











Project Name:

N5 Ballaghaderreen Bypass

Licence Reference No:

10E0380

Townland Name:

Bockagh, County Roscommon

Site Type:

Bockagh 5 Burnt Spread

Nat. Grid Ref.

160271 / 297470

Consultant:

Irish Archaeological Consultancy Ltd.

Excavation Director:

James Kyle

Report Authors:

James Kyle & Shane Delaney

Type of Report

Stage (iv) Excavation Report

Status of Report:

Final

Date of Issue

30 March 2011



ACKNOWLEDGEMENTS

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Irish Archaeological Consultancy Ltd. would like to acknowledge the assistance of the following in bring the project to a successful conclusion:

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ABSTRACT

The following report describes the results of an archaeological excavation of Bockagh 5 (licence ref.: 10E0380), which was located along the route of N5 Ballaghaderreen Bypass, Co. Roscommon. Bockagh 5 was discovered during a second phase of archaeological testing along the proposed bypass undertaken in 2010 by IAC Ltd (10E0298).

The Stage (iii) excavation work at Bockagh 5 was undertaken on behalf of the National Roads Authority and it took place between the 21 and 22 September 2010.

Bockagh 5 was a small deposit of charcoal-rich soil, possibly the remnant of a hearth. It was found close to and may be associated with the cluster of burnt mounds (fulachta fiadh) identified in the townland of Bockagh (Bockagh 1–4) or a nearby post-medieval lime kiln identified at Bockagh 6.

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1 INTRODUCTION

1.1 General

This report presents the results of the Stage (iii) Excavation Services at Bockagh 5 carried out in the townland of Bockagh, Co. Roscommon (Figures 1–2). This work was undertaken as part of an archaeological mitigation program completed under the Archaeological Consultancy Services Contract for the N5 Ballaghaderreen Bypass, County Roscommon. Archaeological fieldwork was directed by James Kyle of Irish Archaeological Consultancy Ltd (IAC) under Licence as issued by the DOEHLG in consultation with the National Museum of Ireland (10E0380). The work was untaken on behalf of Roscommon County Council and the National Roads Authority and it took place between the 21 and 22 September 2010.

The purpose of the Stage (iii) Excavation Services is to preserve-by-record through appropriate rescue excavation any significant archaeological features or deposits discovered by earlier investigations, so as to mitigate impacts on the archaeological remains that may be discovered within the footprint of the project.

1.2 The Development

The N5 National Primary Route stretches from Westport (Co. Mayo), through Co. Roscommon to join the N4 National Primary Route at Longford Town; a distance of *c*. 134km. The proposed development consists of the construction of a Bypass, 13.6km long, to the north of Ballaghaderreen Town to upgrade the N5 to National Primary Route Standard.

The scheme traverses the following townlands (from west–east) Currinah, Cashelcolaun, Bohalas, Tonregee, Bockagh, Coolaghtane, Derrynagur, Ballyoughter, Toobrackan, Magheraboy, Tullaghanrock, Banada, Keelbanada, Ballinphuill, Teevnacreeva, Ratra and Rathkeery.

1.3 Topography & Site Description

Bockagh 5 located in the townland of Bockagh, lies at *c.* 150m Ordnance Datum (OD) and is located in the parish of Kilcolman. The site was located *c.* 2km north-east of the village of Bohalas and *c.* 2.5km north-west of Ballaghaderreen. The surrounding topography comprises undulating bogland drained by small water courses, with Bockagh Hill rising to the north (height of 227m OD).

In terms of the Irish National Grid Bockagh 5 is located at 160271 / 297470.

2 EXCAVATION RESULTS

2.1 Excavation Methodology

The excavation area measured *c.* 10.5m x 10.5m (110 sqm) and it had already been mechanically stripped of topsoil as part of the Stage (ii) Pre-excavation Services.

All archaeological features revealed were cleaned by hand and excavated and recorded using customised field record sheets or 'context sheets', as well as supporting records in the form of registers or lists of drawings, photographs, and the excavation director's field diary. All archaeological features found were drawn to scale, photographed and OD levels taken. Comprehensive drawings were produced at appropriate scales.

The excavation area and the locations of any features recorded within them were recorded by a surveyor using GPS survey equipment and have been tied into the National Grid for the report illustrations.

