

**Interim Stratigraphic Report
of Phase 2 Excavations,
A1/N1 Newry-Dundalk Link Road,
Area 12 Site 109**

Chainage: 11190-11230
Townland: Aghnaskeagh
Parish: Ballymascanlan
County: Louth
Country: Republic of Ireland
NGR: 307556E, 313162N
Client: Department for Regional Development, Roads Service
Director: Chris Farrimond
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Abstract

Louth County Council, the Roads Service NI (Department for Regional Development) and the National Roads Authority are currently proposing a Road Scheme, the A1/N1 Newry-Dundalk Road. The route consists of 14.2km of 2-lane dual carriageway with 5.7km of associated link roads from Cloghoge roundabout, south of Newry to the Ballymascanlan interchange north of Dundalk.

This site consisted of a cluster of five features found in testing (McConway and Lynch 2005). Testing Feature 7 was the northernmost feature in the cluster, it consisted of two teardrop shaped spreads of charcoal flecked soil. These features lay beside one another and continued into the northern baulk. Feature 6 lay 25m to the southeast of Feature 7 and consisted of a spread of brown/grey silt; the eastern edge of this spread continued into the baulk. Feature 5 lay 30m to the southwest of Feature 6 and consisted of a subcircular silty soil with charcoal inclusions. Feature 4 lay 40m to the west of Feature 5 and consisted of two apparently discrete spreads of charcoal. Feature 3 lay 20m south of feature 4 and was the southernmost feature in the cluster of Features 3 –7. It consisted of a roughly oval spread of charcoal flecked brown/grey soil.

Of the four discrete areas that had been scheduled for Phase 2 excavations at Site 109, only Area C (testing Feature 4) contained features of archaeological significance. In this area, there were six stakeholes or postholes that may have combined to form a windbreak, a screen or perhaps a small hit. Just to the north of these features were several pits one of which may be archaeological.

1 Description of the Site and Location

1.1 Introduction

The National Roads Authority (NRA) for the Republic of Ireland and Department for Regional Development (DRD) for Northern Ireland are the authorities in charge of the proposal to construct a new road between Newry and Dundalk. As part of the road works, Archaeological Development Services Ltd (ADS) was commissioned to perform an archaeological assessment along the proposed Link Road and to mitigate the impacts of any construction on archaeological resources. The following report details the results of the fieldwork at Site 109 that followed the recommendations of McConway and Lynch (2005) following the discovery in testing of Features 3-7.

The proposed scheme involves a 14 km route with 5.7 km of associated link roads (Fig. 1). Upgrading the key transport corridors and associated trunk road links will provide a strategic framework for infrastructure investment, improvement of public transport, future urban and economic development especially for large-scale sites to accommodate industry and commerce and assisting tourist travel around the region.

This report describes the results of excavations carried out at Site 109, Areas A-D, between May 27 and June 10, 2005 in advance of groundwork. The staff of ADS carried out archaeological work on behalf of the developers under the direction of Caroline Powell. This section of the project occurs in Aghnaskeagh Townland, Ballymascanlan Parish, Co. Louth, Republic of Ireland; at National Grid Reference 307556E, 313162N (centre point), Ordnance Datum (OD) of approximately 75.1m and road scheme chainage 11190-11230 (Figs 1-4).

1.2 Site description

1.2.1 Topography

The existing landscape character of the study area is a result of previous glacial, geological and human impacts (Figs 1, 2 and 3)¹. The study area is contained within a mountainous backdrop known as the Ring of Gullion. Slieve Gullion defines the western extent of the study area and lies at the centre of the Ring of Gullion. To the north lies Camlough Mountain and Fathom Mountain. The eastern boundary is defined by the western edge of the Carlingford Mountains and specifically Black Mountain. The southern edge of

¹ This information has been taken directly from the A1/N1 Newry-Dundalk Link Road Environmental Statement/Environmental Impact Statement Non-Technical Summary prepared by RPS Ireland Environmental Sciences

the Ring of Gullion is contained within the study area and includes Feede Mountain and Slievenabolea. Between the mountains of the Ring lies a broad gently undulating agricultural landscape. South of Feede Mountain the study area levels off gently undulating to Dundalk Bay. This site was situated on pastureland with a slight east-facing slope, close to the existing A1 (Figs 1-4).

A local farmer reported to the excavation crew that Field 27, the label give the field in which this site is located, underwent levelling c. 30 years ago. This process left many shallow hollows so that when the area was topsoil stripped, as part of the excavations, the remnant hollow would show in plan as a patch of fill in the natural.

1.2.2 Geology

Vaughan in Buckley and Sweetman (1991, 8-10) indicates that the he bedrock geology of the site area is composed of Silurian Greywacke. Silurian rocks were deposited in deep water in active tectonic zones. Each layer in the Silurian strata represents materials displaced and then redeposited by earthquakes, which would cause sediments to slump from the off shore slopes of the continental shelf that would then be deposited as a future greywacke bed.

