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N6 KINNEGAD – ATHLONE SCHEME PHASE 2: KILBEGGAN TO ATHLONE DUAL CARRIAGEWAY



SITE A016/048; E2675: MOYALLY 5

FINAL REPORT

ON BEHALF OF WESTMEATH COUNTY COUNCIL

26 JUNE 2009

IAC Irish Archaeological
Consultancy

PROJECT DETAILS

Project Reference No.	WH/00/112
Project	N6 Kinnegad – Athlone Road Scheme: Phase 2, Kilbeggan – Athlone Dual Carriageway
Ministerial Direction Reference No.	A016/048
NMS Registration Number	E2675
Excavation Director	David Bayley
Senior Archaeologist	Shane Delaney
Consultant	Irish Archaeological Consultancy Ltd, 120b Greenpark Road, Bray, Co. Wicklow
Client	Westmeath County Council
Site Name	Moyally 5
Site Type	Isolated Neolithic Hearth
Townland	Moyally
Parish	Kilmanaghan
County	Offaly
NGR (Easting)	E 221215
NGR (Northing)	N 237283
Chainage	16130
Height m OD	78.2m OD
RMP No.	N/A
Excavation Start Date	2 February 2006
Excavation Duration	2 days
Report Type	Final
Report Date	26 June 2009
Report By	David Bayley

ACKNOWLEDGMENTS

This report has been prepared by Irish Archaeological Consultancy Ltd on behalf of Westmeath County Council and the National Roads Authority in advance of the construction of the N6 Phase 2: Kilbeggan to Athlone Dual Carriageway Scheme.

The excavation was carried out in accordance with the Directions of the Minister for the Environment, Heritage and Local Government (DOEHLG), in consultation with the National Museum of Ireland (NMI) issued under Section 14 of the National Monuments Acts 1930–2004.

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ABSTRACT

Irish Archaeological Consultancy Ltd (IAC), funded by Westmeath County Council (WCC) and the National Roads Authority (NRA), undertook an excavation in the townland of Moyally at the site of Moyally 5 in advance the proposed N6 Phase 2: Kilbeggan to Athlone Dual Carriageway Scheme (Figure 1). The following report describes the final results of archaeological fieldwork at that site. The area was fully excavated by David Bayley under Ministerial Direction (A016/048) and NMS Registration Number E2675 issued by the DOEHLG in consultation with the National Museum of Ireland. The fieldwork took place between 2 and 3 February 2006.

Moyally 5 contained a single hearth. AMS Radiocarbon Dating of the fill (C5) produced a 2 Sigma calibrated date range of 2859–2574 BC, dating it to the late Neolithic period. There were no artefacts of significance recovered from secure archaeological contexts. A single metal nail of modern date was recovered from topsoil.

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1 INTRODUCTION

1.1 General

This archaeological report describes the final results of an excavation carried out at the site of Moyally 5 in the townland of Moyally, Co. Offaly (Figures 1 and 2) as part of an archaeological mitigation programme for the N6 Phase 2: Kilbeggan to Athlone Dual Carriageway Scheme. Archaeological fieldwork was carried out under ministerial direction by David Bayley of Irish Archaeological Consultancy Ltd (IAC Ltd) and was funded by WCC & NRA under the National Development Plan 2000–2006, 2007–2013 and the EU Structural fund.

Moyally 5 (Figure 3) was identified as a result of archaeological assessment undertaken by IAC Ltd. in August 2005 (Ministerial Direction No. A016/029; NMS Registration No. E3273). All features identified during the assessment phase (area of intense burning) were subsequently excavated between the 2 and 3 February 2006 with a team of 1 director, 1 supervisor and a maximum of 4 site assistants.

The site was located 40m from the western field boundary in sloping pastureland at a height of 78.2m OD, c. 400m north of the N80 and c. 2.5km southeast of Moate, (Offaly OS sheets 1). To the north c. 900m was the site of RMP OF001-002, an archaeological complex containing the ruins of Moyally Castle and associated earthworks. Moyally 5 had not been previously identified and was not a recorded monument.

The site was assigned the following identification data:

Site Name: Moyally 5; Ministerial Direction No.: A016/048; NMS Registration No.: E2675; Route Chainage (Ch): 16130; NGR: 221215/237283.

1.2 Proposed Development

The proposed N6 Kinnegad–Athlone Scheme is to be constructed in two phases. The Phase 2 Kilbeggan–Athlone scheme will consist of a dual carriageway that will run for a distance of approximately 29km. The location of the route is predominantly to the south of the existing N6 and there will be access to the local road network through the seven grade separated junctions located at Athlone, Farnagh, Moate and Kilbeggan. The cross-section of the mainline consists of 2m wide verges, 2.5m wide hard shoulders, 7m wide two-lane carriageways and a 3m wide central reserve. This central reserve will accommodate 1m hard strips and a safety barrier. In addition to the mainline dual carriageway there is a further 0.3km of standard dual carriageway to the south of Athlone Interchange to connect to the existing N6 and 1.2km to the south of Kilbeggan Interchange to connect to the existing N52.

1.3 Archaeological Requirements

The archaeological requirements for the N6 Kilbeggan to Athlone Dual Carriageway Scheme, are outlined in the Ministerial Directions issued to Westmeath County Council by the Minister for Environment, Heritage and Local Government under Section 14A (2) of the National Monuments Acts 1930–2004 and in the terms of the contract between Westmeath County Council and Irish Archaeological Consultancy Ltd. These instructions form the basis of all archaeological works undertaken for this development. The archaeological excavation works under this contract are located between the townlands of Kilbeggan South, Co. Westmeath and Creggan Lower, Co. Westmeath.

The proposed N6 was subjected to an Environmental Impact Assessment, the archaeology and cultural history section of which was carried out by Sheila Lane and

Associates and presented in 2003. The Record of Monuments and Places, the Sites and Monuments Record, Topographical files, aerial photography, the Westmeath Archaeological Urban Survey and literary sources were all consulted. One phase of geophysical survey was also conducted at selected sites along the proposed route by Target Archaeological Geophysics. As a result of the paper survey, field inspections and geophysical survey, a number of potential sites were recorded in proximity to this section of the overall route alignment.

Advance archaeological testing was completed by IAC Ltd and excavation of the sites identified during testing was conducted by IAC Ltd on behalf of Westmeath County Council.

1.4 Methodology

The topsoil was reduced to the interface between natural subsoil and topsoil using a 20 tonne mechanical excavator equipped with a flat toothless bucket under strict archaeological supervision. The remaining topsoil was removed by the archaeological team with the use of shovels, hoes and trowels in order to expose and identify the archaeological remains. A site grid was set up at 10m intervals and was subsequently calibrated to the national grid using GPS survey equipment.

All features were subsequently fully excavated by hand and recorded using the single context recording system with plans and sections being produced at a scale of 1:50, 1:20 or 1:10 as appropriate.

A complete photographic record was maintained throughout the excavation. Digital photographs were taken of all features and of work in progress.

An environmental strategy was devised at the beginning of the excavation. Features exhibiting large amounts of carbonised material were the primary targets.

In the instances where artefacts were uncovered on site they were dealt with in accordance with the guidelines as issued by the NMI and where warranted in consultation with the relevant specialists. All artefacts, ecofacts and paper archive are currently stored in IAC offices, Lismore, Co Waterford and will ultimately be deposited with the National Museum of Ireland.

Radiocarbon dating of the site was carried out by means of AMS (Accelerator Mass Spectrometry) dating of identified and recommended charcoal samples. All calibrated AMS dates in this report are quoted to 2 Sigma.

All excavation and post excavation works were carried out in consultation and agreement with the Project Archaeologist, the National Monuments Section of the DOEHLG and the National Museum of Ireland.

2 EXCAVATION RESULTS

Detailed descriptions of contexts are given in Appendix 1. The site matrix is detailed in Figure 6.

