N4 Dromod Roosky Bypass

Advance Archaeological Works Contract

Moher 5

Ministerial Direction A31 (A31-017 / E3305)

Aisling Collins
David J O'Connor

Final Report
Archaeological Excavation
September 2008

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Client
Leitrim County Council
Áras an Chontae
Carrick-on-Shannon
Co Leitrim

Project Details

Project	N4 Dromod Roosky Bypass Archaeological Excavation
Ministerial Direction	A31
Site Identification	A31-017
Registration No.	E3305
Site Director	Aisling Collins
Senior Archaeologist	David J O'Connor
Consultant	Cultural Resource Development Services (CRDS) Ltd Archaeological and Historical Consultants Unit 4a, Dundrum Business Park, Dundrum, Dublin 14
Client	Leitrim County Council Civic Offices, Carrick-on-Shannon, County Leitrim
NRA Project Number	LM/01/100
NRA Senior Archaeologist	Rónán Swan
NRA Archaeologist	Orlaith Egan
Project Engineer	David Meade
Consulting Engineer	Morgan Hart
Site	Moher 5
Townlands	Moher
Parish	Mohill
County	Leitrim
Nat. Grid Ref.	205905.034, 287415.579
Chainage	7423- 7450
OD	47m
RMP No.	N/A
Project Duration	28th March 2006 to 7th April 2006
Excavation Start Date	28th March 2006
Report Date	Draft: July 2007 Issue: September 2007 Issue: September 2008

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Project Team

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Report signed off by,

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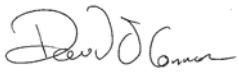

David J O'Connor MA MIAI
Project Manager, CRDS Ltd.

Executive Summary

At the request of Leitrim County Council CRDS Ltd. have undertaken a programme of archaeological excavations for the N4 Dromod Roosky Bypass. In total 25 potential archaeological sites were identified during centreline testing as part of the Advance Archaeological Investigation: N4 Dromod Roosky Bypass (conducted by CRDS Ltd. under licence 05E0983).

This report refers to the excavation of site A31-017 (Moher 5) located in Moher townland in the parish of Mohill and barony of Mohill, County Leitrim. Within the road scheme the site is located at chainage 7423-7450 on the main N4 centreline.

The programme of excavation was undertaken on the 28th March 2006 to the 7th April 2006 as part of Ministerial Direction A31. It was subsequently given the registration number E3305.

Investigations showed the site contained two small burnt stone spreads of possible Fulacht Fiadh material, and a possible charcoal enriched burnt spread. Radiocarbon dating has placed the site in the Late Neolithic, with a date of 3916±82BP (2620-2140 cal BC).

The following report contains the Final results of the excavations.

The excavations were carried out on behalf of Leitrim County Council and funded through the NRA under the NDP 2007-2013 and the EU Structural Fund.

All archaeological finds were stored in CRDS Ltd. offices before being delivered to the National Museum of Ireland for permanent storage.

The excavation archive is currently retained by CRDS Ltd pending agreement on its final deposition.

1 Introduction

1.1. Summary

CRDS Ltd. has carried out predevelopment archaeological testing and excavation along the route of the proposed N4 Dromod Roosky Bypass. In addition to the centreline test trenching, CRDS Ltd. also carried out site specific testing on four sites or areas identified in the Environmental Impact Statement (EIS) as being potentially archaeological. A Topographical Survey on a further site was also completed as part of the contract. Fieldwork (Archaeological Testing) started on the 9th August 2005 and ran until 11th October 2005. Weather conditions were generally poor for the most part. In total 43,294 linear metres of centreline trenching was completed. Twenty-five sites of archaeological interest were uncovered during the course of the centreline test trenching.

Resolution of the sites identified in testing commenced on the 26th January 2006 and continued through until August 31st 2006. Moher 5 was investigated on the 28th March 2006 and completed on the 7th April 2006.

1.2 Proposed Development

The Dromod Roosky Bypass Project is being developed by Roscommon National Roads Design Office on behalf of Leitrim County Council in association with Longford County Council and in consultation with the National Roads Authority. The N4 National Primary route extends from Dublin City to Sligo Town. The N4 is approximately 210km in length and passes through Counties Sligo, Leitrim, Roscommon, Longford, Westmeath, Meath, Kildare and Dublin. It is listed in the National Road Needs Study (NRNS) as a “Strategic Road Corridor”, and links the northwest and western regions with Dublin and the eastern region generally. The section of the N4 under consideration as part of the N4 Dromod Roosky Bypass scheme is approximately 10km long and extends from the townland of Fearnaght in County Leitrim, approximately 2.5km North of Dromod Village, to the townland of Edercloon, approx 1.6km South of Roosky village in County Longford. It passes through the townlands of Fearnaght, Faulties, Furnace or Bleankillew, Dromod Beg, Cloonturk, Gubagraffy, Cornagillagh, Killinaker, Moher, Knockmacrory, Georgia or Gorteenoran, Aghamore, Aghnahunshin, Tomisky and Edercloon. The existing N4 National Primary route consists of a single carriageway road generally between 6-7m in width. During the constraints study phase information was gathered on potential constraints with the study area. Studies covered ecology, cultural heritage, planning and land-use. The studies involved desktop investigations, consultation

and site visits. Major constraints identified consisted of the Shannon and Eslin Rivers and their associated floodplains, the Sligo to Dublin railway line, large areas of designated ecological importance, and the settlements of Dromod and Roosky.

During the course of the project it was decided that N4 Dromod Roosky would be a pilot scheme for a Type 2 Dual Carriageway (i.e 2 lanes in both directions) and not a Type 3 which is a 2 plus 1 scheme. Please refer to the NRA website (www.nra.ie) and the document 'New Divided Road Types' for more information. The Dromod Roosky Scheme exists today as a Type 2 Dual Carriageway

1.3 Scope of Contract

The N4 Dromod Roosky Bypass Advance Archaeological Works Contract covered the section of the proposed N4 realignment together with associated county roads between the existing N4 road at Fearnaght townland in County Leitrim and Edercloon townland in County Longford. It extends for approximately 10km.

The works were carried out by Ministerial Direction as is set out in the National Monuments Act 1930-2004. The National Monuments Act 1930-2004 provides for the protection and preservation of archaeological remains and archaeological objects. Archaeological objects are afforded further protection under the Cultural Institutions Act 1997.

2 Solid Geology and Topography

extracted from Environmental Impact Statement

2.1 Solid Geology

Geologically the area is one of carboniferous limestone bedrock and the area was once part of the Greater Lough Ree / Derg complex, before this lake was reduced by the growth of fens and raised bog. The wet mineral soil coverage consists of a ground-water gley, technically a fertile soil but the high clay content beneath the extended lake causes the soil to remain permanently poorly drained in places, resulting in widespread peat accumulation. Mantles of reasonably well-drained glacial deposits in the south of the area contrasts with peat bog cover alternating with morainic islands of pasture to the north. The resulting C-horizon (natural subsoil) consists of a boulder clay.

2.2 Topography and Landscape

The alignment travels through a variety of landscapes, ranging from the drumlin belt with associated small lakes dominated by cattle farming within small enclosed holdings; the Shannon wetlands straddling Lough Scannal and Lough Bofin; low-lying fertile improved pasture enclosed by regular fields and diverse hedgerows; mixed dense bog woodland and scrub and finally cutover mature raised bog. The dominant feature in the landscape is the river Shannon and the land generally falls from east to west. The chosen route runs entirely within the Shannon Basin. Generally the area lies in the northern central lowlands close to the southern limits of the main drumlin belt.

The land along the route sustained a considerable population in prehistoric times, as indicated by the wide variety of archaeological monument types still extant in the wider landscape. The number of ruinous religious and secular building still present shows that this continued into the historic and medieval periods and beyond, with post-medieval and early industrial features well represented. The section of the route straddling the county boundary is characterised by irregular medium sized straight sided fields with earth and/or stone boundaries crowned by mainly willow species. To the north of the area the less common fields are interspersed with larger areas of unenclosed open raised bog land. The landscape has a mixed land-use capability but some well drained areas show evidence of earlier cultivation. The high incidence of earthen ringforts in the general area supports this premise. Historically the average size of a farm holding was less than 20 hectares and presently cattle grazing predominates, although the prevalence of older cultivation ridges still visible

running beneath present field boundaries suggests that tillage everywhere was once more widespread than it is now. As a result of the population increase in the 17th and 18th centuries, the more fertile areas were among the most densely populated in the county, but the land could not adequately support the population and few outside the ribbon villages and planted estate lived beyond subsistence level. The area was included in the Distressed Poor Law Unions and in the Congested Districts of the 19th and early 20th centuries. The size of some townlands reflect earlier fertility of the land with small enclosures and minor townlands generally echoing areas of former well-drained enclosed tillage or pasture while large townlands enclosed areas of bog or unimproved grassland, often areas of commonage that reflect the pre-19th century system of open rundale farming practice. Townland mearings running through unimproved land are often older than those enclosing smaller townlands. As expected the larger townlands lie in the northern half of the area, with smaller ones close to the county boundary reflecting the relative fertility of the soil in this section of the route. A further hint at previous land use lies in the design or condition of the enclosing boundaries, with well-built and maintained planted banked hedges reflecting areas of previous tillage, which were considered more valuable in the past than meadows, due probably to the increased amount of maintenance work the land required. Located as it was in the north midlands along the Shannon, the area was reasonably well served by transport infrastructure during the last three centuries, helping the area to overcome the general rural decline in population and agricultural activity prevalent in much of the midlands. Besides the river Shannon, the area is located on one of the main routes northwest from Dublin, deflected north of due west by the presence of Lough Ree. The central location of the area meant that it also benefited from the extensive railway system crossing the country, and by 1860 the villages of Dromod and Roosky were relatively well served by road, rail and river, all contributing to its relative wealth during some of the worst periods of desolation and poverty in Irish history. Nowadays agriculture along the route is generally in decline and many fields lie fallow with improved productive pasture and tillage reverting to wet grassland. Otherwise much of the area remains relatively unchanged and many of the field systems and smallholdings may reflect earlier land usage.

3 Archaeological and Historical Background

by Clíodhna Tynan of CRDS Ltd.

3.1 Baseline Survey

As part of the baseline survey for Moher 5, the Record of Historic Sites and Monuments for County Leitrim was consulted for the relevant parts of the County Leitrim Ordnance Survey 6" Sheet 35. All sites within a radius of c.3km of the site were identified. The relevant files for these sites, which contain details from aerial photographs, early maps, OS memoirs, OPW Archaeological Survey notes and other relevant publications, were then studied in the Sites and Monuments Records Office. These monuments are listed in Appendix 2. The archaeological excavation bulletin website (www.excavations.ie) was consulted to identify any previous excavations that may have been carried out in the vicinity of this site in recent times. This database contains summary accounts of all the excavations carried out in Ireland from 1985 to 2001. Details of previous excavations are listed are listed in Appendix 4. Further information is also included on the excavations which form part of this project, particularly those in close geographic proximity to this site, namely Moher 1 - 6 (A31-013 - 018). The topographical files in the National Museum of Ireland were consulted to determine if any archaeological artefacts had been recorded from the area. Other published catalogues of prehistoric material were also studied: Raftery (1983 - Iron Age antiquities), Eogan (1965; 1983; 1994 - bronze swords, Bronze Age hoards and goldwork), Harbison (1968; 1969a; 1969b - bronze axes, halberds and daggers) and the Irish Stone Axe Project Database (School of Archaeology, UCD). The finds from the area are listed in Appendix 3. Aerial photographs of the area of the development were examined in the Geological Survey of Ireland.

3.2 Previous Archaeological Work

A number of archaeological studies have been carried out since 2003 on the proposed route of the N4 Dromod Roosky Bypass Road Scheme. These include the following:

- N4 Drumsna to Longford Road Improvement, Constraints Study Report, MMEPO / Roscommon NRDO, March 2003
- Route Selection Report, N4 Drumsna to Longford, Roscommon NRDO, February 2004
- Environmental Impact Statement, N4 Dromod Roosky Bypass, Roscommon NRDO, December 2004

- N4 Dromod Roosky Bypass Advance Archaeological Works Contract, CRDS Ltd, O'Connor, Muñiz Pèrez & Conron, November 2005

CRDS Ltd. has carried out predevelopment archaeological testing along the route of the proposed N4 Dromod Roosky Bypass. In addition to the centreline test trenching, CRDS Ltd. also carried out site specific testing on four sites or areas identified in the Environmental Impact Statement (EIS) as being potentially archaeological. A Topographical Survey on a further site was also completed as part of the contract. Fieldwork (Archaeological Testing) started on the 9th August 2005 and ran until 11th October 2005. Weather conditions were generally poor for the most part. In total 43,294 (provisional figure) linear metres of centreline trenching was completed.

Archaeological test excavation of Moher 5 was undertaken by Marta Muñiz Pèrez of CRDS Ltd (licence no. 05E0983 - on behalf of Leitrim County Council). Archaeological excavation of Moher 5 was subsequently undertaken by Aisling Collins of CRDS Ltd (Ministerial Direction A31.