1.2.3 Archaeological and historical background

The road follows a natural route way through mountainous terrain that may have been in use from the prehistoric period. There are numerous monuments (following) recorded near the route date from the Neolithic period to the 11th Century AD (Buckley and Sweetman 1991).

Previously known sites within 1km of the current site. A search of the “Archaeological Survey of County Louth” (Buckley and Sweetman 1991) and of the SMR shows that there are twelve known prehistoric and historic sites in the area. These include the following seventeen sites, listed by townland, the SMR number, the Buckley and Sweetman page number their reference number (1991) and the description (usually shortened) presented in Buckley and Sweetman (1991) (Figs 2 and 3).

SMR:	LH004-008 (01), (02) (Buckley and Sweetman 1991: (01) 171 Survey No. 618; (02) 122 Survey No. 321)
Townland:	Drumnasillagh
Parish:	Ballymascanlan
Barony:	Lower Dundalk
County:	Louth
Country:	Republic of Ireland
NGR:	307670E, 313830N

- Description: (01) Ringfort oval area (int. diams. 50m NNW-SSE, 29m WSW-ENE) enclosed by much altered and gasped bank (W 5m, H c. 1.1m). From NNE-E the bank is replaced by a modern stonewall. Original entrance not identifiable. No visible fosse. Souterrain [(02) below] in interior.
- NGR: 307670E, 313840N
- Description: (02) Souterrain situated in the interior of a ringfort [(01) above] (CLAJ 1909, 137-8). Now inaccessible.
- SMR: LH004-030 (01), (02) (Buckley and Sweetman 1991: (01) 158 Survey No. 546; (02) 100 Survey No. 262)
- Townland: Aghnaskeagh
- Parish: Ballymascanlan
- Barony: Lower Dundalk
- County: Louth
- Country: Republic of Ireland
- NGR: 307550E, 313300N
- Description: (01) Ringfort oval area (int. diams. 44m NNW-SSE, 24m WSW-ENE) enclosed by earthen bank (W 5m, H 1.3m externally) with traces of stone facing. Souterrain [(02) below] in NW quadrant of interior.
- NGR: 307330E, 313310N
- Description: (02) Souterrain lintels showing on surface of interior of ringfort [(01) above] (CLAJ 1908, 29)
- SMR: LH004-031 (01), (02) (Buckley and Sweetman 1991: (01) 158 Survey No. 547; (02) 100 Survey No. 263)
- Townland: Aghnaskeagh
- Parish: Ballymascanlan
- Barony: Lower Dundalk
- County: Louth
- Country: Republic of Ireland
- NGR: 307300E, 313200N
- Description: (01) Ringfort circular area (diam. 32m) enclosed by earthen bank (W 6.5m, H 1.2m externally) and external fosse (W 7m) with traces of outer bank, obscured by later field boundaries. Remains of souterrain [(02) below] in SE quadrant of interior.
- NGR: 307300E, 313200N
- Description: (02) Souterrain situated in ringfort [(01) above]. Stone-lined depression, running E-W with slight turn to S at W end, located in SE quadrant of ringfort is probably the remains of a partially collapsed souterrain.
- SMR: LH004-032 (01), (02), (03) [Buckley and Sweetman 1991: Cairn 25, Survey No. 67; (01) is three tombs 25, Survey Nos 39-41; (02) 63, Survey No. 137; (03) 94 Survey No. 249]
- Townland: Aghnaskeagh
- Parish: Ballymascanlan
- Barony: Lower Dundalk
- County: Louth
- Country: Republic of Ireland
- NGR: 307550E, 313690N
- Description: Cairn 'Cairn A', excavated by E. E. Evans in 1934 (CLAJ 1935, 234-55).
- NGR: 307550E, 313690N
- Description: (01) Survey No. 39 is a Megalithic tomb: This monument was excavated in 1934 by E.E. Evans (CLAJ 1935, 234-55). It comprises an oval cairn (above) 17.5m long by 11m

wide, orientated NNE-SSW incorporating a portal-tomb to the E and six Bronze Age cists to the W. The tomb, facing N, is represented by portal stones, each 2.7m high, and a back stone standing 2m to the S. The chamber area contained four pockets of cremated bone with some Neolithic and Bronze Age pot sherds and a blue glass bead. The cists [No. (02) below] yielded cremations and food vessels. Evidence of iron-smelting was recovered from a furnace area [No. (03) below] immediately N of the cairn.