2.2 Excavation Results

A single deposit was identified at Bockagh 5. This was an isolated feature and was not directly associated with any other features however it was positioned within a landscape which included burnt mounds (*Fulachta fiadh*) nearby at Bockagh 1, 2, 3 and 4 and a lime kin at Bockagh 6 (Figure 2).

2.2.1 Natural Geology

Contexts:

Context	Fill of	L(m)	W(m)	D(m)	Basic Description	Interpretation
C2	N/A	N/A	N/A	N/A	Compact grey sandy clay.	Subsoil.

Finds: None.

Interpretation:

The natural subsoil consisted of a compact grey sandy clay with large stone inclusions and was uniform across the site. It was the glacially deposited natural subsoil underlying the entire area.

2.2.2 Phase 1: Possible Archaeological Deposit

2.2.2.1 Deposit C3

Contexts:

Context	Fill of	L(m)	W(m)	D(m)	Basic Description	Interpretation
C3	N/A	3.4	2.08	0.08	Heat affected stone and charcoal	Hearth

Finds: None.

Interpretation:

One deposit was excavated at the site (Figures 3 and 4; Plates 1 and 2). It was a thin irregular deposit of heat affected soil. It is possible that this represents an isolated hearth although there were no obvious signs of *in situ* burning.

2.2.3 Topsoil

Contexts:

Context	Fill of	L(m)	W(m)	D(m)	Basic Description	Interpretation
C1	N/A	Site	Site	0.39	Soft friable peat rich silty clay.	Topsoil.

Finds: None.

Interpretation:

The topsoil sealed all the archaeological features on site. It was a soft friable peat rich silty clay with frequent roots. No finds were identified from the topsoil.

3 SYNTHESIS AND DISCUSSION

3.1 Landscape setting

Bockagh 5 lies at *c.* 150m Ordnance Datum (OD). The surrounding topography comprises undulating bogland drained by small water courses, with Bockagh Hill rising to the north (height of 227m OD).

The Topography, Geology and Hydrology of the N5 Ballaghaderreen Bypass in Co. Roscommon

The N5 Ballaghaderreen Bypass is located in the north-west corner of Co. Roscommon and travels in a north-west direction where it joins the N5 Charlestown Bypass and continues into Co. Mayo. It is an inland county with an area of 2463 km² which is bounded by the River Shannon to the east and the River Suck to the west (Hickey & Drew 2003, 35). Roscommon has an abundance of surface streams and rivers, the majority of which feed into these two rivers (*ibid*, 37). The present road scheme traverses the River Lung which feeds into Lough Gara located *c*. 4 km to the north-east. A cluster of lakes are also situated to the SSW of the scheme *c*. 10km away; these all feed into the River Suck which meanders to the south. A number of caves have also been explored in the county. The largely fossil Pollawaddy cave is located near Ballaghaderreen (*ibid*, 38) and some 1.5km to the south of Frenchpark (directly to the south of the present scheme), there are four stream sinks (*ibid*, 39). Pollnagollum Cave and Doline is also located in the south-west of Frenchpark (*ibid*, 45).

The landscape of the scheme is undulating and the present road scheme passes through the Lung River Valley. Bockagh Hill (227m) rises to the north and Mullaghanoe Hill (234m) is situated to the WNW of the scheme. To the north-east, the Curlew Mountains are situated c. 10km away and just beyond these to the north are the Bricklieve Mountains. The Curlew Mountains form a narrow ridge of resistant Devonian Sandstone (Lee & Daly 2003, 8). The geology of the county is complex with both temporal and lateral changes in rock composition (ibid, 8). The majority of the rocks of Roscommon (90%) are limestone of various degrees of purity and structure (Hickey & Drew 2003, 35) however the landscape crossed by the N5 Ballaghaderreen Bypass is underlain with Devonian Sandstone (EPA 2011). Deposition of the Old Red Sandstone (ORS) rocks took place on a desert like environment which was subjected to intense erosion and then the deposition of gravel, and some clay in the flood plains of the meandering rivers (Lee & Daly 2003, 11). The Sandstones are reddish-brown in colour reflecting the avid sub-arial oxidising conditions under which these rocks were formed (ibid.). In these rocks, the groundwater circulation is probably limited to faults and fractures and the assumed low permeability is supported by the drainage in the area, which is often poor with most of the rainfall running off to the nearest surface watercourse (ibid, 36). In the townland of Toobrackan, the underground geology consists of both Devonian and Carboniferous Sandstones (EPA 2011). The Lower Carboniferous was a period of marine deposition, where on land rivers deposited sand and silts; now represented by the Boyle Sandstone (Lee & Daly 2003, 11).