2.1 Phase 1: Natural Drift Geology

The dominant bedrock geology identified along the corridor of the proposed route are Lower Carboniferous rocks, mainly limestone lithologies, which overlay Devonian Old Red Sandstone rocks. Carboniferous volcanic rocks were also identified as being present locally in the form of sills passing through the bedrock sequences (Riada Consult, 2003). The underlying geology of the area is overlain by occasional moraines and small glacial hillocks covered by grey brown podzolic soils.

The subsoil (C2) above bedrock encountered at Moyally 5 was uniform across the site and consisted of a mid brown boulder clay.

2.2 Phase 2: Neolithic Activity

The phase two archaeological activity at Moyally 5 comprised a hearth. It is described below (Figure 6).

2.2.1 Hearth C3

Context	Fill of	L(m)	W(m)	D(m)	Basic Description	Interpretation
3	N/A	1.17m	1.17m	0.14m	Sub-round irregular cut	Cut of hearth
4	C3	1.17m	1.17m	0.12m	Orange silty-clay of with charcoal inclusions	Primary fill of hearth
5	C3	0.4m	0.2m	0.1m	Black silty, charcoal rich clay	Upper fill of hearth

Finds: None

Interpretation:

Cut C3 represents a hearth that contained two fills. Fill C4 was fire reddened clay around the base of the cut which indicated that it was subject to intense heat. Fill C5 was charcoal rich and represented the use of the hearth (Figures 4 and 5; Plates 1–3). The hearth was isolated, with no other features in the vicinity, so the purpose of this hearth was not determined.

AMS Radiocarbon dating of young oak charcoal (*Quercus* sp.; 1g (O’Carroll, Appendix 2.2)) recovered from the secondary fill (C5) returned a date of 4100 +/- 25 BP (UBA 9154). The sample returned a 2 Sigma calibrated date of 2859–2574 BC, placing it within a Neolithic date range (Appendix 2.3).

2.4 Phase 3: Topsoil

2.4.1 Topsoil

Context	Fill of	L(m)	W(m)	D(m)	Basic Description	Interpretation
1	N/A	N/A	N/A	0.4m	Mid brown sandy clay	Topsoil

Finds:

Context	Find Number	Material	Period	Description
C1	E2675:1:1	Metal-iron	Post-medieval/modern	Possible nail

Interpretation:

Phase 3 represents the topsoil that sealed all of the archaeological deposits and features at Moyally 5 (Figure 6). The artefact recovered from the topsoil has been

examined by a specialist and has been described as a non-diagnostic iron stem, possibly a nail with a surface protrusion that may have been caused by corrosion. It is most likely post-medieval or later in date (Johnson, Appendix 2.1).

3 SYNTHESIS AND DISCUSSION

3.1 Landscape Setting

The new route of the N6 runs from south of Kilbeggan town to east of Athlone Co. Westmeath, crossing through the northern part of Co. Offaly for approximately 7.5km of its entire length. The landscape of this area is comprised of generally flat to undulating terrain. The underlying geology of the area is dominated by carboniferous limestone and is overlain by occasional glacial features such as moraines and eskers. The eskers dominate to the north and south of most of the route, with moraines featuring along parts of the western section toward Athlone. The soil cover varies considerably across the scheme, passing through soil complexes, grey brown podzols, boglands and alluvial deposits. The area is drained by the River Shannon through its tributaries, the Brosna, Boor, Cloghatanny and Gageborough rivers.

The site at Moyally 5 was located 2km southeast of Moate town on a gently undulating field which sloped from east to west (78.2m OD). The underlying geology of the area is carboniferous limestone, which is overlain with occasional small glacial hillocks, forming a gently undulating low-lying landscape. Soil cover in this area consists of grey brown podzolics of the Patrickswell series. A bog is located in the northern part of the townland and lies 600m north of the site. A smaller bog is located 1km to the southwest of the site in Lurgan/Culleenagower/Newtown/Cloghanamina townlands (6" OS map 1834–1842). A small stream was recorded 600m north of the site on the 25" OS map (1887–1913).

3.2 Archaeological Landscape

Apart from the publication of archaeological inventories in some midland counties, such as Offaly (O'Brien and Sweetman 1997) for example (there is no archaeological inventory for Co. Westmeath) and peatland surveys by the Irish Archaeological Wetland Unit (for example Moloney *et al.* 1993) our knowledge of the prehistoric archaeology of the midlands is limited. We are reliant on data stored at the RMP (see Appendix 3) and information from a limited number of excavations within Westmeath and Offaly. This road scheme joins a number of recent large-scale commercially-driven archaeological excavations, most notably the gas pipeline to the west (Grogan *et al.* 2007) which runs mostly parallel a short distance to the north of the N6, but unfortunately evidence for Neolithic settlement remains relatively minor in this region.

The majority of sites along the pipeline were middle-to-late Bronze Age in date while there was also a small number of early Bronze Age sites (most of them burnt mounds or related sites). Early to middle Neolithic sites were absent while only a very small number were dated to the late Neolithic period: the most striking example being the Grooved Ware timber circle at Whitewell, Co. Westmeath, approximately 15km northeast of Kilbeggan (Phelan 2007, 359–50). The heavy soils and generally marginal landscape which the N6, and certain parts of the pipeline, traverse was unsuited to early farmers hence the lack, to date, of early or middle Neolithic archaeological evidence. The Whitewell circle may have links with the passage tomb cemetery at Loughcrew, Co. Meath, approximately 37km to the northeast (Grogan *et al.* 2007, 137). Other late Neolithic activity in the region includes the site of Brackin, Co. Westmeath, where a Carrowkeel bowl was found, and the possible passage tomb 11km to the southeast of Whitewell at Croghanhill, Co. Offaly. Also, a carved stone ball found at the Hill of Uisneach was possibly imported from the Orkneys (Grogan *et al.* 2007, 138).

Further west towards Athlone there are very few Neolithic monuments and the closest to the N6 is a portal tomb at Mihanboy on the western edge of the town (Murtagh 2000, 9). Recent archaeological surveys on the bogs in Offaly have

revealed Neolithic activity, for example Cloncreen bog (McDermott 2002) and Mountlucas bog (Moore *et al.* 2003), but they are far removed from the N6 excavations. Therefore, the small number of late Neolithic sites revealed along the N6, including a pit at Moyally 1, Moyally 5 and Ardballymore 1 and 2, are an important reminder that, despite the absence of early to middle Neolithic monuments, at least low level late Neolithic settlement occurred in this region.

3.3 Archaeological Typology Background

The site at Moyally 5 comprised an isolated hearth, dating to the Neolithic period. There was not much evidence of Neolithic activity in the general area of Moyally, as this hearth and an isolated pit from Moyally 1, c. 500m to the northwest, were the only features that dated to this period.

3.4 Discussion

3.4.1 Phase 1: Natural deposits

This phase represents the natural subsoil, which was cut or sealed by all subsequent archaeological features. For the purposes of recording on-site this phase of activity was allocated the context number C2. At the site of Moyally 5 the subsoil was uniform throughout consisting of mid brown boulder clay.