Survey No. 40 is a Megalithic tomb, which lies 40m to the S of No. 39 (above), excavated in 1935 by E. E. Evans (*CLAJ* 1937, 1-18). It comprises the remains of a cairn, 15m long, orientated NNW-SSE, and narrowing from about 8m wide at the S to 6m at the N. The cairn, revetted on the E and W with dry walling, incorporates four small chambers, two opening at the E and two at the W. Although Evans considered that the NW chamber may have opened to the N, the morphological evidence indicates that it probably opened to the W. Finds from the chambers included cremated bone, Neolithic potsherds and flints, including two hollow scrapers. The chambers are clearly comparable to the subsidiary chambers found in court-tombs and hence the monument is assigned to that class; the finds are consistent with this view.

Survey No. 41 A very ruined Megalithic tomb. The remains consist of two orthostats, 2.4m apart and aligned WSW-ENE, with a large, horizontally laid stone set beside and perpendicular to one of the orthostats; the two latter stones are incorporated in a roadside fence. The OS field trace records that there was formerly 'a large flat stone resting on 2 others' (6" sheet 4, revision 1862). The tomb must remain unclassified pending further investigation but interpretation as the remains of a large wedge-tomb would be consistent with the surviving stones.

NGR: 307550E, 313690N

Description: (02) Cists. Six short cists, aligned NW-SE, were found during excavations by E. E. Evans of Cairn A at Aghnaskeagh. These secondary burials, dating to the Bronze Age, were W and SW of the megalith (individual descriptions omitted).

NGR: 307550E, 313690N

Description: (03) Iron working furnace. Excavated by E. E. Evans in 1934. At NE end of cairn [No. (01) above] was a primitive furnace, 'stoke hole' and flue used in iron working. The structure consisted of an unlined furnace, using fused clay as walling. This type of bowl furnace probably had courses of stone added as heightening. Extending from the bowl was a flue (L c. 2m, W c. 0.3m) roughly D-shaped in section. The door of the furnace faced SW, obviously to catch the prevailing wind, and led to a small 'stoke hole' and a paved pathway (L c. 1.7m) of granite slabs. The excavator has suggested that smelting took place at the mouth of Cist 3 [No. (02) above].

SMR: LH004-033 (Buckley and Sweetman 1991: 25, Survey No. 40)

Townland: Aghnaskeagh

Parish: Ballymascanlan

Barony: Lower Dundalk

County: Louth

Country: Republic of Ireland

NGR: 307570E, 313650N

Description: Court tomb: This monument, which lies 40m to the S of Survey No. 39 [LH004-032 (01) above] was excavated in 1935 by E. E. Evans (*CLAJ* 1937, 1-18). It comprises the remains of a cairn, 15m long orientated NNW-SSE, and a narrowing from about 8m wide at the S to 6m at the N. The cairn, revetted on the E and W with dry walling, incorporates four small chambers, two opening at the E and two to the W. Although Evans considered that the NW chamber may have opened to the N, the morphological evidence indicates that it probably opened to the W. Finds from the chambers included cremated bone,

Neolithic potsherds and flints, including two hollow scrapers. The chambers are clearly comparable to the subsidiary chambers found in court-tombs.

- SMR: LH004-034 (Buckley and Sweetman 1991: 171 Survey No. 617)
 Townland: Drumnacarra
 Parish: Ballymascanlan
 Barony: Lower Dundalk
 County: Louth
 Country: Republic of Ireland
 NGR: 308220E, 313590N
 Description: Ringfort subcircular area (int. dims. 26.5m N-S, 24m E-W) enclosed by earthen bank (W 3.3m, H 0.9m) with internal and external stone facing. No visible trace of fosse. Entrance gap (W 5.6m) at SW.
- SMR: LH004-035 (Buckley and Sweetman 1991: 171, Survey No. 616)
 Townland: Drumnacarra
 Parish: Ballymascanlan
 Barony: Lower Dundalk
 County: Louth
 Country: Republic of Ireland
 NGR: 308270E, 313360N
 Description: Ringfort subcircular area (int. dims. 35.5m N-S, 32.5m E-W) enclosed by a bank (W 5m, H 0.6m internally, 1.1m externally) with internal and external stone facings and a basal course of large stones. Probable entrance gap (W 1.5m) at ESE. No visible fosse.
- SMR: LH004-036 (Buckley and Sweetman 1991: 28, Survey No. 44)
 Townland: Drumnasillagh
 Parish: Ballymascanlan
 Barony: Lower Dundalk
 County: Louth
 Country: Republic of Ireland
 NGR: 307950E, 313240N
 Description: Court tomb is incorporated in a roughly trapezoidal cairn some 30m long and 20m wide at the WSW, narrowing to 7.1m wide at the ESE. There is a well-defined court at the W leading to the gallery area, which is covered by cairn material. The court, 7.5m wide and 6m deep, embraces almost three-quarters of a circle and is represented by 14 orthostats, 7 at either side. Two large slabs lie at the inner end of the court. A single façade stone stands beyond the N arm of the court. Two kerb stones are exposed at the E end of the cairn and a field wall runs along its southern side.
- SMR: LH004-037 (Buckley and Sweetman 1991: 88, Survey No. 234)
 Townland: Drumnasillagh
 Parish: Ballymascanlan
 Barony: Lower Dundalk
 County: Louth
 Country: Republic of Ireland
 NGR: 308080E, 313120N
 Description: *Fulacht fiadh* situated in a small swampy valley, between ridges of light soil to E and W. Immediately to E of mound is a small stream, probably the original source of water for the trough. The site consists of an irregularly shaped mound (max. dims. 15 by 9m, H 0.6m) of burnt stone and charcoal with trough depression to E. To W and S are low