Many of the sub-soils in Co. Roscommon were laid down during the last glaciation affecting Ireland (Lee & Daly 2003, 11). The sub-soils underlying the present scheme consist of Devonian Sandstone Tills and cut-over peat with the exception of Toobrackan, where Carboniferous Sandstone Tills are also present (EPA 2011). Till is the dominant Quaternary deposit and has a variable thickness in Roscommon; it is generally thin or absent in uphill areas, with bedrock outcropping frequently, and thickness in low-lying areas where till thickness of over 30m are not uncommon

(Hickey & Drew 2003, 37). It is a diverse material that is largely deposited subglacially and has a wide range of characteristics due to the variety of parent materials and different processes of deposition (Lee & Daly 2003, 17). The deposition of peat occurred in post-glacial times with the onset of wetter and warmer climatic conditions (*ibid.*). Peat is an unconsolidated brown to black organic material comprising a mixture of decomposed and undecomposed plant matter that accumulated in a water logged environment (*ibid.*). The over lying soils of the scheme consist of Surface Water Gleys and Ground Water Gleys as well as Basin Peats and Blanket Peats (EPA 2011). Surface water gleys are formed in slowly permeable materials as a result of poor drainage of surface water and ground water Gleys are soils whose drainage problems stem not from the soil material but from their topographic position close to the water table (Conway 2011).

3.2 Discussion and Conclusion

Bockagh 5 comprised a single deposit (possible hearth). This was an isolated deposit and was not directly associated with any other features however it was positioned within a landscape which included burnt mounds (*Fulachta fiadh*) nearby at Bockagh 1, 2, 3 and 4 and a lime kin at Bockagh 6 (Figure 2). Bockagh 1–4 represent an extensive burnt mound complex with dates spanning the Bronze Age (Bockagh 1: 1489–1317 BC¹ and 1299–1059 BC; Bockagh 2: 1900–1740 BC; Bockagh 3: 1208–1012 BC; Bockagh 4: 2461–2209 BC, 1115–932 BC, and 1041–911 BC). The lime kiln at Bockagh 6 dates to the post-medieval period. It is possible that the deposit at Bockagh 5 is a peripheral feature associated with the burnt mound complex, the lime kiln, or is simply an isolated feature unrelated to any of these sites. In isolation this site is of little archaeological significance.

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¹ All dates are quoted to 2 Sigma calibrations

4 BIBLIOGRAPHY

Bennett, I. (ed.) 1970-2007. Excavation Bulletin. Wordwell, Bray.

Doyle, T. 2009. N5 Ballaghaderreen Bypass Scheme, Co. Roscommon, Report on Archaeological Testing of Areas G-P (09E476). Unpublished report prepared by Headland Archaeology Ltd. for Roscommon County Council.

Hickey, C. & Drew, D. 2003 Caves of County Roscommon *Proceedings of the University of Bristol Spelaeological Society* **23**(1), 35–50.

Janes, T. 2010. Stage 1 Testing – Areas 1–4 on the N5 Ballaghaderreen Bypass (10E0298). Unpublished report prepared by IAC Ltd for Roscommon County Council.

Kyle, J. 2010. Stage 1 Testing – Areas 5–7 on the N5 Ballaghaderreen Bypass (10E0299). Unpublished report prepared by IAC Ltd for Roscommon County Council.

Lee, M. & Daly, D. 2003 County Roscommon Groundwater Protection Scheme. Geological Survey of Ireland in collaboration with Roscommon County Council.

National Roads Authority. 2006. Guidelines for the Assessment of Archaeological Impact of National Road Schemes.

'Why Ballaghaderreen changed from Mayo to Roscommon', *Echoes of Ballaghaderreen*, 12/1998.

Other Sources

Record of Monuments and Places (RMP), The Department of the Environment, Heritage and Local Government, 7 Ely Place Upper, Dublin 2.

Topographical Files of the National Museum of Ireland, Kildare Street, Dublin 2.