3.4.2 Phase 2: Neolithic activity

Phase 2 represented the archaeological activity at the site at Moyally 5. This phase was represented by the presence of a single isolated hearth feature containing two fills (C4 and C5). AMS Radiocarbon Dating of charcoal (1g of young oak) (O'Carroll, Appendix 2.2) retrieved from fill C5 produced a 2 Sigma calibrated date of Cal 2859–2574 BC (UBA 9154, Appendix 2.3) placing it within a late Neolithic date range. It is probable that this pit is related to another isolated pit, recorded at site Moyally 1 (Bayley 2009a) c. 500m to the northwest, that produced a 2 Sigma calibrated date of Cal 2872–2629 BC. These two features were the only two features in the general area that dated to the Neolithic period, so it is highly likely that they are related. Individually, neither of these isolated features would be considered to be particularly important, but taken together they show that there was sporadic late Neolithic activity in the Moyally area. In addition to these an isolated late Neolithic pit was recorded at Ardballymore 1 (Bayley 2009b) and nine pits and two postholes were excavated at adjacent Ardballymore 2 (Bayley, 2009c). Both of these sites were positioned c. 9.5km to the east of Moyally 5. Furthermore a late Neolithic pit was recorded adjacent to a Bronze Age burnt mound activity at Kilbeg 6 (Lyne 2009), c. 8.3km to the east of Moyally 5. These were the only Neolithic features recorded on the N6 Kilbeggan – Athlone scheme. These sites show that there was small scale late Neolithic activity in the general area.

The sites at Moyally indicate sporadic activity in the area during the Neolithic at Moyally 1 and 5, continuing through the Bronze Age as evidenced by the pits and possible triangular structure recorded at Moyally 6 (Bayley 2009g). The two bowl furnaces at Moyally 2 (Bayley 2009d) produced an Iron Age date, showing yet more sporadic activity in the area during this period. The ringfort at Moyally 1 returned an early medieval AMS date (Bayley 2009a), indicating that the occupation of the area was becoming more permanent during this period. Moyally castle, which was constructed during the medieval period shows that the permanent occupation of the area continued into the medieval period. The features at Moyally 3 (Bayley 2009e) and Moyally 7 (Bayley 2009f) show that land improvement and general agricultural activity took place during the post-medieval/modern date.

None of the sites recorded at Moyally, other than the ringfort at Moyally 1, would be considered to be important on an individual basis, but taken together they show that there was continual short-term activity in the area from the Neolithic through to post-medieval times.

3.4.3 Phase 3: Topsoil

This phase represents the topsoil that sealed all of the archaeological deposits and features on site. A single piece of metal recovered from the topsoil was sent to Catherine Johnson for recommendations in relation to conservation and further analysis (Johnson, Appendix 2.1).

The item was identified as being a modern straight iron stem with tapering terminal that did not warrant further specialist works in terms of analysis or conservation.

4 CONCLUSIONS

Moyally 5 consisted of a single late Neolithic hearth. As it was an isolated feature, the exact function of this hearth was not determined although it is possible that this was a hearth associated with a small camp. AMS Radiocarbon dating of charcoal (young oak) recovered from fill C5 produced a 2 Sigma calibrated date of Cal 2859–2574 BC, dating it to the late Neolithic period. There were no artefacts of significance recovered from secure archaeological contexts with the only artefact recovered from site coming from topsoil and being post-medieval or later in date.

The hearth at Moyally 5 was contemporary with an isolated pit recorded at Moyally 1 located c. 550m to the northwest. Individually, neither of these isolated features would be considered to be particularly important, but taken together they show that there was sporadic Neolithic activity in the Moyally area. These two sites, together with a similar dated Neolithic pits recorded at Ardballymore 1 and Ardballymore 2, show that there was small scale late Neolithic activity in the general area.

None of the sites recorded at Moyally, other than the ringfort at Moyally 1, would be considered to be important on an individual basis, but taken together they show that there was continual short-term activity in the area during the late Neolithic period.

5 BIBLIOGRAPHY

5.1 References

Bayley, D 2009a *Site A016/046 Moyally 1 Final Report*. Unpublished report prepared for Irish Archaeological Consultancy Ltd.

Bayley, D 2009b *Site A016/068 Ardballymore 1 Final Report*. Unpublished report prepared for Irish Archaeological Consultancy Ltd.

Bayley, D 2009c *Site A016/028 Ardballymore 2 Final Report*. Unpublished report prepared for Irish Archaeological Consultancy Ltd.

Bayley, D 2009d *Site A016/044 Moyally 2 Final Report*. Unpublished report prepared for Irish Archaeological Consultancy Ltd.

Bayley, D 2009e *Site A016/047 Moyally 3 Final Report*. Unpublished report prepared for Irish Archaeological Consultancy Ltd.

Bayley, D 2009f *Site A016/015 Moyally 7 Final Report*. Unpublished report prepared for Irish Archaeological Consultancy Ltd.

Bayley, D 2009g *Site A016/049 Moyally 6 Final Report*. Unpublished report prepared for Irish Archaeological Consultancy Ltd.

DAHGI (1999a) *Framework & Principles for the Protection of Archaeological Heritage*. Department of Arts, Heritage, Gaeltacht and the Islands.

Grogan, E O' Donnell, L and Johnstown, P 2007 *The Bronze Age Landscapes of the Pipeline to the West*. Wordwell, Bray.

IAC Ltd. 2005 *N6 Kinnegad-Athlone Scheme Phase 2: Kilbeggan to Athlone Dual Carriageway: Archaeological Assessment*. Unpublished report.

Lyne, E 2009 *Site A016/064 Kilbeg 6 Final Report*. Unpublished report prepared for Irish Archaeological Consultancy Ltd.

Moloney, A D Jennings, M Keane and C MacDermott 1993 *Excavations at Clonfinlough, Co. Offaly*. Irish Archaeological Wetland Unit Transactions **2**. Dublin, Irish Archaeological Wetland Unit.

Murtagh, H 2000 *Athlone History and Settlement to 1800*. Athlone, Old Athlone Society.

NRA (2003) *Archaeological Guidelines for Reporting on Constraint, Route Selection, Environmental Impact Assessment on Archaeological Aspects of NRA Road Schemes*. Draft Consultation Document. National Roads Authority.

O'Brien, C and Sweetman, D 1997 *Archaeological Inventory of Co. Offaly*, The Stationary Office, Dublin.

Phelan, S 2007 Whitewell, Co. Westmeath. In E. Grogan, L. O'Donnell and P. Johnson, *The Bronze Age Landscapes of the Pipeline to the West*, 349–50. Bray, Margaret Gowen and Co. Ltd. and Wordwell.

Riada Consult, Westmeath County Council 2003 *N6 Kinnegad to Athlone Dual Carriageway Environmental Impact Statement*.

5.2 Other Sources

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

Cartographic References

Ordnance Survey Map, scale 1:10560, 1842

Ordnance Survey Map, scale 1:2500, 1887–1913

Electronic References

McDermott, C 2002 Cloncreen Bog (Ballinrath / Ballykilleen / Ballynakill / Cloncreen / Esker More), Co. Offaly (Licence Ref.: 02E0941) Peatland Survey. <http://excavations.ie/Pages/Details.php?Year=&County=Offaly&id=8895>

Moore, C 2003 Mountlucas Bog Co. Offaly (Licence Ref.: 02E0839) (Ballynakill / Clonarrow or Riverlyons / Gorteenkeel / Island / Scrub or Pigeonpark). <http://excavations.ie/Pages/Details.php?Year=&County=Offaly&id=8896>

PLATES



Plate 1: E2675: C3, pre-excitation, facing north.



Plate 2: E2675: C3, mid-excitation, facing north, showing C4 and C5 in section.



Plate 3: E2675: C3, post-excavation, facing north.

APPENDIX 1 CATALOGUE OF PRIMARY DATA

Appendix 1.1 Context Register

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds
1	N/A	N/A	N/A	0.4m	Topsoil	Mid brown sandy clay	Modern nail
2	N/A	N/A	N/A	N/A	Natural drift geology	Mid-brown boulder clay	None
3	N/A	1.17m	1.17m	0.14m	Cut of hearth	Black silty, charcoal rich clay of loose compaction	None
4	C3	1.17m	1.17m	0.1– 0.12m	Primary fill of hearth	Sub-rounded irregular cut of no particular orientation.	None
5	C3	0.4m	0.2m	0.05– 0.1m	Upper fill of hearth	Orange silty-clay of loose compaction with charcoal inclusions	None

Appendix 1.2 Catalogue of Artefacts

Registration Number	Context	Item No.	Simple Name	Full Name	Material	No. of Parts	Description
E2697:1:1	C1	1	Possible Nail	Modern nail	Metal	1	Modern nail recovered from topsoil


Appendix 1.3 Catalogue of Ecofacts

A total of 2 bulk soil samples were taken during the course of excavation at this site. Of these, 1 was processed by means of flotation and sieving through a 250µm mesh. The resulting retrieved sample of this process is listed below.