3.3 Towns and Villages

3.3.1 Dromod

Lewis states that Dromod *'originated in the establishment of works for smelting iron ore, which were carried on successfully till the supply of fuel failed in 1798'* (Lewis 1837, vol. 1, 519). At that time the village of Dromod contained 29 houses and 162 inhabitants. The earliest record found for Dromod comes from the 1659 *Census of Ireland* (Pender 1939, 561) which lists 'Dromad' townland as containing 18 heads of household, all of whom were Irish. One townland in the area, Furnace or Bleankillew, seems to owe its name to the iron-smelting industry. The manuscripts of the *Irish Folklore Schools Commission* record a local tradition that a place in Furnace townland known as *'Furnace Garden'* was so-called *'because foreigners came there…and set up there in an old castle and began to melt iron and had always a big furnace burning'* (MS 214, 42). Another account tells that *'the castle in Furnace was owned by three men who used to melt iron and got broken up and left the country and the castle went in ruin'* (MS214, 49). The Ordnance Survey Name Books (1835-6) state that *'there are the remains of an old furnace for smelting Iron ore in the southern end* [of Furnace townland] *from which probably the name is derived'* (OS Name Books County Leitrim: No. 83, 8). According to Butler (1935, 98) the iron works at Dromod were set up a year or two after the battle of the Boyne and were worked from 1695 to 1713. The directors of the Dromod iron works, along with the works at Ballinamore, were three Englishmen, Slake, Skerret and Hall, who apparently came to Ireland in 1690.

The Midland Great Western Railway (MGWR) company was formed in 1844 with the purpose of constructing a railway route from Dublin to the west coast serving the midlands. It was to become the third largest railway company in Ireland with lines linking Dublin to both Galway and Sligo. The company was incorporated in 1845 with powers to construct a railway from Dublin to Mullingar and Longford and purchase the Royal Canal, though the company had to maintain navigation and toll collection on the canal (Shepherd 1994, 9). Construction began in Dublin in 1846 and the line had reached Mullingar by September 1848 with the Longford line opening on 8th November 1855.

The Cavan-Leitrim Railway, founded in 1883, served a double function; 33¾ miles long, this narrow gauge (3ft) line linked the Midland and Great Western broad gauge station at Dromod to the corresponding Great Northern facility at Belturbet. The narrow gauge also serviced the local communities in between those towns. The construction of the Cavan and Leitrim Railway began in June 1885 and finished in July 1887. In 1920 a branch line was opened to Arigna, which greatly enhanced the local railway. Coal was shipped to the main lines heading for Limerick and the cement works at Drogheda, however, when the coal arrived at Dromod and Belturbet via the narrow gauge line, it had to be shovelled manually from the Cavan and Leitrim wagons to the wagons on the broad gauge lines. Coal traffic ensured the survival of the line through the years of the World War II and by the 1950s it was virtually dependant on the transportation of coal to Irish Cement in Drogheda. However, by 1956 this was no longer viable and the line finally closed on March 31st 1959 (Brady 2000).

3.3.2 Roosky

The settlement at Roosky may have a very early origin as a number of Bronze Age and Iron Age finds from the river Shannon there would suggest it acted as a fording point of the river at an early date (Bourke 2001, 201, 233). The town is contained within counties Leitrim and Roscommon as it spans the Shannon which acts as the county boundary. The Shannon figured prominently in proposals for navigation schemes in the late 17th and early 18th centuries including a petition to make the river Shannon navigable from Limerick to Leitrim. Legislation was authorised by parliament as early as 1715 (2 Geo. I, *c.* 12 IR) to make the river navigable from Limerick to Carrick-on-Shannon but little was done and further legislation was passed in 1721 and 1751. In 1755 Thomas Omer began work for the Commissioners of Inland Navigation and he oversaw the construction of a lateral canal to the west of the Shannon to bypass the shallows at Roosky. First edition Ordnance Survey maps show a double canal channel running from Rabbit Island in the

south to Pigeon Island in the north. By the early 19th century the state of repair of the canalised sections of the Shannon Navigation was poor. Pressure was brought about by the Inland Steam Navigation Company, formed in 1829, to improve the state of the navigation as they wanted to provide regular steamer services between Killaloe and Carrick-on-Shannon. In the 1840s improvement works resulted in the abandonment of the old canal in favour of dredging out the river channel. A new lock and weir were also to be constructed downstream of the village (Delany 1987, 55-58). The old nine arched bridge was replaced by the five arched bridge which stands over the river to this day (Delany 1987, 58; Lewis 1837, vol 2, 541). The older bridge is the one seen marked on Taylor & Skinner's *Maps of the Roads of Ireland* which marked 'Rulky Bridge' and also depicts the canal at Roosky (Talyor & Skinner 1783, 63). By the time Lewis was writing his *Topographical Dictionary of Ireland* Roosky was a market and post-town and was said to participate 'in the general trade of the river' (Lewis 1837, vol 2, 541).

3.4 Baronies and Parishes

3.4.1 The Barony and Parish of Mohill

The history of the barony and parish of Mohill begins with the foundation of a monastery there during the early medieval period by St. Manchan. The monastery, located in the town of Mohill *c*. 8km northeast of Dromod, was probably founded some time in the 6th century as the annals record the death of St. Manchan in 538 (*A. Tig.*) (Gwynn & Hadcock 1970, 187). Nothing survives of the early foundation (Lewis 1837, vol. 2, 376). The Augustinian rule was introduced here in the 13th century and the church is described as a parish church in 1470 (Moore 2003, 183). In 1590 the precinct contained a church, two stone buildings and a cemetery. The foundations of a rectangular building remain in the graveyard, where there is also a Church of Ireland church (Moore 2003, 183). During the early medieval period this area was settled by the Conmaicne Rein who were initially based at Fenagh and from there seem to have settled most of south Leitrim. This area subsequently came to be known as Magh Rein. By the late 7th or early 8th century the area of modern counties Leitrim, Cavan and part of Roscommon was conquered and settled by the Uí Briúin, a branch of the royal dynasty of Connacht. This area became known as the kingdom of Breifne and its over kings the Uí Briúin Breifne. The area was divided into many smaller territories and it seems that the area around the modern barony of Mohill formed part of the kingdom of Muinter Eolais. One of the chief families in Muinter Eolais was the Mac Raghnaill, whose descendants are the modern day Reynolds. During the later part of the first millennium the kingdom of Uí Briúin Breifne grew in strength and in size, expanding into neighbouring Mide. The kingdom seems to have reached the height of its power in the 12th century under the expansionist

endeavours of Tighernán O'Rourke and is said to have stretched 'from Kells to Drumcliff' (Simms 1979, 305). The area was conquered briefly during the early years of the Anglo-Norman colonisation with Hugh de Lacy being given the title of 'king of Midhe and Breifne and Airghaill' after the assignation of Tighernán O'Rourke. Although the O'Rourkes remained in Breifne as vassals of the Anglo-Normans, during the 13th century, as the English lost control of the area, the O'Rourkes came under increasing pressure from the O'Conor kings of Connacht to the west and the rising power of the O'Reilly kings to their east who seem to have joined forces in a bid to gain Breifne territory. The area of west Breifne, the modern county Leitrim, seems to have fallen under the control of Cúchonnacht O'Reilly at this stage but by 1256 Conchobhar O'Rourke had regained control of this portion of Breifne after the battle of Magh Sleacht and he is called 'king of Breifne', 'king of Uí Briúin and Conmaicne' by the Connacht annals (*A.C.*; *A.L.C*) (Simms 1979, 305-19).

The O'Rourke's remained as rulers of west Breifne until the 16th century when their power was finally broken and the county finally came under the control of the Crown with the Plantation of Leitrim in 1620-22. The delineation of the county boundaries of Connacht had begun in the 16th century but was interrupted by the Nine Years War, and so, it is not until 1607 that Leitrim as we know it today was defined and divided into five baronies: Dromahaire, Rosclogher, Leitrim, Mohill and Carrigallen. This division of the baronies survives to this day. The county at this time was described as being 'of the least value of all the counties of Ireland', with one commentator stating that 'none but devils could live in such a hell' (Mac an Ghallóglaigh 1971, 233). The first attempt at planting Leitrim proved to be a failure however, due to the uninviting nature of the local terrain, and the discontentment of the dispossessed native landholders. The situation finally came to a head in the rebellion of 1641, with the protestant settlers being forced to flee to Cavan, and Leitrim was not successfully settled until the Cromwellian and Williamite campaigns of the latter part of that century. It is during the 17th century that we witness the transformation of the landscape of Leitrim with the development of towns such as Carrick-on-Shannon and Jamestown by the settlers and also by their introduction of industry into the area. One such industry, the smelting of iron-ore, was to have a detrimental effect on the forests of the county which were almost entirely decimated by the end of the 18th century. The townlands through which the road development passes that are contained within the parish of Mohill are as follows: Aghamore, Aghnahunshin, Clooncolry, Cloonturk, Cornagillagh, Georgia or Gorteenoran, Gubagraffy, Killinaker, Knockmacrory, Moher (all within county Leitrim) and Edercloon and Tomisky (with county Longford). The Leitrim portion of Roosky is also contained within this parish.

3.4.2 Parish of Annaghduff

The origins of the parish of Annaghduff, which lies within the Barony of Mohill, also date to the early medieval period. An early Christian church was founded there in 766 AD according to Lewis (1837, vol 1, 28). The deaths of abbots of the monastery are recorded in the annals under the years 767 and 792 (*A.U.*, *A.F.M.*). In the Ordnance Survey Namebooks, letters and notes on place names and antiquities compiled by John O'Donovan during the course of the Ordnance Survey mapping of the country in the 1820s to 1840s, Annaduff parish is described as being composed of 'undulating hills highly fertile and cultivated with bogs in the vallies' (OS Name Books: Co. Leitrim; No. 83, 5). The following townlands through which the road development will pass are contained within this parish: Drumod Beg, Faulties, Fearnaght and Furnace or Bleankillew. Dromod village is also situated in the parish of Annaduff.

4 Archaeological Excavation

4.1 Overview of Excavations

The archaeological excavation of site A31-017 included any features of archaeological significance exposed within the road-take footprint. All these features were excavated and recorded down to undisturbed natural subsoil.

The excavation of Moher 5 revealed the site to contain two large burnt stone spreads of possible Fulacht Fiadh material, a charcoal enriched spread and a large pit containing a decayed boulder.

4.2 Methodology

The site was stripped using a 13 ton mechanical digger with flat toothless ditching bucket with the spoil banked up on the southern side of the stripped area. The site measured 30m by 10m revealing the underlying features. Once exposed, archaeological deposits were cleaned and cleared of any remaining topsoil, which was up to c.0.38m deep in places. This was all done by hand in variable weather conditions. The exposed archaeological deposits were then excavated by hand, and recorded in plan, section and by photography, ensuring complete preservation by record of the site. Complete excavation of the site took place between 28th March 2006 to 7th April 2006. Excavation involved the exposure and recording of all archaeological features within the road-take. A team of the director, two supervisors and eight assistants undertook the excavations.

4.3 Results of Archaeological Excavation

The results of the excavation of Site A31-017 at Moher 5 are presented below. The archaeology uncovered all appears to date to prehistoric times. The site consisted of two burnt spreads of Fulacht Fiadh material F33 and F40, and a peaty spread containing charcoal F34. A radiocarbon date of 2620-2140 cal BC was obtained, putting the site in the Late Neolithic (see Appendix 11).

4.3.1 Prehistoric Period

Late Neolithic Burnt Spread F33

Burnt spread F33, located under topsoil F1, was oriented north-northeast by south-southwest. It is believed only the edges of the feature were excavated as it extended beyond the edge of excavation under the south facing baulk, where a clearly visible mound was present. The part of

the spread within the CPO was originally bisected by a test trench, creating two irregular shaped spreads of burnt sandstone. The spread within the CPO measured 4m by 3.7m and had a maximum depth of 12cm. F33 sat directly on top of a layer of peat, F36. This layer also measured 4m by 3.7m with a maximum depth of 13cm. This in turn overlay F37, a spread of silty clay above the natural. F33 has been radiocarbon dated to 3916±82BP (2620-2140 cal BC) which would put it in the Late Neolithic Period.

Burnt Spread F40

F40 was located southwest of F33 and was a sub oval spread of burnt sandstone lying in a natural depression. It was sealed by a dark coloured peaty spread (F39) which measured 4m by 1.8m with a maximum depth of 6cm and contained a chert blade. Two flint lithics were also recovered from F40 (see Appendix 15). It is possible that F40 is part of the same spread as F33 but being on the periphery and shallow in nature, could have been reduced down over the years.

Peat Spread Containing Charcoal F34

F34 was an irregular shaped peat spread containing charcoal, located southeast of burnt spread F33. It measured 3.50m in length with a maximum width of 0.55m and a maximum depth of 0.23m. A chert flake was recovered from F34 (see Appendix 15). A peat spread F26 lay below this layer. It is possible they relate to the activity associated to F33.