Electronic Sources

Conway, J. 2011 Soil Classification. *John Conway*, *Rocks, Soil, Landscape*. http://jscnwy.wordpress.com/ [accessed on 24 March 2011]

EPA 2011 ENVision; *Environmental Protection Agency* Soil maps of Ireland http://www.epa.ie/InternetMapViewer/mapviewer.aspx [accessed on 22 March 2011]

www.excavations.ie - Summary of archaeological excavation from 1970-2005

www.archaeology.ie - DoEHLG website listing all SMR sites with aerial photographs

<u>www.osi.ie</u> – Ordnance Survey aerial photographs (1995, 2000 & 2005) and historic OS mapping (first edition 6" and 25")

APPENDIX 1 CATALOGUE OF PRIMARY DATA

Appendix 1.1 Context Register

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Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds/ecofacts	
1	N/A	Site	Site	0.39m	Topsoil	Soft friable peat rich silty clay with frequent roots.	None	
2	N/A	Site	Site	N/A	Subsoil	Compact grey sandy clay with large stone inclusions.	None	
3	N/A	3.4	2.08	0.08	Deposit	Irregular north–south orientated sloped deposit of soft friable dark brown charcoal rich clay with mid sized heat shattered stone inclusions.	None	

Note: All archives and ecofacts are currently in storage with IAC Ltd at The Library, Chapel Street, Lismore, Co. Waterford awaiting final submission to facilities at the National Museum of Ireland.

Appendix 1.2 Finds Register

No finds were recovered.

Appendix 1.3 Photograph Register

Photo number	Context #	Direction	Туре	Comments	
1651	3	North	Section	Section face of spread	
1652	3	North	Section	Section face of spread	
1654	3	South	Post ex	Post ex of C3	
1655	3	East	Post ex	Post ex of C3	
1656	3	East	Post ex	Post ex of C3	
1657	3	South	Post ex	Post ex of C3	

Appendix 1.4 Plan Register and Section Register

Drawing No. Plan/ Sections		Description	Scale
1	01:01	Section of C3 spread	01:10
	01:02	Pre limit of material overlaid on the post ex plan	01:20

APPENDIX 2 GLOSSARY OF TECHNICAL TERMS

Access Road A new private/public road provided for access to lands

where previous access has been cut off by road

development

Barrow Circular burial monument of the Bronze Age and Iron

Age with a central area defined by a ditch and an

external bank

Bivallate Two sets of ramparts

Bronze Age c. 2400–800 BC the introduction of metallurgy in

Ireland. A time of technological, social and economic

development and change

Cairn Mound composed of stones, sometimes with internal

structures; usually a burial monument, but sometimes

used as a memorial

Cashel A ringfort with stone instead of earthen banks

Cist Pits lined with stone flags containing a burial

Code of Practice The Code of Practice is an agreement between the

Minister (Department of Environment, Heritage and Local Government) and the National Roads Authority acting on behalf of the Authority and the local authorities in relation to archaeology and the

development of national roads

Chainage Road scheme centreline distance in metres from

scheme start point to finish, in this case south to north

Context No The individual number used to record a feature

uncovered in an archaeological excavation.

CPO Compulsory Purchase Order used to compulsorily

acquire land required for the development, in this case

a road

Cropmark Where buried features such as ditches or walls affect

the covering soil and alter the colour of the surface

vegetation and/or crop

Directions Under 2004 National Monuments (Amendment)Act

Section 14A(2) – any works of an archaeological nature that are carried out in respect of an approved road development shall be carried out in accordance with the directions of the Minister, which directions shall be issued following consultation by the Minister with the

Director of the National Museum of Ireland

DoEHLG Department of the Environment Heritage and Local

Government

Dún A ringfort, usually with earthen banks, but a name also

given to prehistoric ceremonial enclosures

Earthwork Any monument made entirely or largely of earth

Enclosure Any monument consisting of an enclosing feature, such

as a bank or a ditch, usually earthen, such as barrows

or ringforts.

Excavation Or resolution is an archaeological term and means the

manual and mechanical excavation by an archaeologist-led team with specific objectives with regard to information, preservation, recording, etc. of archaeological information. Its purpose is to fully

investigate archaeological deposits and features

Feature Archaeological feature, an artificial (man-made)

structure or cut or deposit

Field system Pattern of fields, now no longer in use, sometimes

visible as low earthworks and often associated with

medieval or earlier settlements

Fosse A ditch

Fulacht fiadh Bronze Age cooking site characterised by a crescentic

mound of burnt stone; usually built in damp areas, where the trench for cooking in would fill with water; usually found in groups and also referred to as Burnt

Mounds (plural: fulachta fiadh).