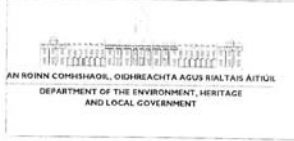
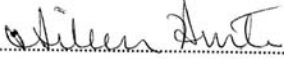
1.3.1 Charcoal

Context number	Sample number	Feature	Sample weight (g)
C5	2	Main fill of hearth	6.5g

Appendix 1.4 Archive Checklist

Project: N6 Kilbeggan – Athlone	Irish Archaeological Consultancy Ltd	
Site Name: Moyally 5		
NMS Number: E2675		
Ministerial Direction No.: A016/048		
Site director: David Bayley		
Date: 22 November 2008		
Field Records	Items (quantity)	Comments
Site drawings (plans)	2	
Site sections, profiles, elevations	1	
Other plans, sketches, etc.	0	
Timber drawings	0	
Stone structural drawings	0	
Site diary/note books	0	
Site registers (folders)	1	
Survey/levels data (origin information)	10	
Context sheets	5	
Wood Sheets	0	
Skeleton Sheets	0	
Worked stone sheets	0	
Digital photographs	0	
Photographs (print)	6	
Photographs (slide)	0	
Finds and Environ. Archive		
Flint/chert	0	
Stone artefacts	0	
Pottery (specify periods/typology)	0	
Ceramic Building Material (specify types eg daub, tile)	0	
Metal artefacts (specify types - bronze, iron)	1	Iron – nail or nut and bolt
Glass	0	
Other find types or special finds (specify)	0	
Human bone (specify type eg cremated, skeleton, disarticulated)	0	
Animal bone	0	
Metallurgical waste	0	
Enviro bulk soil (specify no. of samples)	2	1 of C.4 and 1 of C.5
Enviro monolith (specify number of samples and number of tins per sample)	0	
Security copy of archive	1	On IAC Server

Appendix 1.5 Copy of Registration No. Document from DoEHLG

National Monuments Acts (1930-2004) Ministerial Directions Record Number for archaeological activity	 <p>AN ROINN COMHSHAOIL, OIGHREACHTA AGUS RIALTAIS AITIÚL DEPARTMENT OF THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT</p>
File:	Direction No. A16
Registration Number: E2675	
Directions have been issued to Murty Hanly on behalf of Westmeath County Council in order to regulate archaeological activities carried out on N6 Kilbeggan to Athlone (Phase 2).	
Application having been duly made to me by Mr. David Bayley of Irish Archaeological Consultancy, 8 Dunngar Terrace,, Dun Laoghaire,, Co. Dublin.	
For a registration number to record excavation at the site of Moyally 048 being part of the townland of MOYALLY in the County of Offaly.	
This registration is not an archaeological licence or consent but it is issued solely for archive purposes and to allow for the material from the activity to be registered with the National Monuments Service and the National Museum.	
Signed 	31 October 2006

Appendix 1.6 Copy of Ministerial Direction Document

Section 14A(2) National Monuments Acts 1930-2004

Directions to Westmeath County Council for the carrying out of archaeological works on the N6 Kinnegad to Athlone dual carriageway road scheme (Phase 2 * Kilbeggan to Athlone).

1. Introduction

The project is an approved road development, having been approved by An Bord Pleanála on 26th March 2004.

The development will consist of a dual carriageway that will run for a distance of approximately 57.5km.

In line with recommendations in the Environmental Impact Assessment for the scheme, archaeological investigations included site specific testing followed by a centreline test trench with staggered offsets. The request for directions has an attached strategy document that covers the proposed resolution works

These directions relate to Phase 2 works and are issued following the receipt by the Minister of reports on the testing work carried out in Phase 1.

2. Directions

All aspects of the archaeological works should be conducted in accordance with provisions of the policy and advice notes on archaeological excavations issued by the Department and in line with the provisions of the Code of Practice agreed with the National Roads Authority. Archaeological works shall be carried out in accordance with the Strategy for Proposed Works submitted with the application seeking Directions.

3. Project Archaeologist

The Project Archaeologist appointed for the road development should ensure that the archaeological works are carried out in accordance with the terms of the directions.

- Any changes to the agreed method statement for the excavations should be submitted to the National Monuments Section for approval.
- Any proposal to change any named director of a specific excavation should firstly be notified to the National Monuments Section for approval.

4. Conduct of Archaeological Excavations:

a) The archaeological excavations should be carried out in accordance with the specifications set out in the strategy document submitted to the Minister.

b) The National Monuments Section should be notified of the commencement date of the works on site.

c) The names of the archaeological consultants, including site directors should be submitted to the National Monuments Section in advance of the works commencing.

d) Where necessary the layout of the archaeological trenches should be adjusted to include additional archaeological features and deposits or areas of archaeological potential.

e) All archaeological objects recovered in the course of the test excavations should be treated and conserved in line with the advice notes and guidelines issued by the National Museum of Ireland.

f) A report on the progress of the archaeological works shall be submitted to the National Monuments Section every 4 weeks.

5. Record Number for the scheme:

The record number for the recording of archaeological works is A016/000. Sub-numbers may be allocated by the Project Archaeologist to the additional works. These numbers should be notified to the National Monuments Section for agreement with full details of the archaeological works involved.

6. Detection Device:

Detection devices may be used as appropriate in the course of archaeological works to recover archaeological objects. Details of proposed methodologies should be notified to the National Monuments Section.

7. Reports:

1. A report on the results of the archaeological excavations should be submitted to the National Monuments Section within 4 weeks of the completion of the works on site. Should additional time be required to complete the report the National Monuments Section should be notified before the expiration of the 4-weeks period. A copy of the report should be sent to the National Museum of Ireland.

2. A summary of the excavation results for the site should be published in the Excavations Bulletin for the year when works are undertaken.

8. National Monuments (Subsection 14A(4)):

If during the carrying out of the archaeological excavations a site should prove to be a National Monument within the meaning of the National Monuments Acts (1930-2004) all works should stop and the National Monuments Section should be informed immediately.

9. Inspection of Works

Officers, servants or agents of the Minister may inspect the archaeological works at any time and full co-operation should be given to them in carrying out the inspections.

APPENDIX 2 SPECIALIST REPORTS

Appendix 2.1 Small Finds Report – Catherine Johnson

Appendix 2.2 Charcoal and Wood ID Report – Ellen O’Carroll

Appendix 2.3 Radiocarbon Dating Results – QUB Laboratory

THE N6 KILBEGGAN-ATHLONE ROAD PROJECT
THE SMALL FINDS FROM A016-048 MOYALLY 5
CATHERINE JOHNSON

Summary

The only find from this site is a non-diagnostic iron stem, possibly a nail, with a surface protrusion which may have been caused by corrosion. The object is a surface find and is post medieval or later in date.

The only find from this site is an iron object. Because of its poor condition, an x-ray was necessary to determine its shape. The object is incomplete but may have been an implement of some sort or a utensil. It resembles, for example, iron double-ended spoons from Anglo-Scandinavian York (Ottaway 1992, 602, fig. 249, nos. 3002–3), although the Moyally object came from the topsoil and may be post-medieval or later.

