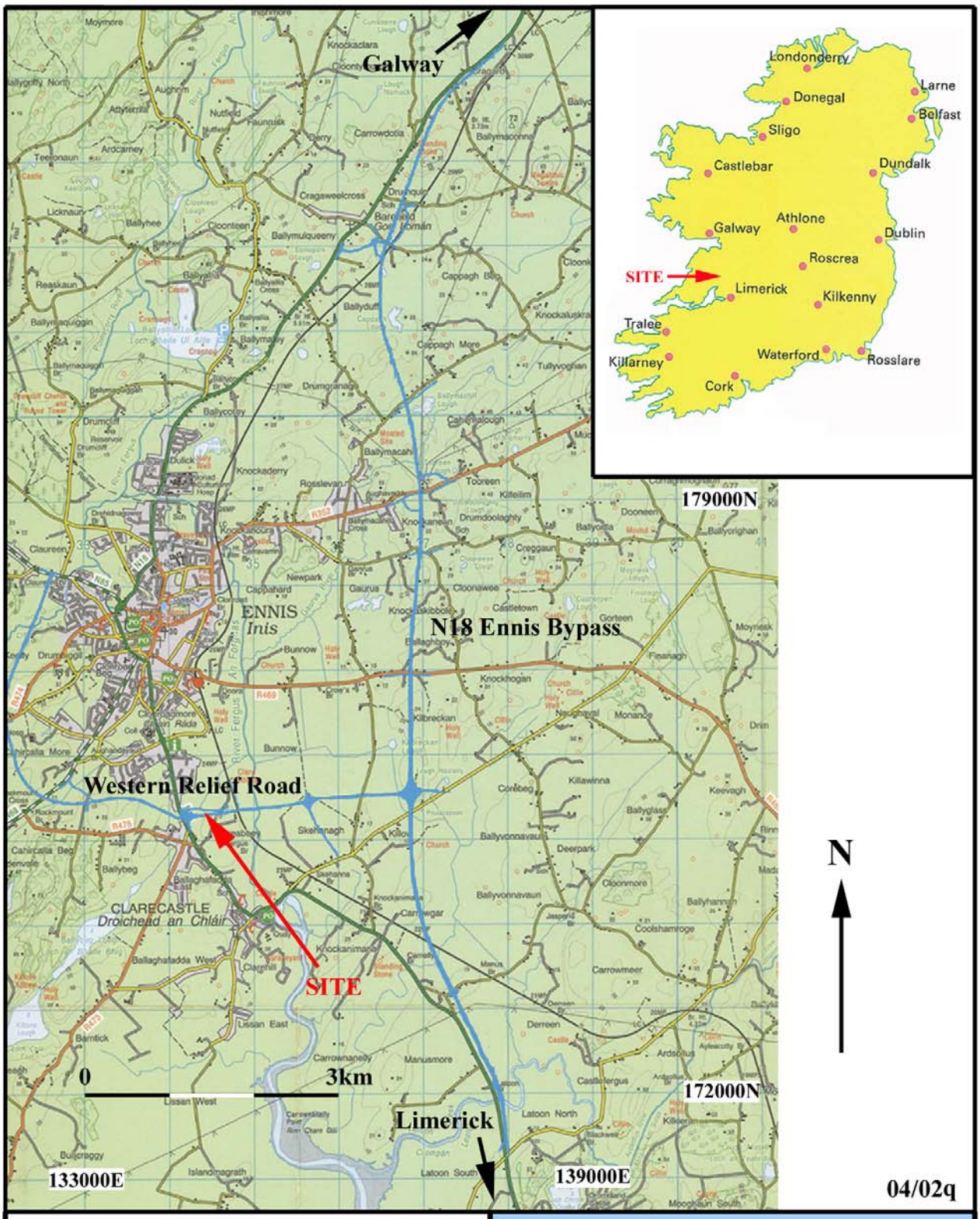
Appendix 1: Catalogue of features and deposits

Context No	Description	Sample No.
1	Topsoil	-
2	Natural	-
3	Burnt stone spread	2
4	Fill of trough 5	1
5	Trough cut	-
6	Fill of drain 7	-
7	Drain cut	-
8	Possible 2nd trough cut	-