5 Archaeological Finds

5.1 Overview

There were 4 finds recovered from Moher 5. They consisted of a small flint bladelet, a flint chunk, a chert flake and a chert blade (see Appendix 15).

All finds were stabilised to National Museum of Ireland specifications and temporarily housed in CRDS offices for the duration of the project. Finds will ultimately be stored in the National Museum of Ireland.

5.2 Prehistoric Finds

The two flint pieces were recovered from F40, a sub oval spread of burnt sandstone. The layer above, F39, produced a broken chert blade (see section 4 above).

5.2.1 Lithics

A total of four lithics were recovered from Moher 5.

Find No.	Site	Feature	Date	Classification	Description
A031-017:1	A31-017	40	23-03-06	Stone	Lithic - small fine broken flint bladelet
A031-017:2	A31-017	40	23-03-06	Stone	Lithic - irregular flint chunk
A031-017:3	A31-017	34	22-03-06	Stone	Lithic - irregular chert flake
A031-017:4	A31-017	39	22-03-06	Stone	Lithic – broken chert blade

6 Archaeological Samples

6.1 Overview

A programme of sampling took place during the excavation of Site A31-017 at Moher 5. Advice was sought from various experts while excavation was ongoing, and following their advice and recommendations a sampling strategy was conceived especially for the site.

Following the completion of on-site excavation a review was undertaken of all samples taken at Site Moher 5. This involved the disposal of some samples and the re-examination and prioritising of the others. All samples retained for analysis are outlined below.

6.2 Samples Processed from Moher 5

Sample	Site	Feature	Date	Classification	Description
6	A031-017	34	31-03-06	charcoal	C14 and wood id
7	A031-017	33	03-04-06	charcoal	C14 dating
8	A031-017	45	05-04-06	Soil sample	Fill of suspected trough F47
9	A031-017	45	26-04-06	Wood	Wood ID

6.3 Samples Sent for Further Analysis

Sample	Sieved	Vol	Flot/Retent	Mesh	Charcoal	Seed	Flots	Notes
8	Y	6L	F	0.25mm	Y	Y	1 flot	A very small amount of charcoal.
8	Y		R	1mm	Y	Y		Retent picked. Flakes of charcoal, seeds?, in retent. If important, send retent.
10	Y	7.5L	F	0.25mm	Y	Y	1 flot	
10	Y		R	1mm	Y	Y		Retent picked. Flakes of charcoal, seeds?, in retent. If important, send retent.

6.4 Samples Sent for Radiocarbon Dating

Sample	Site	Feature	Date	Classification	Description
7	A031-017	33	03-04-06	charcoal	C14 dating

7 Archaeological Discussion

7.1 Discussion Overview

The two burnt spreads or possible Fulacht Fiadh F33 & F40 were both quite shallow with no traces of a trough in either one. F40 appeared to be more complete while F33 extended beyond the CPO into the field to the north.

Burnt mounds are prehistoric monuments which date largely to the Bronze Age, concentrating in the period 1800-800 BC, however more recently dated sites of this type have produced dates pre 2000 BC and later sites have also been recognized (O'Sullivan & Downey 2004, 37; Brindley & Lanting 1990; O'Carroll forthcoming). Burnt mounds are the most common Bronze Age site type and the occurrence of burnt mounds suggests other evidence of Bronze Age occupation may be present in the landscape which has yet to be recognised.

Burnt mound sites are characterised by horseshoe shaped mounds of firing debris (fire cracked stone and charcoal) and, usually, an associated trough used to hold water. Heated stones were likely used to boil water in the troughs and the resultant debris of burnt stone was spread around the general area.

There are more than 6000 burnt mounds now known (Buckley 1990) and several hundred have been excavated nationally.

Burnt mounds were usually located in wetlands or in close proximity to water sources. Such sites are traditionally interpreted as cooking sites - where large joints of meat could be boiled and were associated with temporary, perhaps seasonal use. The Irish name *Fulacht Fiadh* suggests an association with deer and potentially deer hunting. The name roughly translates as a cooking place for deer (www.irishdictionary.ie/dictionary).

However the function of burnt mound sites is unclear, emerging evidence suggests they may be best viewed as multi-purpose sites. Their location close to a water source and the mounds of firing debris indicates that fire and water were essential to on-site activities. More recent suggested activites at these sites include cooking and (ritual) bathing, industrial processing including brewing, extraction of grease, dyeing and leather treatment (Barfield & Hodder 1987; Buckley 1990; Ó Drisceoil 1990; Ó Néill 2000, 2004; Cross May et al. 2005; Monk 2007; Quinn & Moore 2007).

7.2 Conclusion

The site at Moher 5 may have being disturbed over time for agricultural reasons resulting in shallow archaeological deposits. Burnt Spread F40 may have been levelled (with the deposit only surviving as it lay in a natural depression). However no trough was discovered suggesting that it may in fact be related to Burnt Mound F33. Only the western edge of Burnt Mound F33 encroached into the CPO and was excavated. The feature clearly extended into a visible mound close by. Radiocarbon dating has placed the site in the Late Neolithic, with a date of 3916±82BP (2620-2140 cal BC).

Appendices

Appendix 1: National Monuments Service Registration Number
Appendix 2: Recorded Archaeological Sites and Monuments
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Appendix 1

National Monuments Service Registration Number

National Monuments
Acts (1930-2004)
Ministerial Directions -
Record Number for
archaeological activity

AN ROINN COMHSHAOIL, OIDHREACHTA AGUS RIALTAIS AITIUIL
DEPARTMENT OF THE ENVIRONMENT, HERITAGE
AND LOCAL GOVERNMENT

File: A31/17 Direction No. A31

Registration Number: E3305

Directions have been issued to Martin Dolan on behalf of Leitrim County Council in order to regulate archaeological activities carried out on N4 Dromod to Roosky Bypass.

Application having been duly made to me by Ms. Aisling Collins of Annesley News, Brighton Avenue, Monkstown, Co Dublin.

For a registration number to record excavation at the site of Moher 5 being part of the townland of MOHER (Carrigallen By.) in the County of Leitrim.

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 ..... 28 February 2007

Appendix 2

Recorded Archaeological Sites and Monuments

extracted from Environmental Impact Statement

The Sites and Monuments Record (SMR) and the Record of Monuments and Places (RMP) are the principle sources of information on the field monuments within the state. These document all known and potential sites, whether extant, buried or destroyed. The non-statutory SMR list, compiled between 1984 and 1992, was replaced by the RMP lists and corresponding maps in 1994. These includes most of the information contained within the SMR, except monuments which were either not located or which were deemed not to merit inclusion upon further examination. Additional sites discovered during the interval were added to the RMP. The list is not exhaustive and monuments are regularly being added to the inventory. The lists for Leitrim and Longford have not yet been published but the information is available in the form of Archaeological Survey field notes. Just one monument from these lists was found to lie within the corridor (LE035-017), the site of a standing stone that has been removed some time in the past.

additional information by CRDS Ltd.

The following are a list of recorded monuments in the general vicinity of the road scheme

LE035:002	Rath
Aghamore 20244, 29445 100-200' OD 337	Towards the top of the north-west facing slope of a drumlin and directly north of another rath (LM035:003). Grass-covered subcircular area (internal dimensions 21m east-west; 18m north-south) defined by an earthen bank (width 8-12m; internal height 0.2m; external height 1.1m at south to 2.2m at east and west), and an external fosse (width of base 1.6-3m; depth 0.2m at east) northwest-east-southwest. There is a slight mound (diameter 6m) at the centre.

LE035:003	Rath
Aghamore 20247, 29441 100-200' OD 338	On the north-facing slope of a drumlin immediately south of another rath (LM035:002). Grass-covered circular area (internal dimensions 32m north-south; 30m east-west) defined by an earthen bank (width 6.5-8m; internal height 0.3-0.5m; external height 0.5m at south to 1.8m at north), reduced to a scarp (height 2.5m) at east, and an external fosse (width of base 1.5-3m; depth 0.15m at west to 0.7m at north). There is a local tradition of a souterrain in the interior.

LE035:017	Standing stone (site)
Fearnaght 20402, 29267 200-300' OD 146	On a shelf with a quarry to north and lower ground to west. Marked only on the current edition of the OS 6-inch map. The field has been reclaimed and the standing stone removed.

LE035:018	Bullaun stone
Fearnacht 20394, 29254 100-200' OD 1476	On a west-facing slope. An oval stone (dimensions *c.* 0.4m x *c.* 0.2m) with a small basin on one side close to a well which is an opening (diameter 1.2m; depth 0.5m) defined by boulders (dimensions *c.* 0.5m) which is not known to be a holy well.

LE035:020	Rath
Furnace or Bleankillew 20458, 29159 100-200' OD 669	On a gentle east-facing slope. Grass-covered subcircular area (internal dimensions 42m north-south; 37m east-west) defined by an overgrown earthen bank (width 4m; internal height 1.1m; external height 3m) south-north which is reduced to a scarp (height 1.4-2.5m) elsewhere, and a flat bottomed fosse (width 1-2.5m; depth 0.7-1m). The entrance (width 4m) is at south.

LE037:001	Earthwork (site)
Moher 20558, 28751 100-200' OD 1382	On a gentle west-facing slope close to the River Shannon. Described as a fort on the 1st edition of the OS 6-inch map. Grass-covered oval earth and stone mound (dimensions 42.3m north-south; 38.6m east-west; height 0.8m at east to 3.3m at west) with signs of recent quarrying along the perimeter at northeast.

LE037:003	Earthwork (site)
Aghamore 20579, 28630 100-200' OD 1309	In pasture on a west-facing slope. Marked as a circular enclosure (diameter *c.* 36m) on the 1st and current editions of the OS 6-inch maps. Not visible at ground level.

Sites uncovered during the Dromod Roosky Bypass Road Scheme

A31-001 / E3288	Kiln (site of)
Faulties 204474, 292194 OD 50	The excavation of Site A31-001 (Faulties) revealed a post-medieval kiln, as was depicted on the 1st Edition Ordnance Survey 6" map (1829-41).

A31-006 / E3293	Agricultural Activity
Cloonturk 1 205958, 290782 OD 44	The excavation of Site A31-006 (Cloonturk 1) revealed a series of post-medieval activity, with several features possibly being of an older date.

A31-005 / E3292	Burnt Mounds
Cloonturk 2 205909, 290813 OD 43.2	The excavation of Cloonturk 2 revealed the site to contain one large and two smaller burnt stone deposits of possible Fulacht Fiadh material, a charcoal enriched spread, a stone deposit and a pit containing dumped stone.The large burnt stone deposit (F3) has been dated to 3976±30 BP (2580-2400 BC) putting it in thevery early stages of the Early Bronze Age. The smaller burnt stone deposit (F8) has been dated to 3775±30 BP (2300-2050 BC) again putting it in the early stages of the Early Bronze Age, similar to F3.

A31-007 / E3295	Burnt Mounds
Clooncolry 1 206234, 290246 OD 53.5	Investigations revealed two main phases of activity, the Early Bronze Age and the Middle Bronze Age. The Early Bronze Age was represented by a large burnt stone deposit (F8) overlying three pits and troughs (F31, 42 & 49). A further burnt deposit (F48) and associated pit (F53) also belong to this period. A fragment of a polished stone axe was recovered from a stratigraphically secure context (F32) radiocarbon dated to the Early Bronze Age. The Middle Bronze Age was represented at Clooncolry by a burnt mound (F3), a burnt spread (F4) and associated pit (F30). In addition to the prehistoric archaeology, a number of modern agricultural features were also observed and excavated.

A31-009 / E3297	19th Century Building
Clooncolry 3 206000, 288782 OD 45	Clooncolry 3 consisted of a ruined stone farmhouse and outbuilding possibly dating from the 19th century. The building is almost completely flattened apart from the western gable and a small portion of the north facing side wall, the remains of its southern end was completely covered in brambles, and ivy concealed half of the gable end which was the only thing keeping it standing. The outhouse has been demolished and is now completely overgrown. A small mill stone was uncovered from the northern side of the house during the testing phase of archaeological investigations. The aim of the archaeological investigations was primarily to establish details of the construction and extent of the building.

A31-019 / E3307	Burnt Mound
Georgia 1 205863, 286990 OD 47	The excavation of Site A31-019 (Georgia 1) revealed a Fulachta Fiadh, a number of stake holes and two small pits. Charcoal from the burnt stone deposit has been radiocarbon dated to 1205 - 1280 AD. It is likely that the sample comes from charcoal resulting from the burning of scrub close to the bog in the medieval period over a probable Bronze Age burnt mound.

A31-016 / E3304	Pits
Moher 4 205845, 287533 OD 48	Investigations showed that Moher 4 was spread over 4 areas with only Area 2 and 3 containing archaeology. Area 2 contained two sub circular pits side by side, while Area 3 contained two possible furrows and a sub rectangular pit. A posthole (F27) has been radiocarbon dated to 660-780 Cal AD, putting it in the Early Medieval period.