E2675:1:1 is an incomplete iron object, consisting of a stem with shallow concave sides. One end expands to form a broken u-shaped prong or dish, 10 mms wide. The other end also expands and has stepped shoulders and a centrally placed (broken?) tang, 15 mms long and 4 mms wide. Overall L. 85 mms. Max. W. 11 mms. T. 5.5 mms.

Bibliography

Ottaway, P 1992 *Anglo-Scandinavian ironwork from Coppergate*, The archaeology of York: the small finds 17/6, London.

CHARCOAL IDENTIFICATIONS

N6 KINNEGAD – ATHLONE SCHEME
PHASE 2: KILBEGGAN TO ATHLONE
DUAL CARRIAGEWAY

MINISTERIAL DIRECTION NUMBER: A016/048
NMS REGISTRATION NUMBER: E2675
MOYALLY 5

ELLEN O'CARROLL MA DIP. EIA MGT
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EMAIL: EOCARROLL@IRELAND.COM

1. Introduction

One charcoal sample was identified and analysed from excavations from a Neolithic pit excavated at Moyally 5, Co. Offaly. This site is located in the townland of Moyally, County Offaly, c. 2.5km southeast of Moate, Co. Westmeath. The archaeological excavation was carried out by Irish Archaeological Consultancy Ltd on behalf of Westmeath County Council and the National Roads Authority in advance of the construction of the N6 Phase 2: Kilbeggan to Athlone Dual Carriageway Scheme.

The analysis of charcoal and wood can provide information on two different levels. The analysis is an important component of any post-excavation environmental work as it can help in re-constructing an environment hitherto lost to us, although this must be done with caution as sufficient sample numbers are required for a complete and full understanding of the immediate environment. Keepax suggests 50 charcoal samples in a European temperate climate. Charcoal and wood are also analysed and identified to determine what species are used and selected for particular functions on site i.e. post-holes, wall posts, burnt remains of wattle and so on.

2. Methods

The process for identifying wood, whether it is charred, dried or waterlogged is carried out by comparing the anatomical structure of wood samples with known comparative material or keys (Schweingruber 1990). A wood reference collection from the Botanical Gardens in Glasnevin, Dublin was also used.

Charcoal

The soil samples were processed on-site. The flots were sieved through a 250 micron or a 1mm sieve, while the retent was put through a 2mm or 4mm sieve. All of the charcoal remains from the soil samples were then bagged and labeled.

The identification of charcoal material involves breaking the charcoal piece along its three sections (transverse, tangential and radial) so clean sections of the wood pieces can be obtained. This charcoal is then identified to species under a universal compound microscope reflected and transmitted light sources at magnifications x 10 - 400. By close examination of the microanatomical features of the samples the charcoal species are determined.

The purpose of the charcoal identifications was two-fold. In some cases the identifications were carried out prior to C14 dating in order to select specific species for dating and in other cases the charcoal was analysed for fuel selection policies and selection of wood types for structural use. Each species was identified, bagged together and then weighed. Insect channels were noted on the charcoal fragments identified as this may indicate the use of dead or rotting wood used for fuel or other such functions. The distinction can sometimes be made between trunks, branches and twigs if the charcoal samples are large enough. This was noted where possible. When charcoal samples showed indications of fast or slow growth this was also recorded. The samples identified for environmental reconstruction and wood usage were counted per fragment and then weighed. The smaller sample amounts with less than 50 fragments were all identified while 50 fragments were identified from the larger samples. In general the fragment count for charcoal was low from these features.

There are inherent problems in re-constructing the environment at the time of use of the site due to the low quantity of samples and charcoal fragments identified from the assemblages. Keepax concludes that, when working in a temperate climate, at least fifty samples should be identified from an archaeological site, to make it a viable charcoal study, with a minimum of 25 samples (Keepax 1988). Notwithstanding the

charcoal sample numbers, it is clear that the charcoal results coupled with the wood analysis throw up some interesting results and trends in relation to wood selection and use and woodland cover in the Neolithic periods in Co. Offaly.

A number of wood taxa cannot be identified to species or sub-species level anatomically. Sessile oak (*Quercus petraea*) and pedunculate oak (*Quercus robur*) are both native and common in Ireland and the wood of these species cannot be differentiated on the basis of their anatomic characteristics. English elm (*Ulmus procera*) and wych elm (*Ulmus glabra*) cannot be separated by their wood structure and identifications of elm are shown as *Ulmus* spp. There are also two species of birch (*Betula pendula* and *Betula pubescens*) and several species of willow therefore the identifications are given as *Betula* spp and *Salix* spp respectively. *Prunus* includes blackthorn (*Prunus spinosa*) and cherry (*Prunus padus/avium*) and sometimes it is difficult to differentiate between the different species of *Prunus* spp.

3. Description of the feature types

The site at Moyally 5 comprised a single hearth feature; 1.17m in length, 1.17m in width and with a depth of 0.14m. The exact function of this hearth could not be determined. The hearth has been dated to the Neolithic period (2859–2574BC).

4. Results

One hundred fragments of charcoal were identified from one sample submitted for dating and environmental re-construction and woodland use. The charcoal is related to a pit associated with the Neolithic period. The fragment count of each taxon represented in the samples is given below in Table 1. There was one taxon type identified from the assemblage which included oak.

Table 1: Identifications from charcoal from Moyally 5

Site no.	Context no.	Context type	Sample no.	Species	Date & Comment
A016/48	5	Fill of pit	2	Oak (100f*, 3.6g*),	2859–2574BC Slow growth. Tyloses present

*g = grammes

* f = fragment count

5. Discussion and Conclusions of Charcoal and wood assemblage

Wood types identified the assemblages

There was one taxa type present in the charcoal remains. Hundreds of small oak fragments were present in the sample The oak fragments were mainly related to heartwood as there was tyloses present in the sample.

The charcoal is related to wood selection in relation to firewood used at the site in the Neolithic age. The feature may be related to a single episodic event as there was only one taxon present.

Oak makes good firewood when dried and was used as fuel in iron smelting processes in the recent past. Throughout all periods of prehistory and history oak has been used for structural timbers. Oak also has unique properties of great durability and strength which makes it a suitable species for such structural requirements. The oak identified suggests that there was a supply of oak in the surrounding environment particularly during the Neolithic period.

Further analysis, discussions and comparisons of results will form part of a final integrated charcoal and pollen study of the sites and the surrounding environment on

this scheme which is being undertaken as part of the authors PHD thesis. These results will be published accordingly.

6. References

- Beckett, J K 1979 *Planting Native Trees and Shrubs*. Jarrold and Sons Ltd; Norwich.
- Eogan, G 1983 *Hoards of the Irish Later Bronze Age*. University College Dublin.
- Grogan, E O Donnell, L Johnston, P 2007 *The Bronze Age Landscapes of the pipeline to the west*. Wordwell, Wicklow.
- Hall, V 1995 Woodland Depletion in Ireland over the last Millennium in J R Pilcher and S. Mac An tSaoir (eds), *Wood, Trees and Forests in Ireland*, 23–35.
- Hurley, M F 1982 Wooden artifacts from the excavation of the medieval City of Cork in S McGrail, *Woodworking Techniques before A.D 1500*. BAR **129**, 301–311.
- Hurley, M F 1986 *A study of Skeletal and Wooden Artefacts from Medieval Cork*. Unpublished M.A. Thesis, University College Cork.
- Hurley, M & Scully, O 1997 *Late Viking Age and Medieval Waterford Excavations 1986–1992*. Waterford Corporation.
- Keepax, C A 1988 *Charcoal analysis with particular reference to archaeological sites in Britain*. PhD Dissertation, University of London.
- Kelly, F 1988 *A Guide to Early Irish Law*. Institute for Advanced Studies, Dublin.
- McCracken, E 1971 *The Irish Woods Since Tudor Times*. Institute of Irish Studies, Belfast.
- Moloney *et al.* 1994 *Excavations at Clonfinlough, Co. Offaly*. Crannog Publications.
- Morgan, R 1975 *The Selection and Sampling of Timber from Archaeological Sites for Identification and Tree-ring analysis*, *Journal of Archaeological Science* **2**, 221–230.
- Nelson E C 1993 *Trees of Ireland*. The Lilliput Press, Dublin.
- O'Carroll, E 1996 *The analysis of two wooden assemblages from Corlea Bog, Co. Longford and King John's Castle, Co. Limerick*. Unpublished M.A. Thesis, University College Cork.
- O'Carroll, E 2004 *The analysis of wood and charcoal from Monanny, Co. Monaghan*. Unpublished report for IAC.
- O'Carroll, E 2007 *The analysis of wood and charcoal from Cashelduff, Co. Mayo*. Unpublished report for Mayo County Council.
- O'Carroll, E 2007 *The analysis of wood and charcoal from the N11, Arklow to Rathnew, Co. Wicklow*. Unpublished report for the NRA/Wicklow County Council.
- O'Carroll, E 2007 *The wood and charcoal analysis from the Charlestown By-pass*. Unpublished report for the NRA /Mayo County Council.