Geophysics A non-invasive survey method involving one or more of

the following; earth resistance, various types of

magnetometry and ground penetrating radar

Henge Large earthen embanked enclosure with an internal

ditch and external bank

Hillfort Large late Bronze Age/Iron Age defensive hilltop

enclosure defined by one or more large ramparts and

consisting of banks with external ditches

Holy well A natural spring or well associated with a saint or a

tradition of cures

In situ Archaeological features or artefacts found in their

original position in the ground

Iron Age Prehistoric period from c. 500 BC to c. AD 500. Also

described as the Celtic period, when influences from central Europe and Britain led to the adoption of the Celtic language and the development of an Irish style of

Celtic art.

Landtake The land acquired for the road development (see CPO)

Licencee An archaeologist qualified under the DoEHLG to direct

the excavation of archaeological sites

Lime kiln A stone and brick structure utilised for the burning of

lime. Mostly built in the 18th and 19th centuries when the burning of lime as an agricultural fertiliser was

widespread.

Megalithic tomb Literally 'large stone,' a Neolithic tomb

Mesolithic Prehistoric period from *c*. 7000–4000 BC

Moated site An Anglo-Norman defended homestead consisting of a

square or rectangular enclosure defined by a bank and a broad, flat-bottomed ditch; date to the thirteenth and fourteenth centuries and often built in damp land in

order that the moat would fill with water

Motte and bailey An Anglo-Norman defensive structure consisting of a

large, steep-sided earthen mound – the motte – with a rectangular enclosure at the base – the bailey; date

from the twelfth and thirteenth centuries

Multivallate More than two sets of ramparts

National Monument A monument or the remains of a monument the

preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic or archaeological interest attaching thereto.

NGR National Grid Reference

NMI National Museum of Ireland

Natural Sub soils located beneath the topsoil in which

archaeological features are located

Neolithic Pertaining to the New Stone Age c. 4000–2500 BC,

when agriculture and cattle husbandry was developed

in Ireland

Occupation site A settlement site; the term is usually used to indicate a

prehistoric site

OS Ordnance Survey

Passage tomb Megalithic tomb dating to the Neolithic characterised by

an oval or circular mound, kerbing, and a passage, often terminating with a chamber in which cremated

burials were placed; often situated on hilltops

Rath A ringfort, usually with earthen banks, or any circular

enclosure

Raheen Small fort

Resolution See excavation above

Ring barrow Barrow with raised or domed central area

Ring ditch Barrow with flat or dished central area

Ringfort Early Christian (c. AD 500 to 1100) defended secular

settlement consisting of a bank and external ditch defining a central circular area that contained dwelling structures of occupants; also called fairy fort, rath, lios, or cashel (the latter constructed of stone as opposed to

earth)

RMP Record of Monuments and Places – a list of

monuments and places and accompanying maps complied by the State. Sites designated an RMP are subject to statutory protection under the National

Monuments Act.

Roadtake The outer edge of the road including any embankment.

Souterrain Underground passages, probably built for storage

purposes or possibly as temporary refuges; often

associated with ringforts

Standing stone Upright stone, usually single but sometimes in pairs

and groups. They can be shaped or natural and are usually dated to the Bronze Age but occasionally to the Neolithic. Used to mark routes, sacred areas,

boundaries or, occasionally, burials

Site Archaeological site – an individual or group of artefacts

and/or features in an area.

Test excavation A form of archaeological excavation where the purpose

is to establish the nature and extent of archaeological deposits and features present in a location that is proposed for development. Its purpose is not to fully

investigate those deposits or features.