A31-017 / E3305	Burnt Mound
Moher 5 205905, 287415 OD 47	Investigations showed the site contained two small burnt stone spreads of possible Fulacht Fiadh material, and a possible charcoal enriched burnt spread. Radiocarbon dating has placed the site in the Late Neolithic, with a date of 3916±82BP (2620-2140calBC).

A31-021 / E3309	Pits
Aghamore 1 205938, 286425 OD 44.5	Complete metal detection of the site took place between 3rd – 25th April 2006 prior to soil stripping. Finds recovered date from the post-medieval and modern period. The post-medieval period is represented by a musket shot. The modern era is represented by a considerable number of metal objects mainly related to agricultural activity, such as horse-shoes, nails, fragments of farm machinery and hand tools. The excavation of Site A31-021 (Aghamore 1) revealed sporadic post-medieval and modern activity, in line with the results of the metal detection survey. Most of the pits and curvilinear features identified in testing were shown to be natural geological features.

A31-022 / E3310	Burnt Mounds & Pits
Aghamore 2 205992, 286230 OD 52.5	Investigations showed the site contained five burnt spreads and three burnt stone deposits, all probably a result of burnt stone technology, along with a series of associated pits and troughs.

A31-023 / E3311	Burnt Mounds
Aghnahunshin 206074, 285975 OD 48	Investigations showed the site to be three Fulachta Fiadh and their associated features which included a series of pits and stake holes. Three Radiocarbon dates were obtained from charcoal within the burnt mounds– two from the Early Bronze Age 2470-2130 Cal BC and one from the Early Medieval period Cal AD 890-1030.

A31-024 / E3312	Wooden Trackways
Tomiskey 206619, 285178 OD 47	The excavation revealed six structures and deposits of archaeological significance. These consisted of two tertiary toghers and four deposits of archaeological wood.

A31-025 / E3313	Wooden Trackways
Edercloon 206861, 285027 OD 1309	Investigations showed the site to consist of a large complex of wooden structures, predominantly toghers and platforms with occasional smaller deposits of archaeological wood also present. The complex was extremely dense with forty-five individual sites located in very close proximity with many abutting and crossing over and beneath each other. These consisted of four primary toghers, eight secondary toghers, 12 tertiary toghers, five platforms and 13 deposits of archaeological wood. Thirty-six radiocarbon and dendrochronological dates from the University of Waikato, New Zealand, Beta Analytic Laboratory, Florida, and Queens University, Belfast indicate that the structures date from the Neolithic to the medieval period, with the majority dating to the centuries of the Late Bronze Age and Early Iron Age.

Appendix 3

Recorded Archaeological Finds from the Area

extracted from Environmental Impact Statement

The Topographical Files in the archives of the National Museum of Ireland identify artifacts that have been donated or otherwise acquired by the museum. They include both provenanced and unprovenanced chance finds, finds from private collections and objects uncovered during the course of archaeological excavation. No finds from the area covered by the proposed route were recorded.

additional information by CRDS Ltd.

Edercloon Axe

A hafted Stone Axe was recovered from peat cutting at Edercloon, and has been published and illustrated in a number of academic books (see Waddell, 1992, 44-46 for a good example). The landowners subsequently informed of a number of unreported objects that were uncovered over the years including a wooden handled vessel and leather objects (Glynn pers comm.).

Appendix 4

Previous Archaeological Excavations from the Area

extracted from Environmental Impact Statement

No excavations along the proposed route were recorded in the Excavations Bulletin and Excavations Database.

Appendix 5

Site Archive

Site archive for excavations at Moher 5

Item	Number	Notes
Notebooks	1	A Directors notebook
Registers	8	Levels Book, Samples Register, Finds Register, Drawing Register, Photo Register, Feature Register, Attendance Book and an Incident Book
Feature Sheets	16	1 Leaver Arch Folders containing all Feature Sheets
Other Documents	3	Safety Statement, N4 Testing Report & N4 EIS
Digital Photographs	51	All photographs in colour and taken with a HP Digital Camera
Plans	14	14 plans and sections on permatrace

Appendix 6

Feature Register

Features recorded during the excavation of Moher 5

F33	A031-017	Deposit	OD	Late Neolithic	L 4m, W 3.7m, D 0.12m
Description	*Two irregular shaped spreads of burnt stone and charcoal, possibly fulacht material separated by the digger during testing. Charcoal enriched peaty soil with large inclusions of burnt sandstones of small to medium size. Moderate to frequent inclusions of small roots.*				
Interpretation	*This possible fulacht spread, lies on a layer of peat. It is a very thin layer of burnt spread which has also been cut by testing. No trough or fire hearth. Main part of the feature exists outside the CPO were mound was observed*				
Finds	*None*				
F34	**A031-017**	**Deposit**	**OD**	**Prehistoric**	**L 3.5m, W 0.55m, D 0.25m**
Description	*Dark brown/black peaty charcoal spread. It is irregular in shape and runs North-west South-east. Its full extent is unknown as it ran into the baulk. Contains roots. It's a peaty organic material with some flecks and some larger pieces of charcoal. It is of medium to soft compaction.*				
Interpretation	*Peat Spread containing charcoal. Possibly related to F33 and lies on the same peaty material as the spread F34 as there is a small amount of wood/rooty material it may be a burnt fallen down tree or burnt shrubs. Sits on top of F26*				
Finds					
F35	**A031-017**	**Natural**	**OD**		**L 2.55m, W 0.60m, D 0.12m**
Description	*A natural linear rock accumulation orientated North-east to South-west*				
Interpretation	*Linear arrangement of naturally occurring stones composed of sandstone layers which are broken at the top and consist of intact layers beneath. The stones occur in natural clay. Non Archaeological.*				
Finds					
F36	**A031-017**	**Deposit**	**OD**	**Late Neolithic**	**Min L 8.25m, min W 3.8m, D 0.13m**
Description	*A layer of peaty material. It is irregular with no real orientation, medium brown in colour of a peaty organic material and is medium in compaction.*				
Interpretation	*A layer of peaty material that lies under the burnt spread F33*				
Finds	*None*				
F37	**A031-017**	**Natural**	**OD**		
Description	*Beige silty clay found beneath F34. This is an irregular shaped spread of material found under F34 and runs down the length of the baulk to beneath F33. It is beige in colour with some medium to smaller stones. It is also somewhat sandy/gritty and of a medium to hard compaction.*				
Interpretation	*A natural deposit*				
Finds					
F38	**A031-017**	**Natural**	**OD**		
Description	*Natural material that consists mainly of large stones with some medium sized stones. They are quite angular and flat resembling large slabs*				
Interpretation	*A very stony natural concentrated beneath and around F34*				
Finds					
F39	**A031-017**	**Deposit**	**OD**	**Prehistoric**	**L 4m, W 1.8m, D 0.06m**
Description	*Compact sub-circle of brown/black peat containing frequent small to medium sized burnt stone, frequent small pebbles and frequent small root inclusions with occasional charcoal flecks.*				
Interpretation	*F39 sat on top of Burnt Spread F40, sealing it*				
Finds	*None*				

F40	A031-017	Deposit	OD	Late Neolithic?	L 3.8m, W 3m, D 0.08m
Description	*Sub-oval concentration of burnt sandstone and charcoal, filling a slight depression on an east north-east, south south-west axis. The maximum size of the majority of stones was stones 0.10m x 0.05m x 0.02m. There were occasional larger rounded stones of 0.15 x 0.15. A large number of the stones were decayed and crumbling. The matrix is black/dark grey sandy silt.*				
Interpretation	*Burnt Spread under F39 but as no trough was found, could be related to F33*				
Finds	*None*				
F45	A031-017	Fill	OD		L 3.2m, W 3.3m, D 0.42m
Description	*A peat fill of F46, which was a sub-triangular cut with a large decayed rock on it. Contains some pieces of decayed root found within peat.*				
Interpretation	*Possibly the fill of a tree bowl.*				
Finds	*None*				
F46	A031-017	Cut?	OD		L 3.2m, W 3.3m, D 0.46m
Description	*Sub-triangular cut with only two visible cuts. The southern area contained a large decayed and fractured boulder which sloped toward the base of the cut. The western edge was sharp to vertical to a sharp base. The Northern corner was a gradual slope to a gradual base. The Eastern edge out from the Northern corner starts to drop sharply to a vertical side with one area of under-cutting then gradually sloped to the base. The South-east edge was a gradual slope to the base. The south east edge was a gradual top to a coved side to a straight natural.*				
Interpretation	*A possible tree bowl*				
Finds					
F47	A031-017	Deposit	OD	Late Neolithic?	L 4m, W 1.2m, D 0.03m
Description	*A shallow sub-rectangular deposit of fulacht material with no visible cut. Possibly spread on natural depressions.*				
Interpretation	*A deposit associated with F40.*				
Finds					

Appendix 7

Finds Register

Archaeological Finds recovered from Moher 5

Find No.	Site	Feature	Date	Classification	Description
A031-017:1	A31-017	41	23-03-06	Stone	Lithic - small fine broken flint bladelet
A031-017:2	A31-017	41	23-03-06	Stone	Lithic - irregular flint chunk
A031-017:3	A31-017	34	22-03-06	Stone	Lithic - irregular chert flake
A031-017:4	A31-017	39	22-03-06	Stone	Lithic – broken chert blade

Appendix 8

Samples Register

Archaeological samples from Moher 5

Sample	Site	Feature	Date	Classification	Description
6	A031-017	34	31-03-06	charcoal	C14 and wood id
7	A031-017	33	03-04-06	charcoal	C14 dating
8	A031-017	45	05-04-06	Soil sample	Fill of suspected trough F47
9	A031-017	45	26-04-06	Wood	Wood ID

Appendix 9

Levels Register

Levels taken during excavation at Moher 5

Site	Date	Dwg	No.	TBM	BS	HOI	Feature	Reading	Level
A031-017	30-03-06	10	1	47.24	1.89	49.13	F70	2.21	46.92
A031-017	30-03-06	10	2	47.24	1.89	49.13	F70	2.2	46.93
A031-017	30-03-06	10	3	47.24	1.89	49.13	F70	2.21	46.92
A031-017	30-03-06	10	4	47.24	1.89	49.13	F70	2.21	46.92
A031-017	30-03-06	10	5	47.24	1.89	49.13	F70	2.19	46.94
A031-017	30-03-06	10	6	47.24	1.89	49.13	F33	2.1	47.03
A031-017	30-03-06	10	7	47.24	1.89	49.13	F33	2.18	46.95
A031-017	30-03-06	10	8	47.24	1.89	49.13	F70	2.37	46.76
A031-017	30-03-06	10	9	47.24	1.89	49.13	F33	2.14	46.99
A031-017	30-03-06	10	10	47.24	1.89	49.13	F70	2.22	46.91
A031-017	30-03-06	10	11	47.24	1.89	49.13	F70	2.26	46.87
A031-017	30-03-06	10	12	47.24	1.89	49.13	F33	2.17	46.96
A031-017	30-03-06	10	13	47.24	1.89	49.13	F33	2.16	46.97
A031-017	30-03-06	10	14	47.24	1.89	49.13	F33	2.24	46.89
A031-017	30-03-06	10	15	47.24	1.89	49.13	F70	2.37	46.76
A031-017	30-03-06	10	16	47.24	1.89	49.13	F33	2.11	47.02
A031-017	30-03-06	10	17	47.24	1.89	49.13	F70	2.29	46.84
A031-017	30-03-06	10	18	47.24	1.89	49.13	F33	2.16	46.97
A031-017	30-03-06	10	19	47.24	1.89	49.13	F33	2.09	47.04
A031-017	30-03-06	10	20	47.24	1.89	49.13	F33	2.2	46.93
A031-017	30-03-06	10	21	47.24	1.89	49.13	F33	2.25	46.88
A031-017	30-03-06	10	22	47.24	1.89	49.13	F70	2.3	46.83
A031-017	30-03-06	10	23	47.24	1.89	49.13	F33	2.17	46.96
A031-017	30-03-06	10	24	47.24	1.89	49.13	F70	2.27	46.86
A031-017	30-03-06	10	25	47.24	1.89	49.13	F33	2.21	46.92
A031-017	30-03-06	10	26	47.24	1.89	49.13	F33	2.21	46.92
A031-017	30-03-06	10	27	47.24	1.89	49.13	F33	2.25	46.88
A031-017	30-03-06	10	28	47.24	1.89	49.13	F70	2.37	46.76
A031-017	31-03-06	11	1	47.24	1.62	48.86	F35	1.9	46.96