- O'Donnell, L 2005 *Wood and charcoal identifications from Charlesland, Co. Wicklow*. Unpublished specialist report for Margaret Gowen and Co.
- O'Donnell, L 2005 *Wood and charcoal identifications from Ballynagran, Co. Wicklow*. Unpublished specialist report for Margaret Gowen and Co.
- O'Sullivan, A 1987 Wood in Archaeology. *Archaeology Ireland* **4**, 69–73.
- O'Sullivan, A 1994 The use of Trees and Woodland in early medieval Ireland. *Irish Forestry* **51**, 80–94.
- Rackham, O 1976 *Trees and Woodlands in the British Landscape*. Weidenfeld & Nicholson, London.
- Rackham, O 1980 *Ancient Woodland: its history, vegetation and uses in England*. Edward Arnold, London.
- Sands, R 1997 *Pre-historic woodworking. The Analysis and Interpretation of Bronze and Iron Age toolmarks*. Institute of Archaeology, University of London.
- Schweingruber, F H 1990 (3rd edition) *Microscopic Wood Anatomy*. Birmensdorf: Swiss Federal Institute for Forest, Snow and Landscape Research.
- Webb, D A 1977 *An Irish Flora*. Dundalgan Press Ltd., Dundalk.
- Western, C A 1970 Wood and Charcoal in Archaeology. *Science in Archaeology*, 178–187.

RADIOCARBON DATING RESULTS
FOR MOYALLY 5

CHRONO LABORATORY, QUEENS UNIVERSITY BELFAST

Colette Rynhart
 Irish Archaeological Consultancy Ltd
 120b Greenpark Road
 Bray
 Co. Wicklow, Ireland
 Rep. of Ireland
 VAT No. IE8288812U

14 CHRONO

¹⁴CHRONO Centre
 Queens University Belfast
 42 Fitzwilliam Street
 Belfast BT9 6AX
 Northern Ireland

Radiocarbon Date Certificate

Laboratory Identification: UBA-9154
 Date of Measurement: 2008-05-19
 Site: A016/048 Moyally Co.Offaly
 Sample ID: S2 C5
 Material Dated: Young Oak
 Pretreatment: AAA
 Submitted by: IAC

¹⁴C Date: 4100±25
 AMS δ¹³C: -21.6

Information about radiocarbon calibration

RADIOCARBON CALIBRATION PROGRAM*
 CALIB REV5.0.2
 Copyright 1986-2005 M Stuiver and PJ Reimer
 *To be used in conjunction with:
 Stuiver, M., and Reimer, P.J., 1993, Radiocarbon, 35, 215-230.
 Annotated results (text) - -
 Export file - cl4res.csv

S2 C5		
UBA-9154		
Radiocarbon Age BP	4100 +/- 25	
Calibration data set:	intcal04.14c	# Reimer et al. 2004
% area enclosed	cal AD age ranges	relative area under probability distribution
68.3 (1 sigma)	cal BC 2837- 2815	0.205
	2672- 2580	0.795
95.4 (2 sigma)	cal BC 2859- 2809	0.232
	2753- 2721	0.082
	2702- 2574	0.686

References for calibration datasets:
 PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), Radiocarbon 46:1029-1058.

Comments:
 * This standard deviation (error) includes a lab error multiplier.
 ** 1 sigma = square root of (sample std. dev.^2 + curve std. dev.^2)
 ** 2 sigma = 2 x square root of (sample std. dev.^2 + curve std. dev.^2)
 where ^2 = quantity squared.
 [] = calibrated range impinges on end of calibration data set
 0* represents a "negative" age BP
 1955* or 1960* denote influence of nuclear testing C-14

NOTE: Cal ages and ranges are rounded to the nearest year which may be too precise in many instances. Users are advised to round results to the nearest 10 yr for samples with standard deviation in the radiocarbon age greater than 50 yr.

APPENDIX 3 LIST OF RMP SITES IN AREA

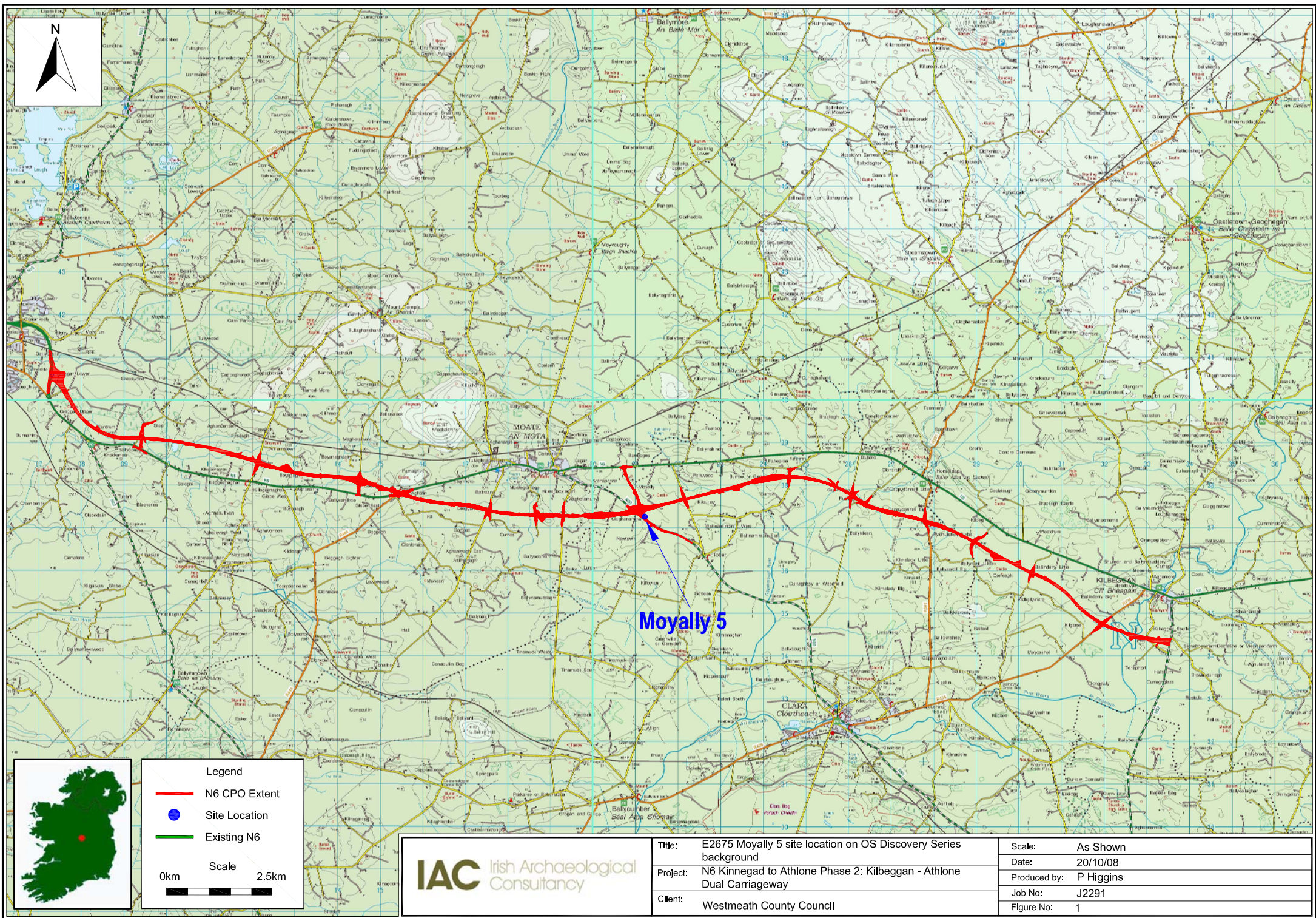
RMP No	Description
WM030-115	Ringfort – Rath
OF001-00201	Tower House And Bawn
OF001-00202	Earthworks
OF001-003	Mound (possible)
OF001-005	Enclosure
OF001-010	Barrow
OF002-013	Enclosure Site
OF002-015	Castle Site