Test trenching See Test excavation

Tower house Small castle, usually of three storeys, dating from the

14th to 16th centuries

Tumulus Burial mound composed of earth, sometimes with

internal structures

Uncoursed masonry Wall laid in a random form

Univallate Single set of ramparts

Zone of archaeological Potential

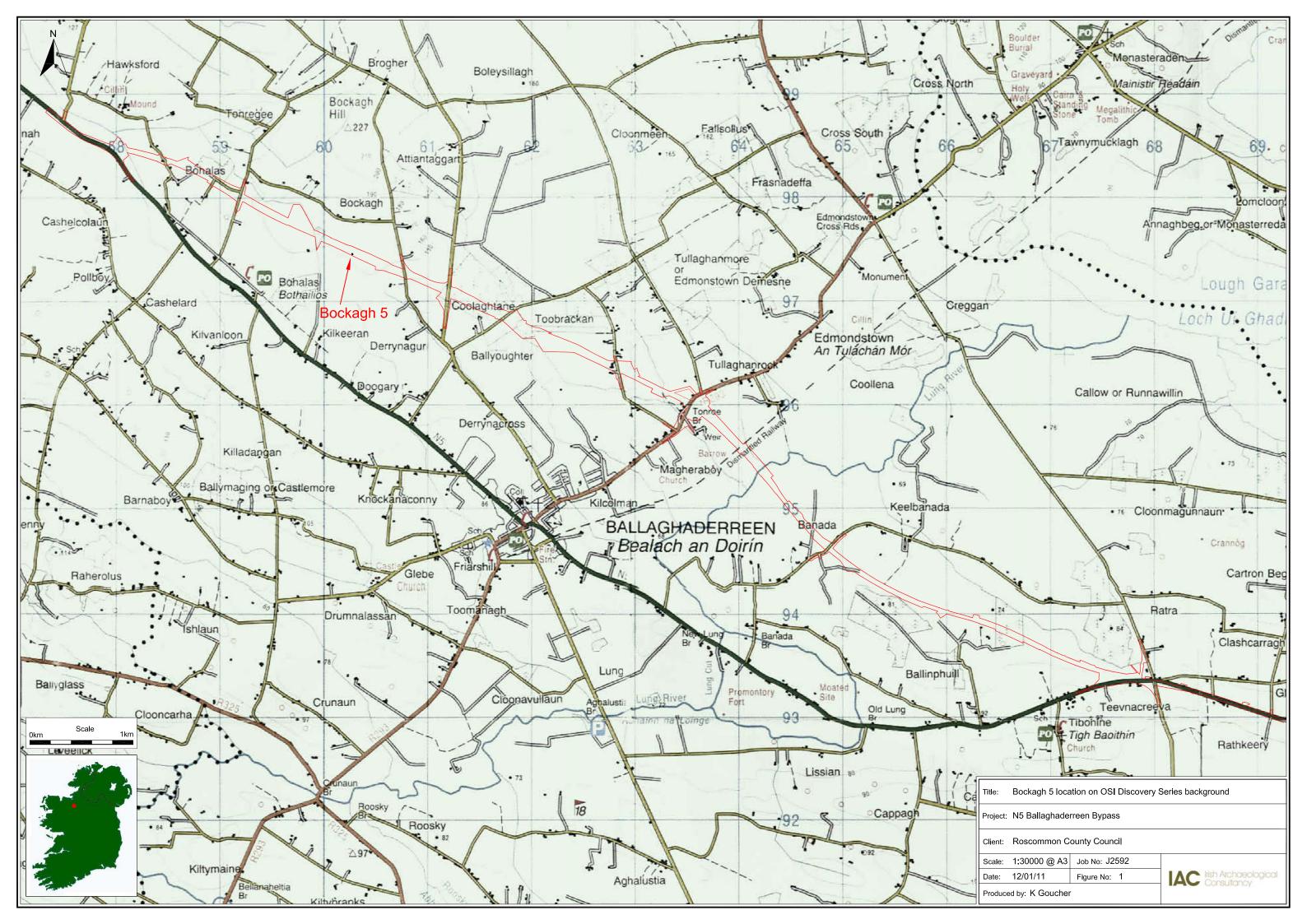
A buffer area around an archaeological site or