A031-017	31-03-06	11	2	47.24	1.62	48.86	F35	1.94	46.92
A031-017	31-03-06	11	3	47.24	1.62	48.86	F35	2.02	46.84
A031-017	31-03-06	11	4	47.24	1.62	48.86	F35	1.9	46.96
A031-017	31-03-06	11	5	47.24	1.62	48.86	F35	1.95	46.91
A031-017	31-03-06	11	6	47.24	1.62	48.86	F70	2.02	46.84
A031-017	31-03-06	11	7	47.24	1.62	48.86	F70	2.04	46.82
A031-017	31-03-06	11	8	47.24	1.62	48.86	F70	2.03	46.83
A031-017	31-03-06	11	9	47.24	1.62	48.86	F70	2.01	46.85
A031-017	31-03-06	11	10	47.24	1.62	48.86	F35	2.02	46.84
A031-017	31-03-06	11	11	47.24	1.62	48.86	F70	2.01	46.85
A031-017	31-03-06	12	1	47.24	1.63	48.87	F33	1.7	47.17
A031-017	31-03-06	13	1	47.24	1.63	48.87	F33	1.76	47.11
A031-017	31-03-06	14	1	47.24	1.62	48.87	F70	1.98	46.88
A031-017	31-03-06	14	2	47.24	1.62	48.87	F34	2.0	46.86
A031-017	31-03-06	14	3	47.24	1.62	48.87	F34	2.02	46.84
A031-017	31-03-06	14	4	47.24	1.62	48.87	F34	2.07	46.79
A031-017	31-03-06	14	5	47.24	1.62	48.87	F34	2.03	46.83
A031-017	31-03-06	14	6	47.24	1.62	48.87	F70	2.09	46.77
A031-017	31-03-06	14	7	47.24	1.62	48.87	F70	2.04	46.82
A031-017	03-04-06	15	1	47.24	1.77	49.01	F33	1.85	47.16
A031-017	05-04-06	17	1	47.24	1.66	48.9		1.67	47.23
A031-017	05-04-06	17	2	47.24	1.66	48.9		1.66	47.24
A031-017	05-04-06	17	3	47.24	1.66	48.9		1.67	47.23
A031-017	05-04-06	17	4	47.24	1.66	48.9		1.73	47.17
A031-017	05-04-06	17	5	47.24	1.66	48.9		1.83	47.07
A031-017	05-04-06	17	6	47.24	1.66	48.9		1.81	47.09
A031-017	05-04-06	17	7	47.24	1.66	48.9		1.84	47.06
A031-017	05-04-06	17	8	47.24	1.66	48.9		1.67	47.23
A031-017	05-04-06	17	9	47.24	1.66	48.9		1.64	47.26
A031-017	05-04-06	17	10	47.24	1.66	48.9		1.72	47.18
A031-017	05-04-06	17	11	47.24	1.66	48.9		1.73	47.17
A031-017	05-04-06	17	12	47.24	1.66	48.9		1.74	47.16
A031-017	05-04-06	17	13	47.24	1.66	48.9		1.76	47.14
A031-017	05-04-06	17	14	47.24	1.66	48.9		1.63	47.27

A031-017	05-04-06	17	15	47.24	1.66	48.9		1.6	47.3
A031-017	05-04-06	17	16	47.24	1.66	48.9		1.69	47.21
A031-017	05-04-06	17	17	47.24	1.66	48.9		1.8	47.1
A031-017	05-04-06	17	18	47.24	1.66	48.9		1.73	47.17
A031-017	05-04-06	18	1	46.31	2.65	48.96	F50	2.97	45.99
A031-017	05-04-06	18	2	46.31	2.65	48.96	F50	2.43	46.53
A031-017	05-04-06	18	3	46.31	2.65	48.96	F50	2.39	46.57
A031-017	05-04-06	18	4	46.31	2.65	48.96	F50	2.7	46.26
A031-017	05-04-06	18	5	46.31	2.65	48.96	F50	3.07	45.89
A031-017	05-04-06	18	6	46.31	2.65	48.96	F50	3.7	45.26
A031-017	05-04-06	18	7	46.31	2.65	48.96	F50	3.5	45.46
A031-017	05-04-06	18	8	46.31	2.65	48.96	F50	2.48	46.48
A031-017	05-04-06	18	9	46.31	2.65	48.96	F50	2.22	46.74
A031-017	05-04-06	18	10	46.31	2.65	48.96	F50	1.68	47.28
A031-017	05-04-06	18	11	46.31	2.65	48.96	F50	1.91	47.05
A031-017	05-04-06	18	12	46.31	2.65	48.96	F50	1.52	47.44
A031-017	05-04-06	18	13	46.31	2.65	48.96	F50	1.74	47.22
A031-017	05-04-06	18	14	46.31	2.65	48.96	F50	2.15	46.81
A031-017	05-04-06	18	15	46.31	2.65	48.96	F50	2.37	46.59
A031-017	05-04-06	18	16	46.31	2.65	48.96	F50	3.09	45.87
A031-017	05-04-06	18	17	46.31	2.65	48.96	F50	2.85	46.11
A031-017	05-04-06	19	1	44.27	1.77	46.04	F50 + F51	0.38	45.66
A031-017	06-04-06	20	1	47.24	1.54	48.78	F45 + F46	1.76	47.02
A031-017	06-04-06	21	1	47.24	1.54	48.78	F46	1.73	47.05
A031-017	06-04-06	22	1	47.24	1.56	48.78	F39 + F40	1.46	47.34
A031-017	07-04-06	23	1	47.24	1.69	48.93		1.77	47.16
A031-017	07-04-06	23	2	47.24	1.69	48.93	F47	1.69	47.24
A031-017	07-04-06	23	3	47.24	1.69	48.93		1.75	47.18
A031-017	07-04-06	23	4	47.24	1.69	48.93		1.71	47.22
A031-017	07-04-06	24	1	47.24	1.71	48.95	F46	1.91	47.04
A031-017	07-04-06	24	2	47.24	1.71	48.95	F46	1.96	46.99
A031-017	07-04-06	24	3	47.24	1.71	48.95	F46	2.02	46.93
A031-017	07-04-06	24	4	47.24	1.71	48.95	F46	2.08	46.87
A031-017	07-04-06	24	5	47.24	1.71	48.95	F46	1.85	47.1

A031-017	07-04-06	24	6	47.24	1.71	48.95	F46	1.94	47.01
A031-017	07-04-06	24	7	47.24	1.71	48.95	F46	2.2	46.75
A031-017	07-04-06	24	8	47.24	1.71	48.95	F46	2.67	46.28
A031-017	07-04-06	24	9	47.24	1.71	48.95	F46	2.31	46.64
A031-017	07-04-06	24	10	47.24	1.71	48.95	F46	1.87	47.08
A031-017	07-04-06	24	11	47.24	1.71	48.95	F46	1.76	47.19
A031-017	07-04-06	24	12	47.24	1.71	48.95	F46	1.8	47.15
A031-017	07-04-06	24	13	47.24	1.71	48.95	F46	2.37	46.58
A031-017	07-04-06	24	14	47.24	1.71	48.95	F46	1.82	47.13
A031-017	07-04-06	24	15	47.24	1.71	48.95	F46	1.83	47.12
A031-017	07-04-06	24	16	47.24	1.71	48.95	F46	1.91	47.04
A031-017	07-04-06	24	17	47.24	1.71	48.95	F46	1.76	47.19
A031-017	07-04-06	24	18	47.24	1.71	48.95	F46	1.88	47.07
A031-017	07-04-06	24	19	47.24	1.71	48.95	F46	2.06	46.89
A031-017	07-04-06	24	20	47.24	1.71	48.95	F46	2.18	46.77
A031-017	07-04-06	24	21	47.24	1.71	48.95	F46	2.1	46.85
A031-017	07-04-06	24	22	47.24	1.71	48.95	F46	1.85	47.1
A031-017	07-04-06	24	23	47.24	1.71	48.95	F46	2.08	46.87
A031-017	07-04-06	24	24	47.24	1.71	48.95	F46	2.0	46.95
A031-017	07-04-06	24	25	47.24	1.71	48.95	F46	1.93	47.02
A031-017	07-04-06	24	26	47.24	1.71	48.95	F46	1.93	47.02
A031-017	07-04-06	24	27	47.24	1.71	48.95	F46	1.93	47.02
A031-017	07-04-06	24	28	47.24	1.71	48.95	F46	2.18	46.77
A031-017	07-04-06	24	29	47.24	1.71	48.95	F46	2.1	46.85
A031-017	07-04-06	24	30	47.24	1.71	48.95	F46	1.9	47.05

Appendix 10

Photographic Register

Digital Photographs taken at Moher 5

Photo No.	Site	Feature	Date	Direction	Comments
A031-017 015	A031-017	F5	21-03-06	N/A	Post-ex
A031-017 060	A031-017	F33	28-03-06	N/A	Pre-ex *N arrow incorrect*
A031-017 061	A031-017	F33	28-03-06	N/A	Pre-ex *N arrow incorrect*
A031-017 062	A031-017	F33	28-03-06	N/A	Pre-ex *N arrow Incorrect*
A031-017 063	A031-017	F34	28-03-06	N/A	Pre-ex *N arrow Incorrect*
A031-017 064	A031-017	F34 + F33	28-03-06	N/A	Pre-ex *N arrow Incorrect*
A031-017 065	A031-017	F33	28-03-06	N/A	Pre-ex *N arrow Incorrect*
A031-017 066	A031-017		28-03-06	N/A	Working shot
A031-017 067	A031-017		28-03-06	N/A	Working Shot
A031-017 068	A031-017		28-03-06	N/A	Working Shot
A031-017 069	A031-017		31-03-06	N/A	Working Shot
A031-017 070	A031-017	F33	31-03-06	N/A	Pre-ex
A031-017 071	A031-017	F33	31-03-06	N/A	Pre-ex
A031-017 072	A031-017	F33	31-03-06	N/A	Pre-ex
A031-017 073	A031-017	F33	31-03-06	N/A	Pre-ex
A031-017 074	A031-017	F33	31-03-06	N/A	Pre-ex
A031-017 075	A031-017	F34	31-03-06	N/A	Pre-ex
A031-017 076	A031-017	F33 + F34	31-03-06	N/A	Pre-ex
A031-017 077	A031-017	F35	31-03-06	N/A	Pre-ex
A031-017 078	A031-017	F35	31-03-06	N/A	Pre-ex
A031-017 079	A031-017	F34	31-03-06	N/A	Pre-ex
A031-017 080	A031-017		31-03-06	N/A	Natural Stone bands
A031-017 081	A031-017	F34	31-03-06	N/A	Pre-ex over peat, over natural stone
A031-017 083	A031-017	F33	31-03-06	N/A	During Excavation
A031-017 084	A031-017	F33	31-03-06	N/A	Post-ex section
A031-017 085	A031-017	F33	31-03-06	N/A	Post-ex section
A031-017 086	A031-017	F33	31-03-06	N/A	Section – balk
A031-017 087	A031-017	F33	31-03-06	N/A	Post-ex section
A031-017 088	A031-017	F33	31-03-06	N/A	Post-ex section

A031-017 089	A031-017	F33	31-03-06	N/A	Post-ex. Stone in natural
A031-017 090	A031-017	F35	31-03-06	N/A	Section – Natural
A031-017 092	A031-017	F34	31-03-06	N/A	Section
A013-017 104	A031-017	F34	03-04-06	N/A	Section, DRWG 15
A013-017 105	A031-017	F34	03-04-06	N/A	Section, DRWG 15
A013-017 106	A031-017	F34	03-04-06	N/A	Section, DRWG 15
A013-017 107	A031-017	F33 + F34	03-04-06	N/A	Section, DRWG 15
A013-017 108	A031-017	F33	03-04-06	N/A	Section, DRWG 15
A013-017 109	A031-017	F33	03-04-06	N/A	Section, DRWG 15
A013-017 110	A031-017	F33	03-04-06	N/A	Section, DRWG 15
A013-017 111	A031-017	F38	03-04-06	N/A	Post-ex. Natural
A013-017 112	A031-017	F38	03-04-06	N/A	Post-ex. Natural
A013-017 113	A031-017	F38	04-04-06	N/A	?
A013-017 114	A031-017	F38	04-04-06	N/A	?
A013-017 115	A031-017	F39	04-04-06	N/A	Pre-ex
A013-017 116	A031-017	F39	04-04-06	N/A	Pre-ex
A013-017 117	A031-017	F39	04-04-06	N/A	Pre-ex
A013-017 118	A031-017	F39	04-04-06	N/A	Pre-ex
A013-017 119	A031-017	F39	04-04-06	N/A	Pre-ex
A031-017 133	A031-017	F41 + F44	05-04-06	N/A	Pre-ex
A031-017 134	A031-017	F41 + F44	05-04-06	N/A	Pre-ex
A031-017 135	A031-017	F41+ F44	05-04-06	N/A	Pre-ex

Appendix 11

Radiocarbon Dates

The University of Waikato

Radiocarbon Dating Laboratory

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Report on Radiocarbon Age Determination for Wk- 20192

Submitter	M Rajic
Submitter's Code	A031/17/7
Site & Location	Co Longford, Ireland
Sample Material	Hazel, Birch, Alder and Ash
Physical Pretreatment	Possible contaminants were removed. Washed in ultrasonic bath.
Chemical Pretreatment	Sample washed in hot 10% HCl, rinsed and treated with hot 1% NaOH. The NaOH insoluble fraction was treated with hot 10% HCl, filtered, rinsed and dried.