See Figure 2 for location.

APPENDIX 4 LIST OF N6 SCHEME SITE NAMES

Site Name	Ministerial Direction No.	NMS Registration Number
Seeoge 2	A016/007	E2635
Moyally 7	A016/015	E2643
Kilcurley 1	A016/019	E2647
Cappydonnell Big 1	A016/025	E2653
Ardballymore 2	A016/028	E2656
Creggan lower 1	A016/030	E2658
Creggan lower 2	A016/031	E2659
Williamstown 1	A016/032	E2660
Williamstown 3	A016/033	E2661
Williamstown 4	A016/034	E2662
Boyanaghcalry 1	A016/035	E2663
Seeoge 1	A016/036	E2664
Aghafin 1	A016/037	E2665
Cregganmacar 1	A016/038	E2666
Cregganmacar 2	A016/039	E2667
Cregganmacar 3	A016/040	E2668
Curries 1	A016/041	E2669
Curries 2	A016/042	E2670
Culleenagower 1	A016/043	E2671
Moyally 2	A016/044	E2672
Moyally 1	A016/046	E3274
Moyally 3	A016/047	E2674
Moyally 5	A016/048	E2675
Moyally 6	A016/049	E2676
Tober 1	A016/051	E2677
Burrow or Glennanummer 1	A016/052	E2678
Burrow or Glennanummer 2	A016/053	E2679
Burrow or Glennanummer 3	A016/054	E2680
Russagh 4	A016/055	E2681
Russagh 1	A016/056	E2682
Russagh 2	A016/057	E2683
Russagh 3	A016/058	E2684
Kilbeg 1	A016/059	E2688
Kilbeg 2	A016/060	E2689
Kilbeg 4	A016/062	E2691
Kilbeg 5	A016/063	E2692
Kilbeg 6	A016/064	E2693
Kilbeg 7	A016/065	E2694
Correagh 1	A016/066	E3374
Ballinderry Little 1	A016/067	E2695
Ardballymore 1	A016/068	E2696
Kilgaroan 1	A016/069	E2697
Kilgaroan 2	A016/070	E2698
Kilgaroan 3	A016/071	E2699
Kilgaroan 4	A016/072	E2700
Kilgaroan 6	A016/074	E2702
Ballinderry Big 1	A016/076	E3275
Ballinderry Big 2	A016/077	E3276
Ballinderry Big 3	A016/078	E3277
Tonaphort 1	A016/079	E3278
Tonaphort 2	A016/080	E3279
Tonaphort 3	A016/081	E3280

Site Name	Ministerial Direction No.	NMS Registration Number
Kilbeggan South 1	A016/082	E3281
Kilbeggan South 2	A016/083	E3282
Kilbeggan South 3	A016/084	E3283
Cregganmacar 4	A016/085	E2703
Williamstown 2	A016/086	E2704
Kilbeg 8	A016/087	E3966



Legend

- N6 CPO Extent
- Site Location
- Existing N6

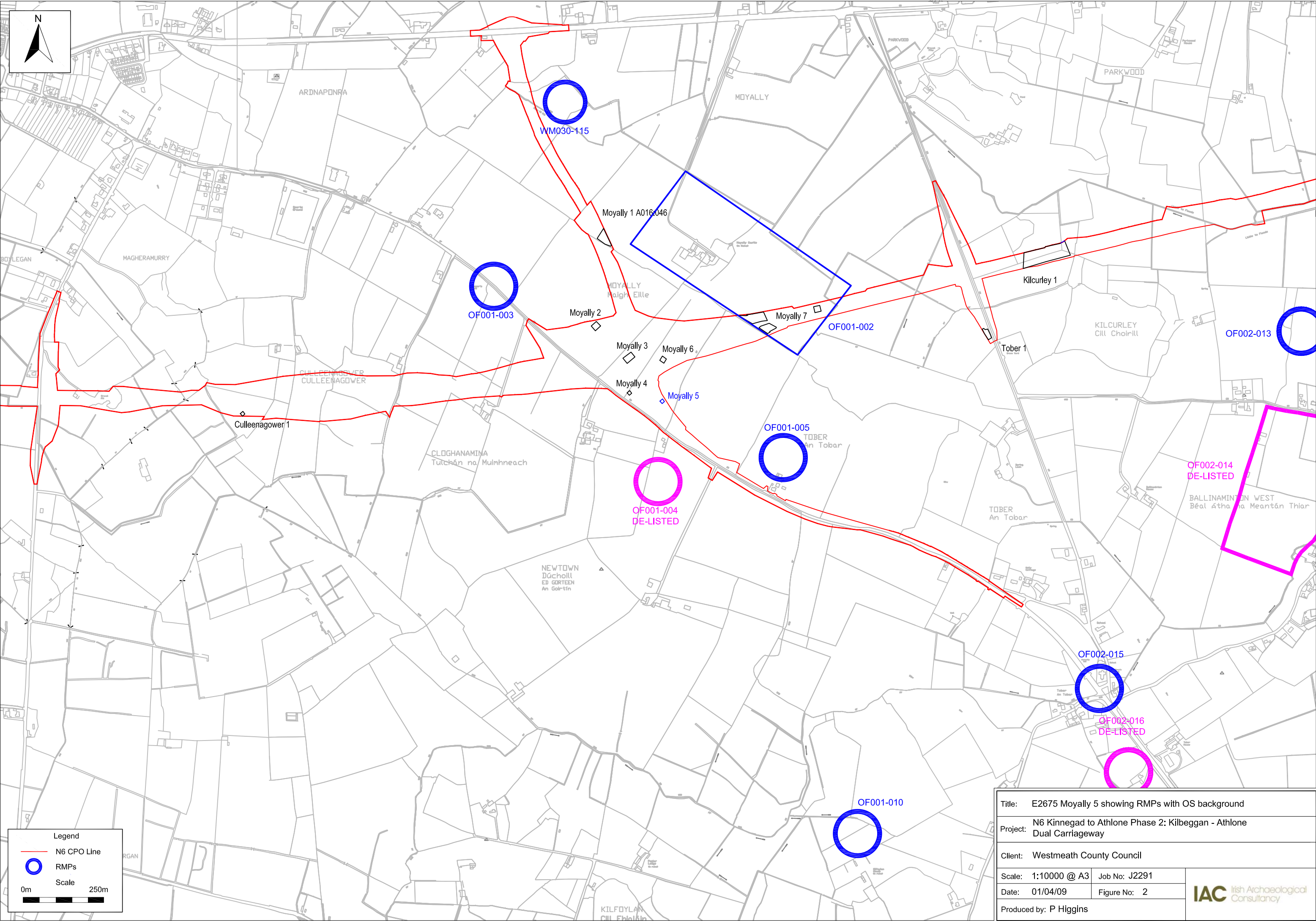
Scale

0km 2.5km

IAC Irish Archaeological Consultancy

Title:	E2675 Moyally 5 site location on OS Discovery Series background
Project:	N6 Kinnegad to Athlone Phase 2: Kilbeggan - Athlone Dual Carriageway
Client:	Westmeath County Council