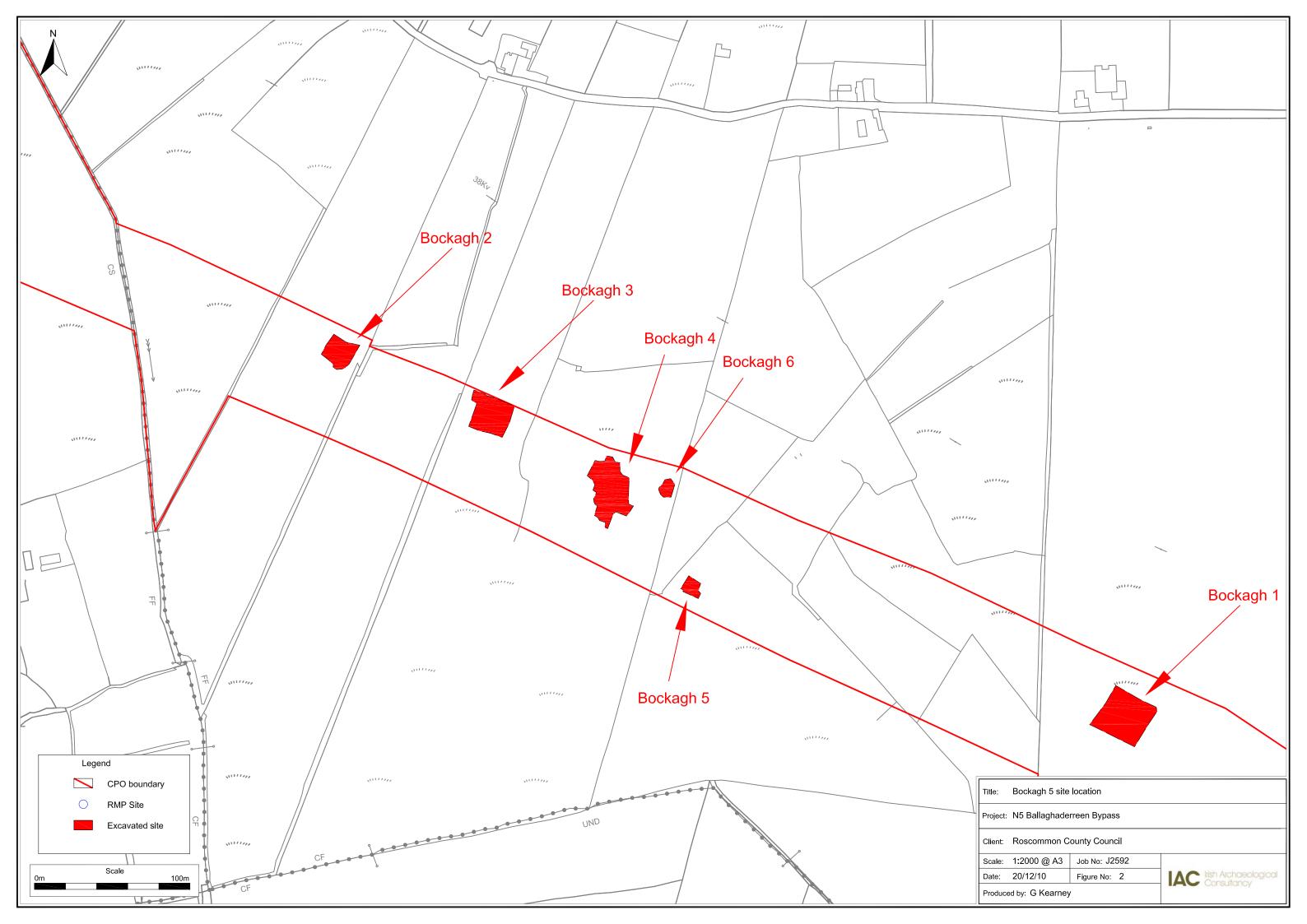
monument where greatest potential exists for the