$d^{14}C$	-387.3 ± 6.3	‰
$\delta^{13}C$	-26.2 ± 0.2	‰
$D^{14}C$	-385.8 ± 6.3	‰
% Modern	61.5 ± 0.7	%
Result	**3916 ± 82 BP**	

Comments

AGHogg
17/1/07

- Result is *Conventional Age or % Modern* as per Stuiver and Polach, 1977, Radiocarbon 19, 355-363. This is based on the Libby half-life of 5568 yr with correction for isotopic fractionation applied. This age is normally quoted in publications and must include the appropriate error term and Wk number.
- Quoted errors are 1 standard deviation due to counting statistics multiplied by an experimentally determined Laboratory Error Multiplier of 1 .
- The isotopic fractionation, $\delta^{13}C$, is expressed as ‰ wrt PDB.
- Results are reported as % *Modern* when the conventional age is younger than 200 yr BP.

Appendix 12

Drawing Register

Record drawings made during the excavation of Moher 5

Site	Dwg	Scale	Type	Sheet	Features	Initials	Date
A031-017	10	1:20	Plan	8	F33	JF	30-03-06
A031-017	11	1:20	Plan	9	F35	JF	30-03-06
A031-017	12	1:10	Section	10	F33, F36	NJ	31-03-06
A031-017	13	1:10	Section	10	F33, F36	NJ	31-03-06
A031-017	14	1:20	Plan	9	F34	ER-ER	31-03-06
A031-017	15	1:10	Section	11	F33, F34, F36	CM-MK	03-04-06
A031-017	17	1:20	Plan	13	F39, F40	NJ-ER	04-04-06
A031-017	18	1:40	Plan	14	Kiln F50	AA-HL	05-04-06
A031-017	19	1:20	Section	15	F50, F51	ER	05-04-06
A031-017	20	1:10	Section	16	F45, F46	NJ	06-04-06
A031-017	21	1:10	Profile	16	F46	CM	06-04-06
A031-017	22	1:10	Section	16	F39, F40	CM	06-04-06
A031-017	23	1:20	Plan	17	F47	NJ	07-04-06
A031-017	24	1:20	Plan	17	F46	NJ	07-04-06

Appendix 13

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Appendix 14

Testing report for Moher 5

SITE NUMBER	FEATURE	TYPE
Moher 5	F1	Burnt Mound
FIELD	OWNER	STATUS
110	Mr Francis Dolan	Tested
TRENCHE/S	CHAINAGE	OFFSET
110XT1; 110XT2; 110XT3; 110XT4	7423-7450	---
NGR	OD	DEPTH BELOW SURFACE
205905.034, 287415.579	---	0.1m
ASSOCIATED FEATURES	PLATES	FIGURE
---	Plate 29	Figs. 2.6 & 4.14
FINDS	ARCHIVE PHOTOS	ARCHIVE DRAWINGS
None	---	65
LENGTH	WIDTH	DEPTH
30m	10m	Exposed only
DIRECTOR	RECOMMENDATION	
MMP	Excavation.	

A spread of charcoal and burnt stone. The mound is visible on the ground, although most of it is outside the CPO. Only the western end of the Fulacht is inside the CPO. It is located close to a narrow stream, which runs towards a more substantial river to the south. A concentration of pebbles is visible towards the western edge, lying in the base of the burnt mound, may be a metalled surface.

Appendix 15

Report on the Lithic Assemblage from Moher 5, county Leitrim (E3305)

Dermot G. Moore

Abstract
Two pieces of flint in the form of a small irregular bladelet and a chunk and a flake and a blade of chert were recovered during the excavations at Moher 5, county Leitrim (E3305) and represents prehistoric knapping practices during the Neolithic - Early Bronze Age.

Introduction
Two pieces of flint and two of chert were recovered during the excavations at Moher 5, county Leitrim (E3305). The four pieces were retrieved from three individual contexts. The two pieces of flint were recovered from F41 while the chert pieces were recovered from two contexts (F34 and F39) associated with burnt stone and charcoal.

Flint
The two pieces of flint were recovered from the same context (F41). The first was a small fine broken bladelet (E3305:041:001) which exhibited a dorsal scar and a small flake scar on the ventral face. The second piece was an irregular and slightly weathered chunk of a quite dense type of flint (E3305:041:002).

Chert
The first piece of chert was a rather unusual flake (E3305:034:001), which measured 14mm x 15mm x 3mm. It consisted of a small sub-rounded flake with dorsal flake scars and slight flake scars on the ventral face. This piece may simply be a fortuitously knapped piece or it may have been flaked specifically for an unknown function. The second chert piece was a broken blade with dorsal blade scar recovered from F39.

Summary
The four pieces recovered from Moher 5 in county Leitrim (E3305) represents evidence of knapping practices on a small scale. Although all were associated with burnt mound activity, their recovery, while not indicative of a specific period or function (Moore 1999) does suggest a prehistoric presence in the Neolithic – Bronze Age on or in the vicinity of the site. This would appear to be confirmed by the radiocarbon date from one of the burnt spreads.

In conclusion, the small flaked flake, two blades and an irregular chunk would appear to represent possible transient and intermittent occupation associated with knapping activities.

References
Moore, D. G. 1999. Analysis of the Lithic Assemblages from Early Prehistoric Sites along the South Antrim Coast. Unpublished MPhil thesis. Queen's University, Belfast.

Appendix 16

Report on the Plant Remains from Moher 5, county Leitrim (E3305)

SUSAN LYONS MSc MIAI
ENVIRONMENTAL ARCHAEOLOGIST

Project Code: PR/035
Author: Susan Lyons MSc MIAI
Client: CRDS Ltd
Date: April 2008

N4 Dromod to Roosky Bypass: Plant remains assessment from Moher 5 A031/017

1. INTRODUCTION

This report discusses the plant remains assemblage recorded from the soil samples associated with the archaeological excavations at Moher 5 (A31-017), Co. Leitrim, located along the N4 Dromod Roosky Bypass.

2. BACKGROUND

A course of archaeological testing and subsequent archaeological excavation was carried out at Moher 5, Co. Leitrim by *Cultural Resource Development Services (CRDS) Ltd* on behalf of Leitrim County Council and the National Roads Authority as part of the archaeological mitigation program associated with the N4 Dromod Roosky Bypass under the Ministerial Direction Number A031/017.
The site is located in Moher townland in the parish of Mohill and barony of Mohill, Co. Leitrim (NGR 205905.034, 287415.579).
The archaeological excavations at Moher 5 revealed two large burnt stone spreads of possible *fulacht fiadh* material, a charcoal enriched spread and a large pit. Subsequent radiocarbon dating of burnt spread material (F33) has yielded a Late Neolithic date of 3916±82BP (2620-2140 calBC) for the site (Collins, 2007).

3. SAMPLE STRATEGY

An on-site soil sampling strategy was implemented and features and deposits deemed archaeologically significance were sampled. A total of four soil samples were taken on site as bulk soil samples and were processed by *CRDS Ltd.* The remains of all four samples (Feature 33, Sample 7, Feature 34, Sample 6, Feature 40 Sample 10 and Feature 45, Sample 8) were subsequently submitted to Susan Lyons in February 2008 to identify and analyse the plant material within. The primary objective of this project was to identify where possible any botanical remains present in order to help with interpreting the function of the site or indeed the features themselves.

4. METHODOLOGY

The samples were viewed under a low powered binocular microscope (magnification x0.8 to x5) and any carbonised or potentially waterlogged botanical materials were identified to genus/species level where applicable. The plant remains were recorded using an abundance key to highlight the concentrations/quantities of material identified from each sample; + = rare (1-5), ++ = occasional (6-10), +++ = common (11-50) and ++++ = abundant (>50).

5. RESULTS

The results are summarised in Table 1.

Wood charcoal – Charcoal was recorded in relatively high concentrations from F33 (burnt spread), F34 (peat spread containing charcoal) and F40 (burnt spread) with a lower concentration noted from F45 (fill of cut F46). The material was very fragmented with average fragment size 3mm – 30mm in length.

Uncarbonised plant remains – A high concentration of uncarbonised plant fibres and root material were recorded from all four samples. This material was very dried out and too fibrous to be identified to any species.

6. DISCUSSION

All samples contained fragments of charcoal and were void of any other botanical remains associated with domestic or occupational activity. Charcoal is a common occurrence from burnt mound/*fulachta fiadh* sites and is related to the burning activities associated with these site types. Other plant remains such as cereals and wild taxa are extremely rare from *fulacht fiadh* sites (O'Neill, 2000), however when they are recovered from such sites they are recorded in very low

numbers and usually interpreted as residual material redistributed across the site from another source.

The presence of uncarbonised plant fibres and root material within the samples may represent what were once waterlogged or peaty deposits. Whether these peat deposits were deliberately used as a form of fuel or insulation within the site or entered these features as a result of natural redeposition is difficult to ascertain.

7. RECOMMENDATIONS

1. There is no further work required on these samples
2. A record of the methodology and results of this assessment should be included in any final report

8. REFERENCES

Collins, A 2007 *N4 Dromod Roosky Bypass Road Scheme: Moher 5 A031/017 Preliminary Archaeological Report. CRDS* Ltd unpublished report

O'Neill, J 2000 'Just another *fulacht fiadh* story', *Archaeology Ireland* Vol 14 No. 2

Moher 5 A031/017

Feature number	Sample number	Flot volume (ml)	Feature Description	Wood charcoal	Uncarbonised plant fibres	Comments
033	007	520ml	Possible fulacht spread, over a layer of peat	++++	+++	Sample is likely to have been partially waterlogged
034	008	1000ml	Peat spread containing charcoal.	++++	+++	Sample is likely to have been partially waterlogged
040	010	350ml	Burnt spread under F39	++++	+++	Sample is likely to have been partially waterlogged
045	008	260ml	Peat fill of sub-rectangular cut F46	+	+++	Sample is likely to have been partially waterlogged

Table 1. Composition of plant remains

Key: + = rare (1-5), ++ = occasional (6-10), +++ = common (11-50) and ++++ = abundant (>50)

Plates

Plate 1: Late Neolithic Burnt Spread F33 Pre-excavation (A031-017 012)

Plate 2: Section of Late Neolithic Burnt Spread F33 Post-excavation (A031-017 035)

Plate 3: Section of Stone underneath Spread F33 (A031-017 021)

Plate 4: Section of Stone underneath Spread F33 (A031-017 022)

Plate 5: Burnt Spread F40 Pre-excavation (A031-017 047)

Plate 6: Section through Burnt Spread F40 (A031-017 055)

Plate 7: Natural Boulder Pit F46 (A031-017 057)

Plate 8: Stone Spread F35 (A031-017 018)

Plate 1: Late Neolithic Burnt Spread F33 Pre-excavation (A031-017 0012)

Plate 2: Section of Late Neolithic Burnt Spread F33 Post-excavation (A031-017 0035)

Plate 3: Section of Stone underneath Spread F33 (A031-017 0021)

Plate 4: Section of Stone underneath Spread F33 (A031-017 0022)

Plate 5: Burnt Spread F40 Pre-excavation (A031-017 0047)

Plate 6: Section through Burnt Spread F40 (A031-017 0055)

Plate 7: Natural Boulder Pit F46 (A031-017 0057)

Plate 8: Stone Spread F35 (A031-017 0018)