Scale:	As Shown
Date:	20/10/08
Produced by:	P Higgins
Job No:	J2291
Figure No:	1



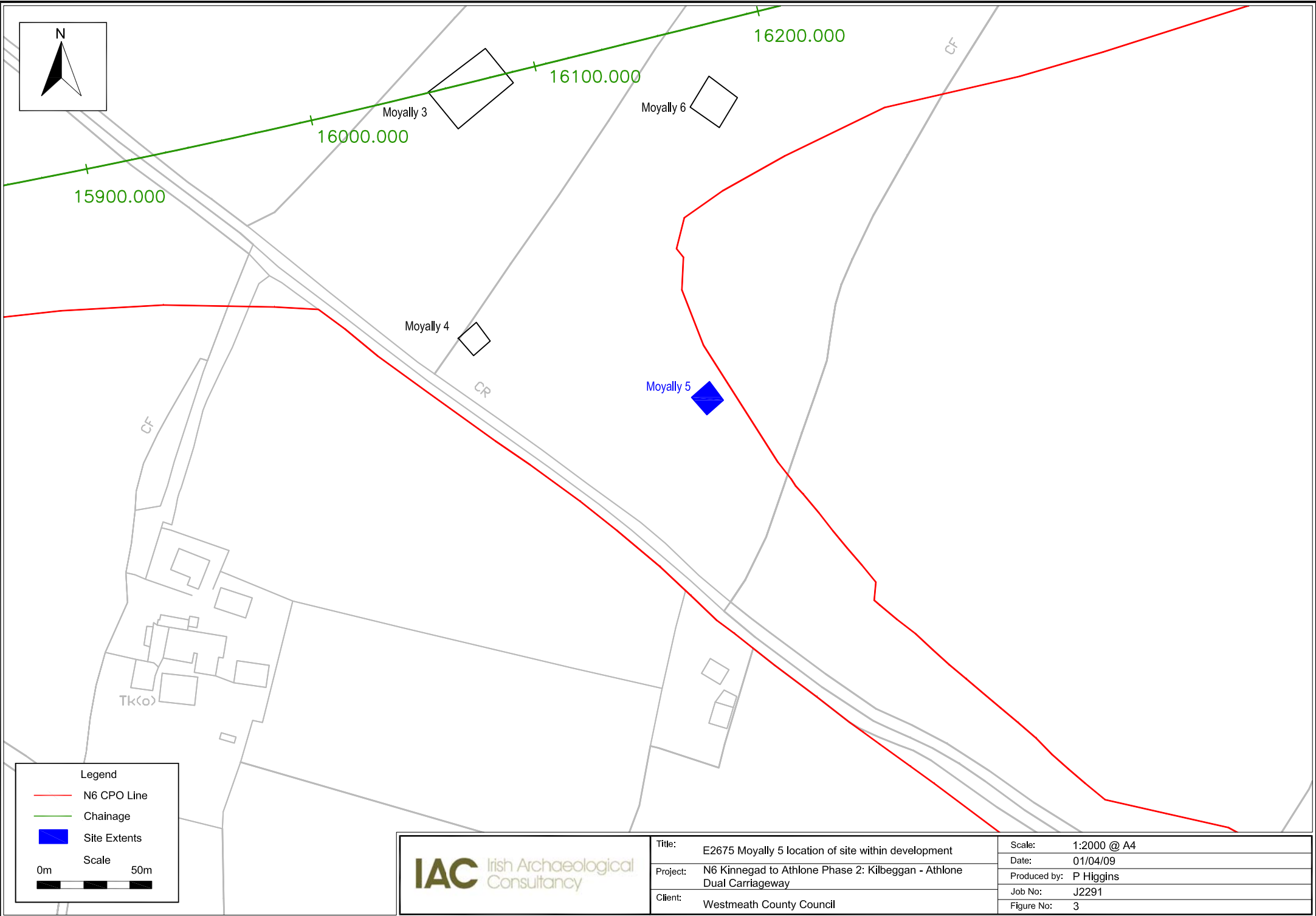
Legend

- N6 CPO Line
- RMPs

Scale
0m 250m

Title: E2675 Moyally 5 showing RMPs with OS background	
Project: N6 Kinnegad to Athlone Phase 2: Kilbeggan - Athlone Dual Carriageway	
Client: Westmeath County Council	
Scale: 1:10000 @ A3	Job No: J2291
Date: 01/04/09	Figure No: 2
Produced by: P Higgins	





Legend

- N6 CPO Line
- Chainage
- Site Extents

Scale

0m 50m

IAC Irish Archaeological Consultancy

Title: E2675 Moyally 5 location of site within development
Project: N6 Kinnegad to Athlone Phase 2: Kilbeggan - Athlone Dual Carriageway
Client: Westmeath County Council

Scale: 1:2000 @ A4
Date: 01/04/09
Produced by: P Higgins
Job No: J2291
Figure No: 3

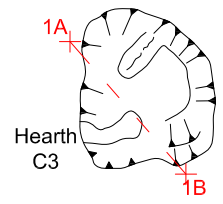


Limit of excavation

+ 221214E
237286N

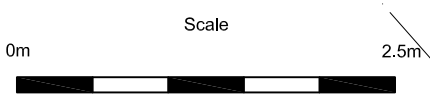
+ 221219E
237286N

78.247
∧






78.167
∧

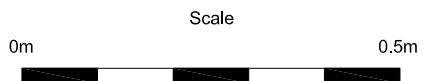
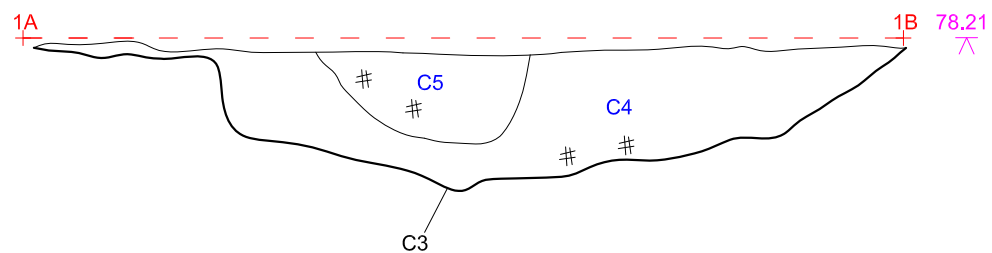
+ 221214E
237279N



Legend

-  Limit of Excavation
-  C## Cut numbers
-  ##.### Reduced Levels

Moyally 5
Southwest facing section of C3



Legend

- C## Cut numbers
- C## Fill Numbers
- # Charcoal
- xx.xxx Reduced Levels
- ∧

IAC Irish Archaeological
Consultancy

Title:	E2675 Moyally 5 section
Project:	N6 Kinnegad to Athlone Phase 2: Kilbeggan - Athlone Dual Carriageway
Client:	Westmeath County Council

Scale:	1:10 @ A4
Date:	01/04/09
Produced by:	G Kearney
Job No:	J2291
Figure No:	5

PHASE 3: TOPSOIL

C1



C5

PHASE 2: NEOLITHIC ACTIVITY

C4

C3



PHASE 1: NATURAL DRIFT GEOLOGY

C2

CXXX = SPREADS AND FILL CONTEXTS
CXXX = CUT CONTEXTS