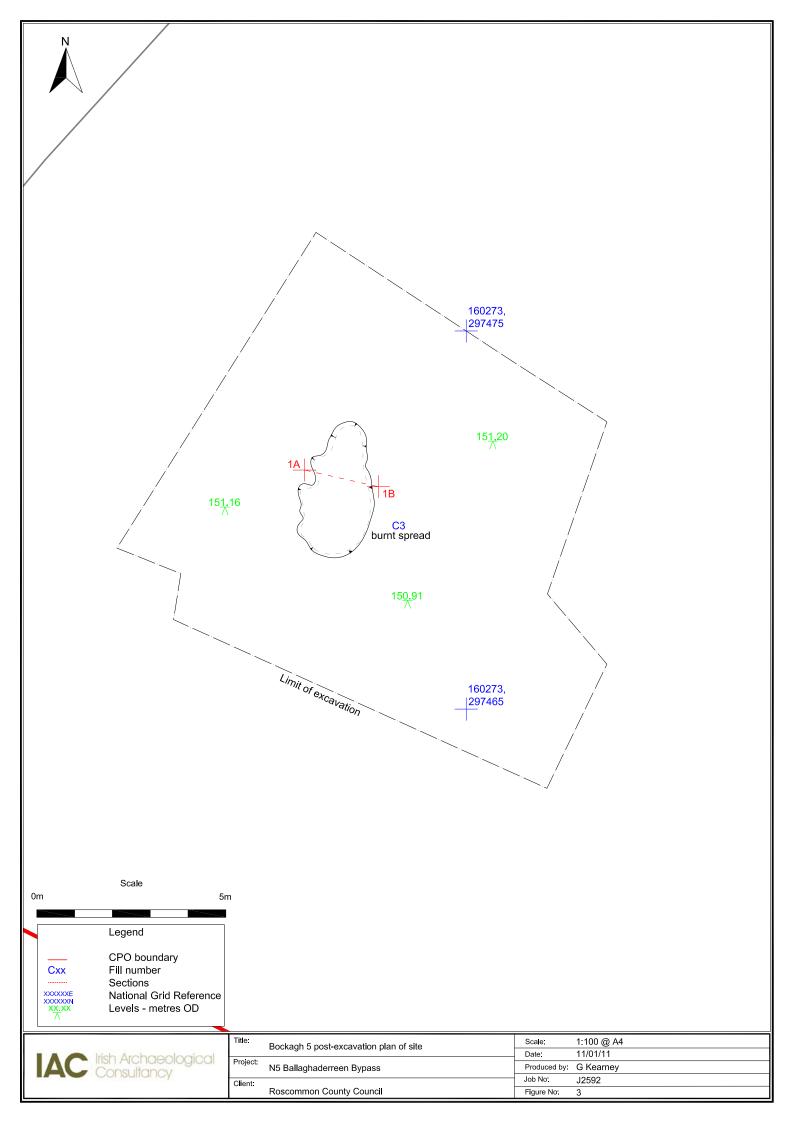
recovery of archaeology associated with a site or monument

APPENDIX 3 NRA DATABASE ENTRY

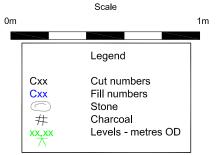
Database entry	Comment
Excavation number	10E0380
Townland	Bockagh
Site name	Bockagh 5
County	Roscommon
Project reference	N/A
Year of excavation	2010
Grid reference (Easting)	160271
Grid reference (Northing)	297470
OD Height (m)	150m
Landscape setting	The site was located <i>c</i> . 2km north-east of the village of Bohalas and <i>c</i> . 2.5km north-west of Ballaghaderreen. The surrounding topography comprised undulating bogland drained by small water courses.
Project Archaeologist	Deirdre McCarthy
Site Director	James Kyle
Archaeological consultancy	Irish Archaeological Consultancy Ltd.
Identification technique	Archaeological Test Trenching
Site type	Burnt Spread
Site activity	Burnt Spread
Dating period	Undated
Radiocarbon dates	None
Dendro-chronological dates	None
Descriptions	Excavations revealed a small deposit of charcoal rich soil; possibly the remnants of a hearth.
Artefacts	None
Environmental evidence	None
Additional information	N/A
Publication	Publication proposal submitted to client.













Title:	Bockagh 5 section	Scale:	1:20 @ A4
		Date:	10/01/11
Project:	N5 Ballaghaderreen Bypass	Produced by:	G Kearney
Client:		Job No:	J2592
0	Roscommon County Council	Figure No:	4

Plates

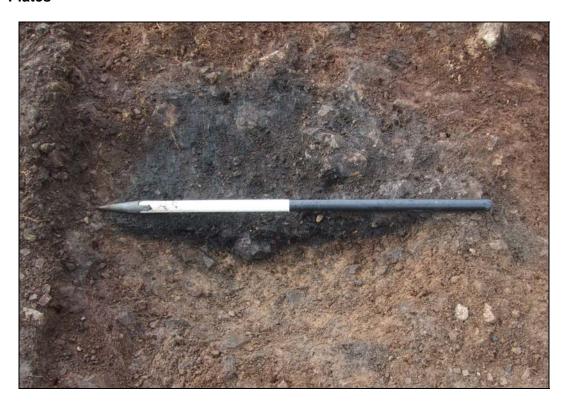


Plate 1: Mid-excavation section of C3



Plate 2: Post-excavation of C3