Figures

Figure 1: Scheme Location

Figure 2: Moher 5 Test Trench Location Plan

Figure 3: Results of Test Trenching

Figure 4: Moher 5 Site Location

Figure 5: Overall Site Plan

Figure 6: Pre-excavation Plan of Moher 5

Figure 7: Sections through Burnt Spread F33 & F46

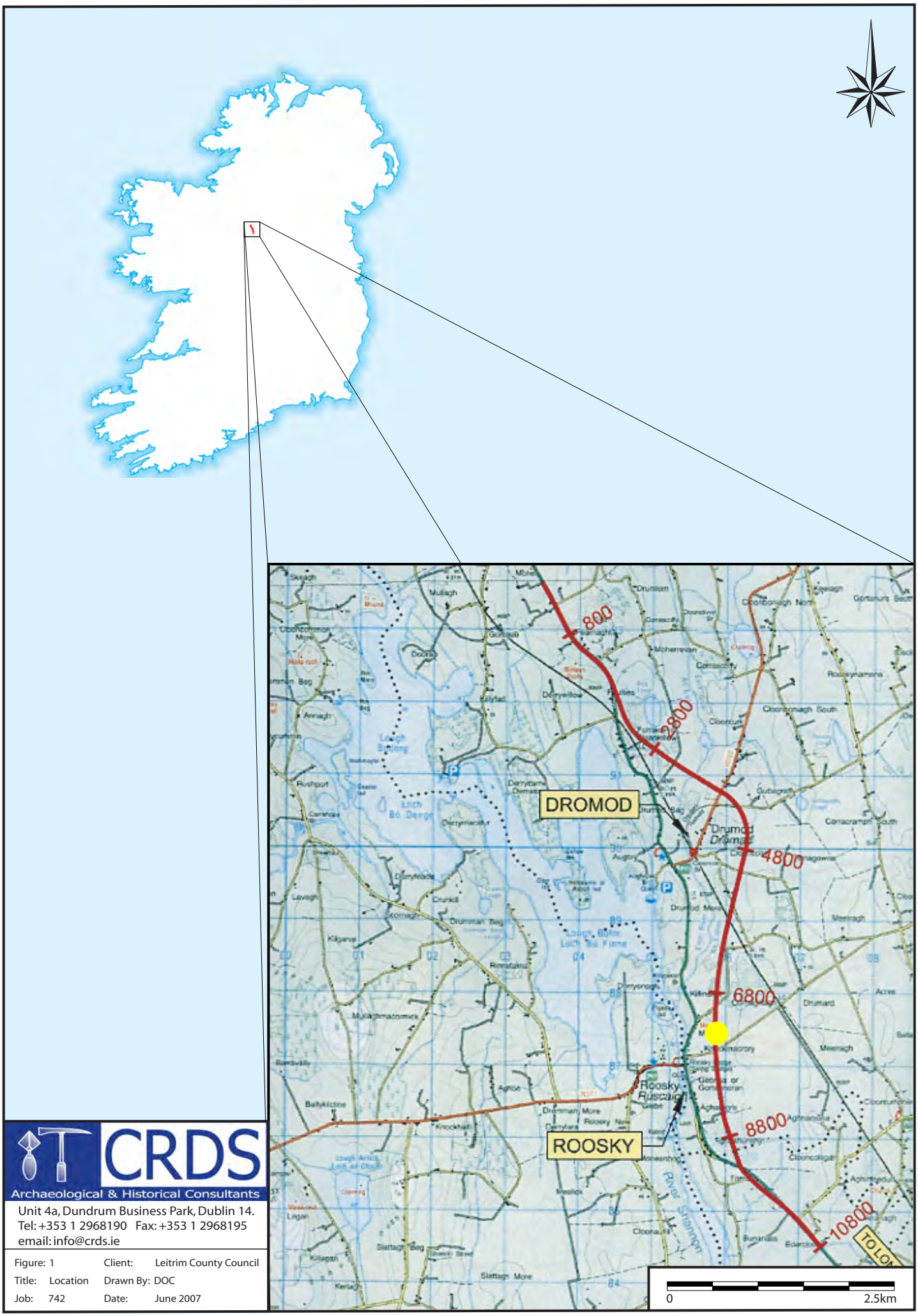

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Figure: 1		Client:	Leitrim County Council
Title:	Location	Drawn By:	DOC
Job:	742	Date:	June 2007