Appendix 2: Catalogue of samples

Sample No	Cut	Deposit	Volume sieved (L)	Volume floated (L)	Finds?	Burnt stone?	Charred plant remains?
1	5	4	12	12	No	Yes	Yes
2	-	3	-	-	No	No	Yes



04/02q

N18 Ennis Bypass, Site AR124, Clareabbey, Co. Clare
04E0022

Figure 1: Site location

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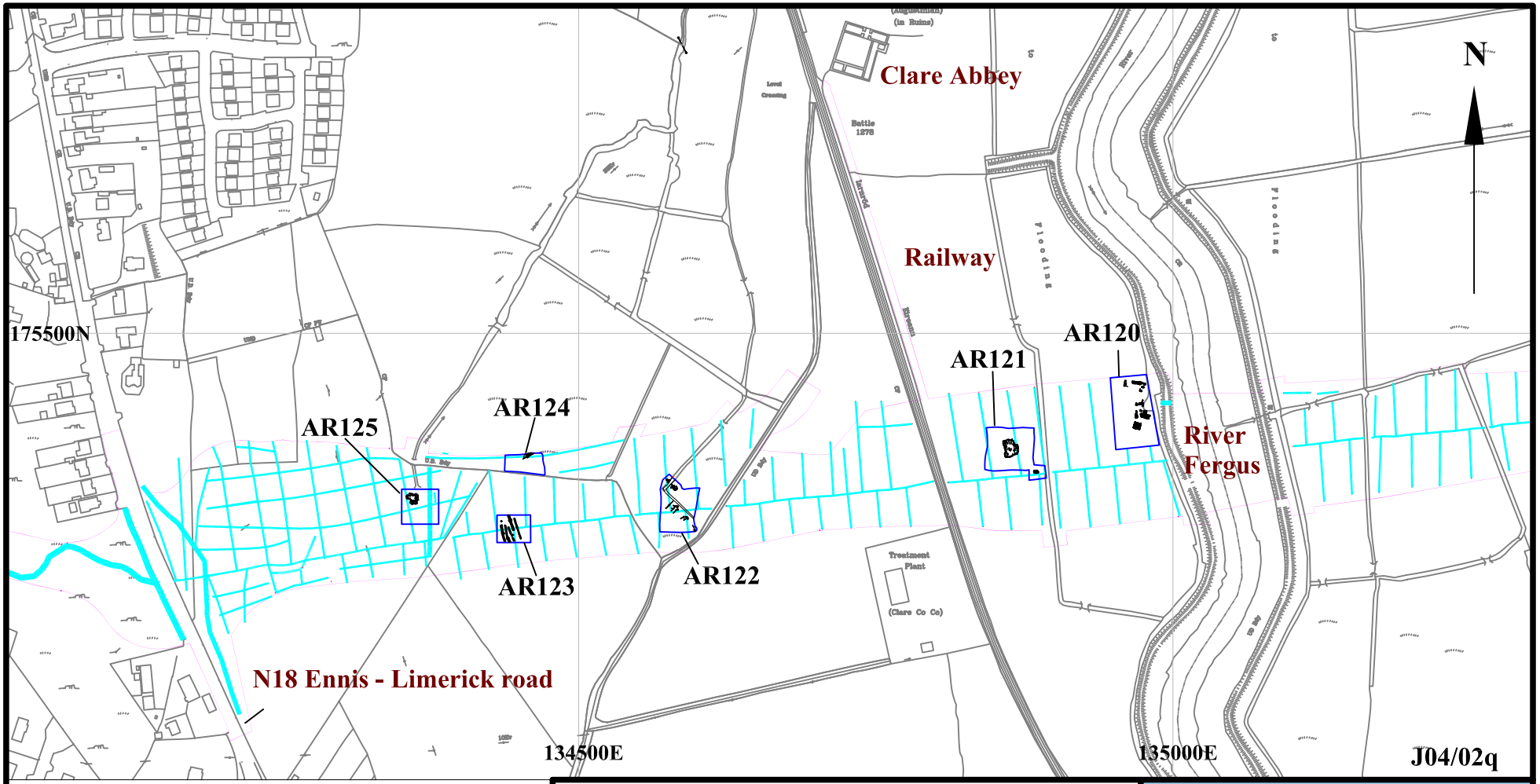

N18 Ennis Bypass, Site AR124, Clareabbey, Co. Clare

04E0022

Figure 2: Site location within local landscape.
Showing test trenches (03E1291)
Scale 1:5000. OSI Licence: AR0049406