Figure 1: E3305 Scheme Location

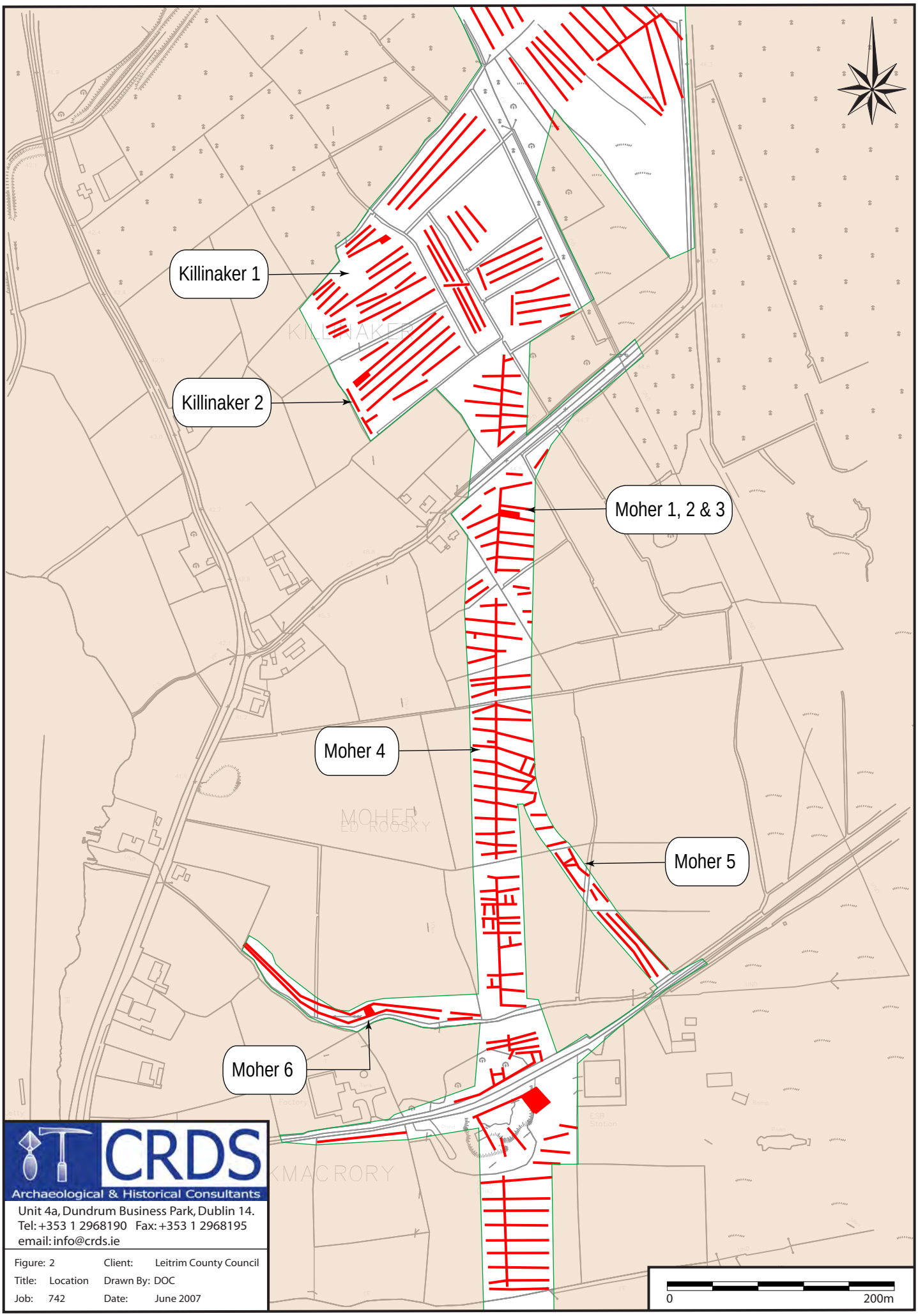

Figure 2: E3305 Moher 5 Test Trench Location Plan

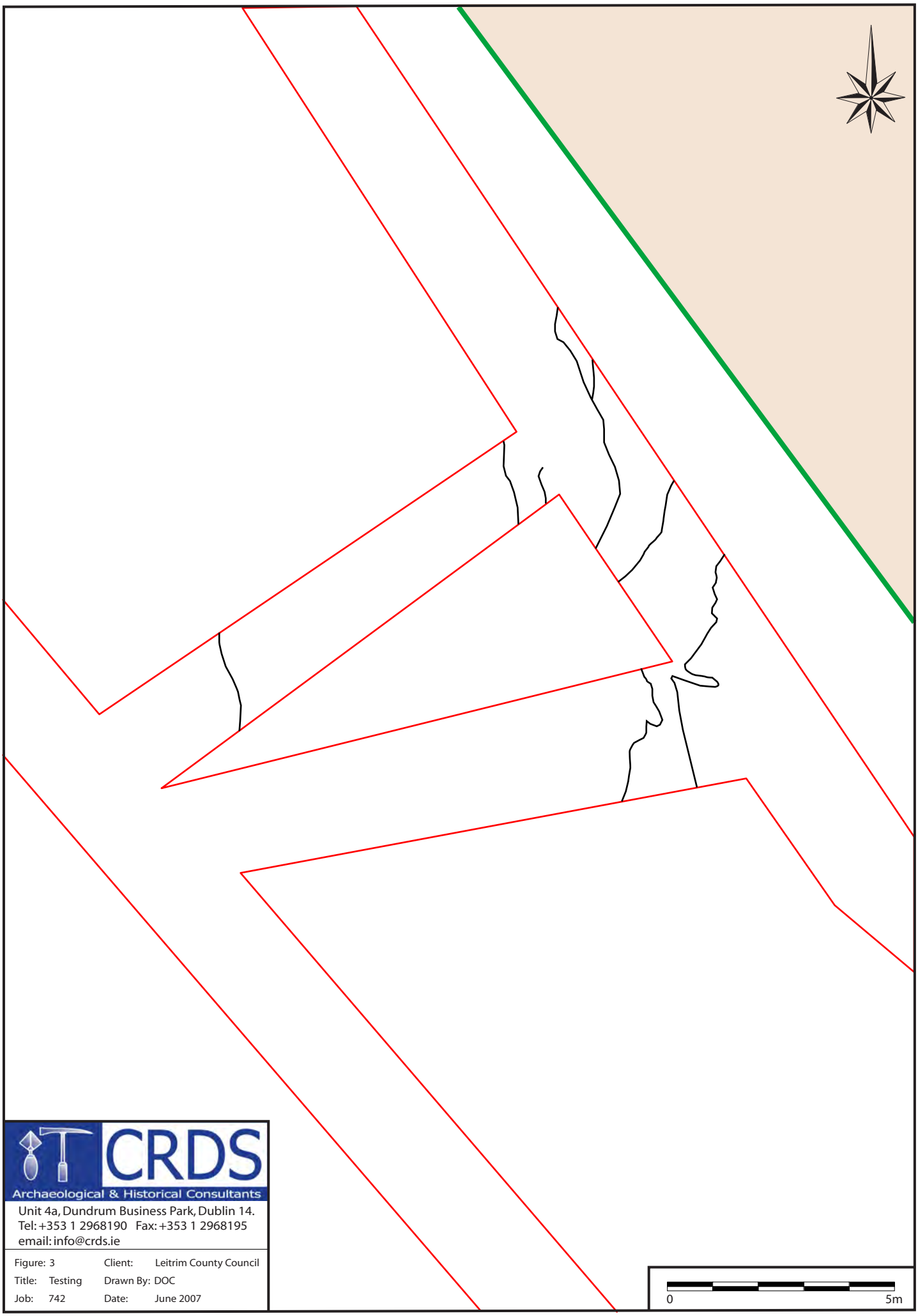

Figure 3: E3305 Results of Test Trenching

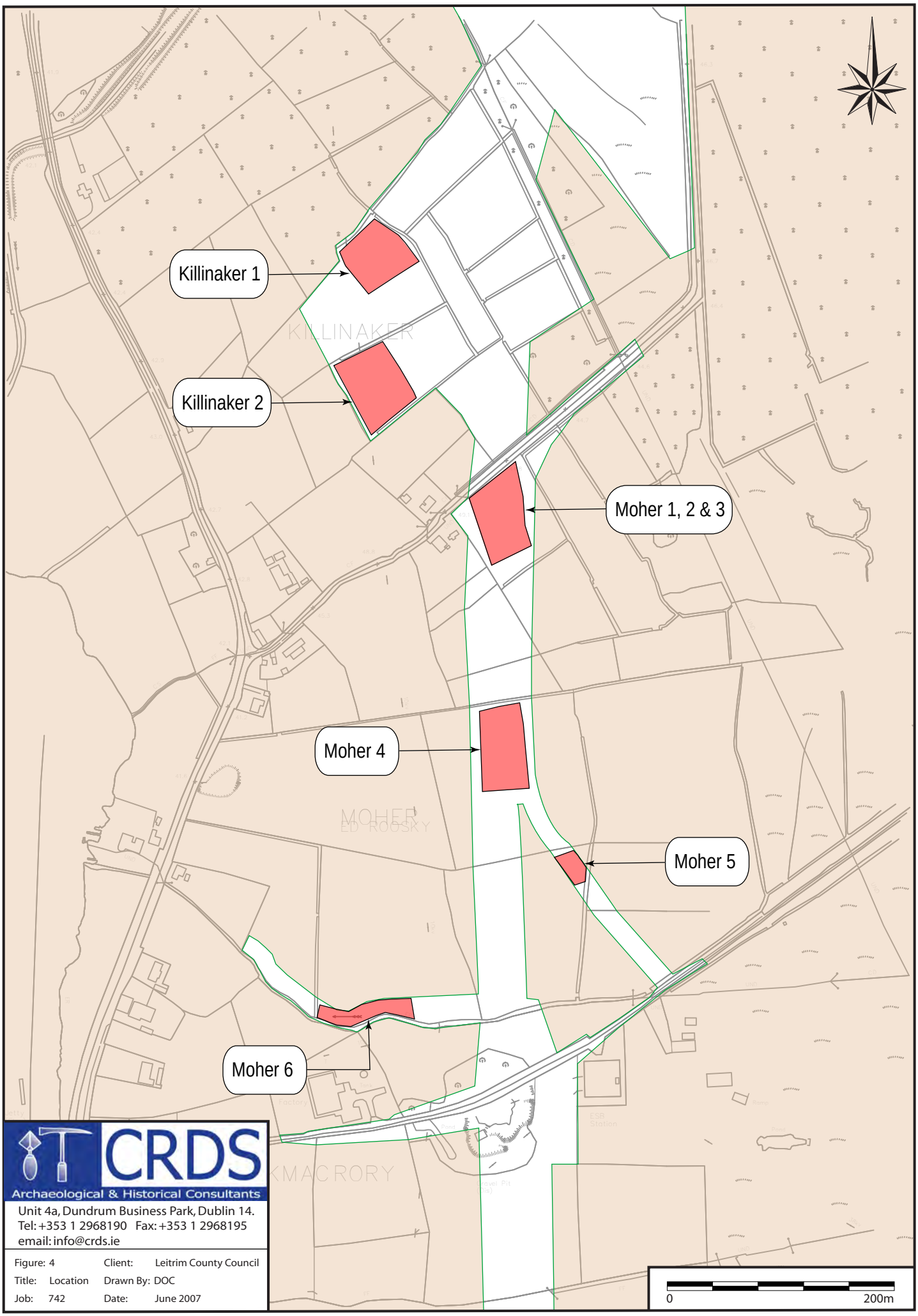

Figure 4: E3305 Moher 5 Site Location

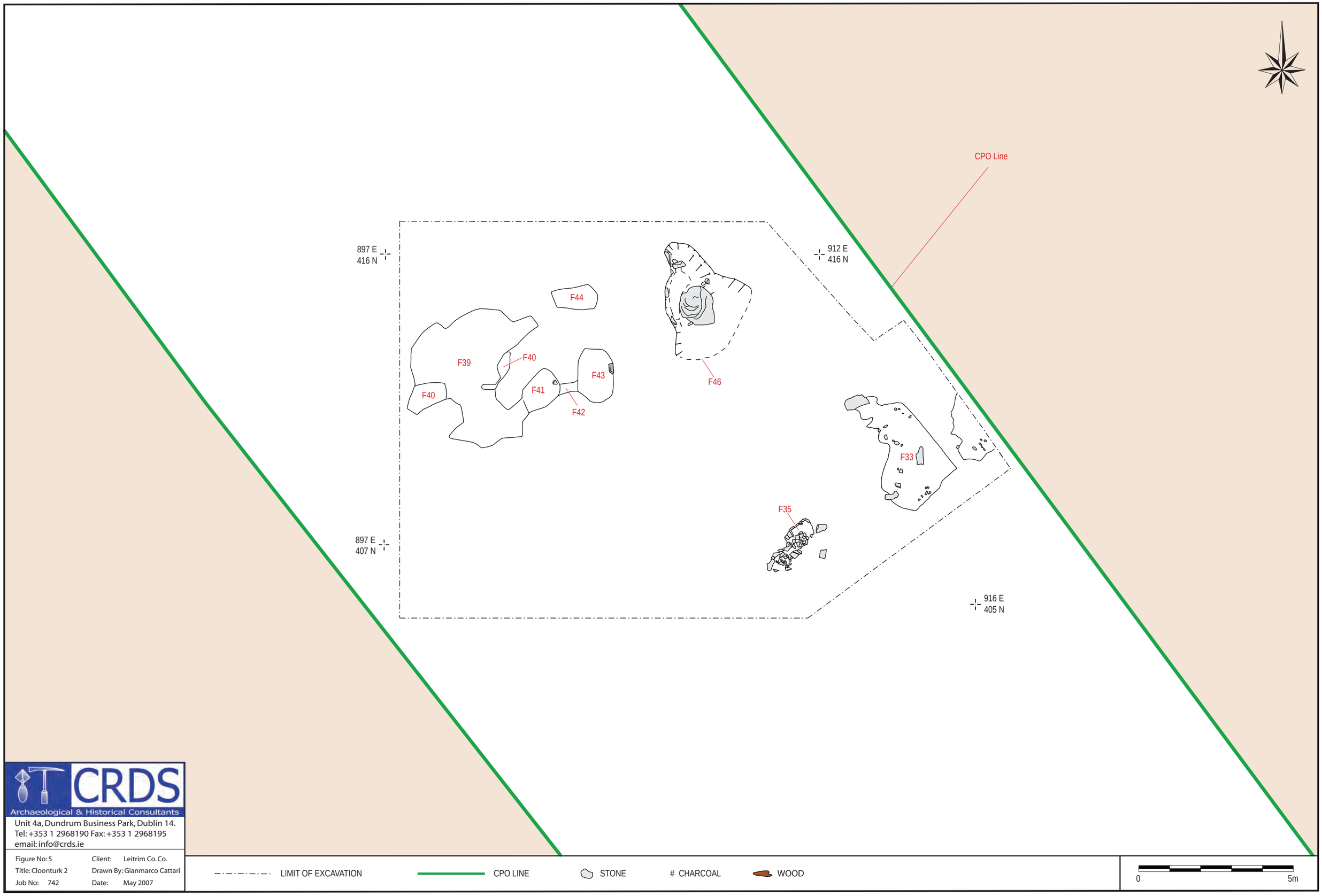

Figure 5: E3305 Overall Site Plan

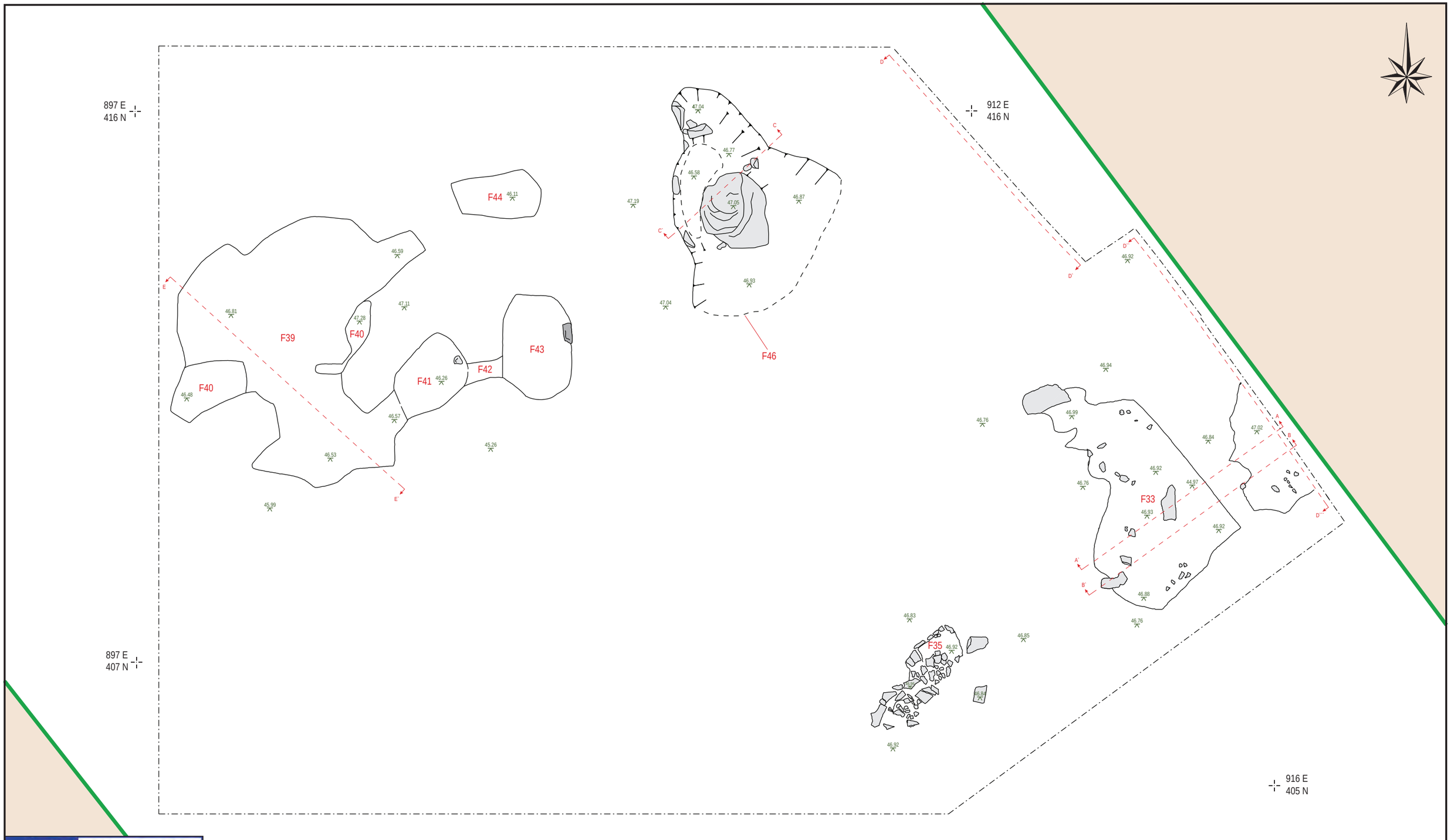

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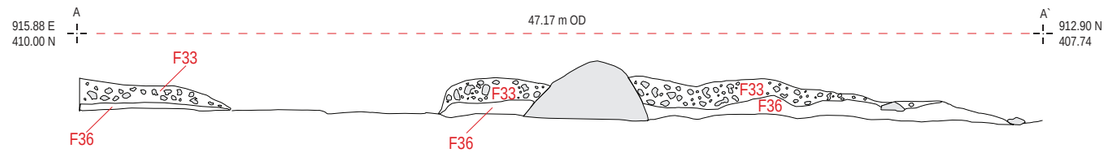
Figure No: 6	Client:	Leitrim Co. Co.	
Title: Moher 5	Drawn By:	Gianmarco Cattari	
Job No: 742	Date:	May 2007	

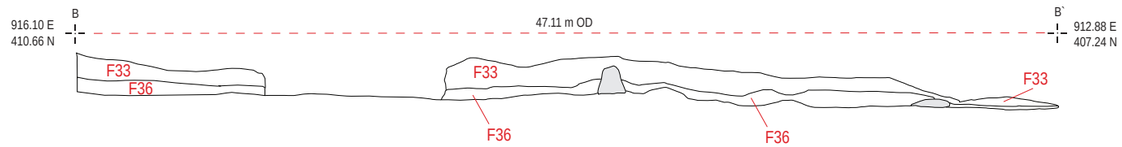
LIMIT OF EXCAVATION — CPO LINE — STONE — # CHARCOAL — WOOD

0 — 3m

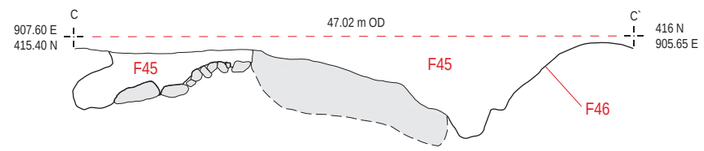
Figure 6: E3305 Pre-excavation Plan of Moher 5



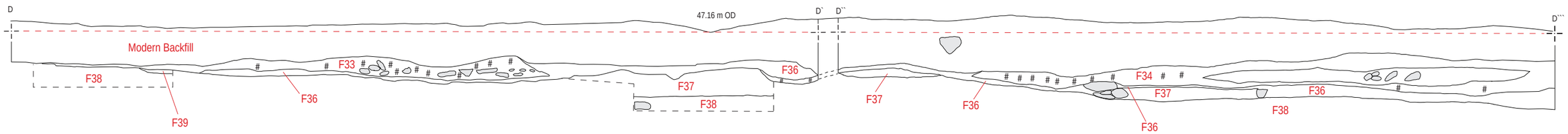
Section through F33



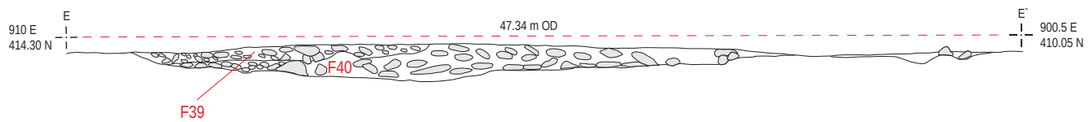
Section through F33



Section through F46



Section of baulk at edge of excavation



Section through F39 and F40

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Figure No: 7	Client:	Leitrim Co. Co.	
Title: Moher 5	Drawn By:	Gianmarco Cattari	
Job No: 742	Date:	May 2007	

LIMIT OF EXCAVATION | CPO LINE | STONE | # CHARCOAL | WOOD

0 1m

Figure 7: E3305 Sections through Burnt Spread F33 & F46