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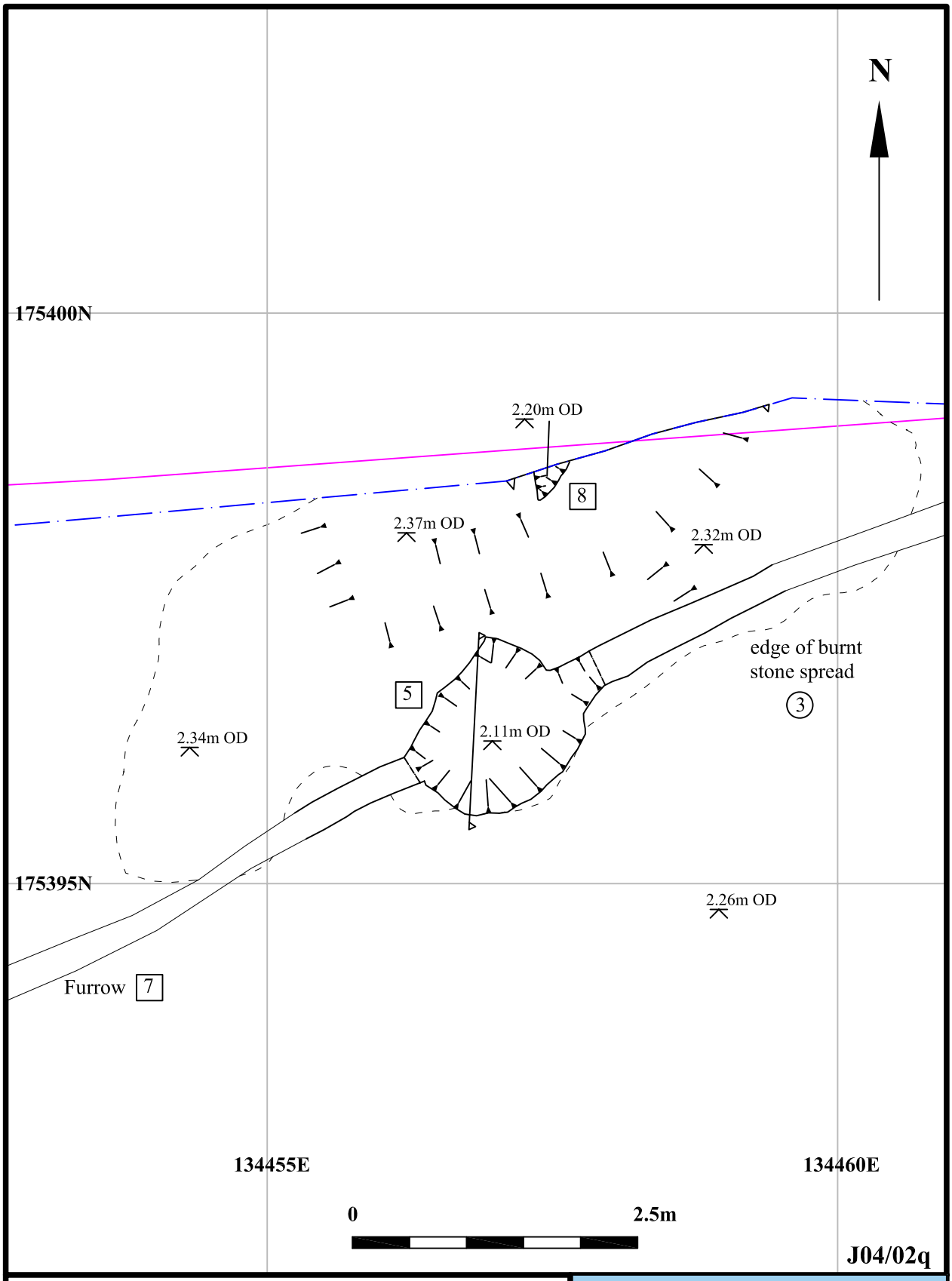


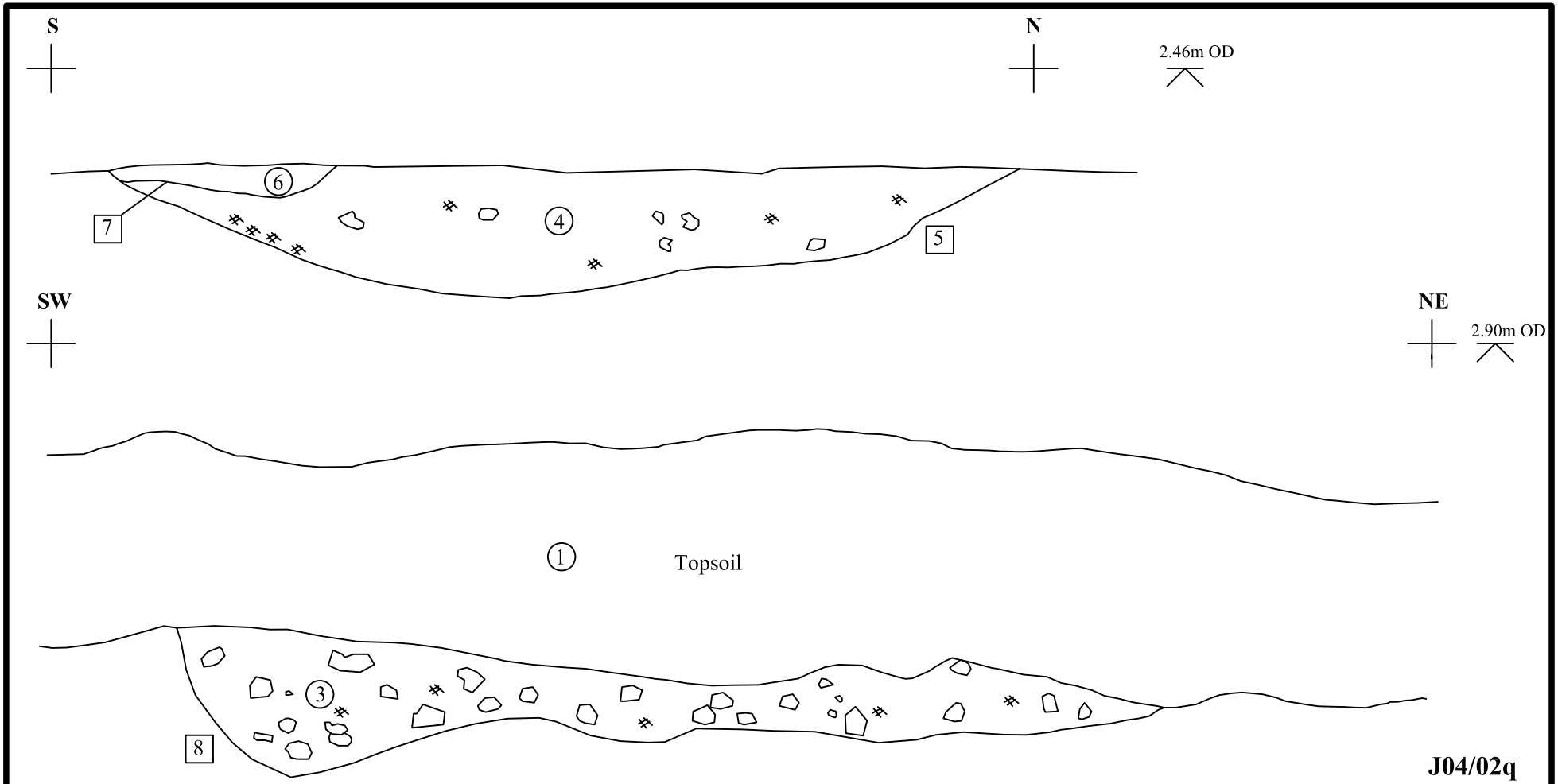
N18 Ennis Bypass, Site AR124, Clareabbey, Co. Clare

04E0022

Figure 3: Site plan

Scale 1:50 OSI Licence: AR0049406

TVAS IRELAND LTD



0 0.5m

N18 Ennis Bypass, Site AR124, Clareabbey, Co. Clare

04E0022

Figure 4: Sections of features 5, 7 and 8

Scale 1:10

TVAS IRELAND LTD

Plate 1. Burnt spread 3 and circular trough/pit 5. Looking north. Scale 1m

Plate 2. Trough/pit 5 half-sectioned. Looking west. Scale 1m

Plate 3. Section through burnt spread 3 and possible trough/pit 8. Looking north. Scales 1m and 0.2m