irregular banks extending from the mound, comprised of mound material. However, their exact relationship to the mound is indeterminate.

SMR: LH004-041 (Buckley and Sweetman 1991: 25, Survey No. 41)
 Townland: Aghnaskeagh
 Parish: Ballymascanlan
 Barony: Lower Dundalk
 County: Louth
 Country: Republic of Ireland
 NGR: 307490E, 312470N
 Description: Possible wedge tomb described as a Megalithic tomb. This tomb is very ruined. The remains consist of two orthostats, 2.4m apart and aligned WSW-ENE, with a large, horizontally laid stone set beside and perpendicular to one of the orthostats; the two latter stones are incorporated in a roadside fence. The OS field trace records that there was formerly 'a large flat stone resting on 2 others'.

SMR: LH004-042 (Buckley and Sweetman 1991: 75, Survey No. 179)
 Townland: Aghnaskeagh
 Parish: Ballymascanlan
 Barony: Lower Dundalk
 County: Louth
 Country: Republic of Ireland
 NGR: 307540E, 312450N
 Description: Standing stone: Formerly located a short distance SE of megalithic tomb (LH002-041).

SMR: LH004-043 (01), (02) (Buckley and Sweetman 1991: (01) 195, Survey No. 760; (02) 123, Survey No. 322)
 Townland: Drumnasillagh
 Parish: Ballymascanlan
 Barony: Lower Dundalk
 County: Louth
 Country: Republic of Ireland
 NGR: 308180E, 312750N
 Description: (01) Enclosure polygonal enclosure (max. dims. 27m E-W, 26m N-S) Known locally as 'Jameson's Fort'. May be modified ringfort. Souterrain [(02) below] in interior of enclosure.
 NGR: 308190E, 312740N
 Description: (02) Souterrain situated in enclosure [(01) above] and consisting of a section of passage (L 5.2m, W 1m, H 1.3m) running N-S.

Sites known from the current project. Current work has identified seven archaeological sites within 1km of this location (Figs 2 and 3). Positive results of trial pits excavations along the route were reported in 2005 (McConway and Lynch). These are:

Site 104 (Ó Baoill 2005) this site was composed of three areas of activity, termed the northwest, the middle-north and the east. In the northwest area, the archaeological remains appeared to represent repeated episodes of burning. Here the archaeology consisted of a posthole, two charcoal spreads and

three pits. They were all discreet features as there were no stratigraphic links between any of the features to indicate either their chronology or contemporaneity. The three pit features would appear to be a series of hearths.

The area of the site designated middle-north contained a stratified sequence of archaeological deposits consisting of two deliberately scarped features in the natural associated with a large area of burning. It would appear that some sort of communal activity, either cooking or perhaps ritual, was taking place at this location. There appeared to be an effort to mask the burning activity by laying down various layers of redeposited natural on top of the charcoal within the cut. Later, the digging of a linear feature damaged the earlier features. This cut, both in orientation and dimensions, has all the appearance of an early medieval grave but no remains were recovered from its basal fill. However, attributes of the feature including the digging of the berm or ledge at its south side, the orientation of the feature, the presence of a cairn of stones that slumped into the main cut and the possible stone marker socket all suggest a burial.

In the east area, there were two features, an irregularly shaped oblong cut and a circular pit. They were both discreet features, as there was no stratigraphic link between either of the features to illuminate either chronology or contemporaneity.

The excavations found no evidence for a 'ring ditch' or 'ploughed out barrow', suggested from the Phase 1 archaeological testing. However, there was evidence of small scale, multi-period activity across the site. The lack of artifacts retrieved from site hinders close preliminary dating of the features investigated. It is hoped that more information may be gained when the radiocarbon dates from the various samples taken are analysed.

Site 105 (Turrell 2005a) where a 20m by 20m area was stripped down to the stony subsoil to reveal two plough furrows, several shallow pits, perhaps the result of spade cultivation, and a linear feature, perhaps a ditch or possibly the result of mechanical ridging. All of these features had similar fills and some contained sherds of modern pottery. Some burnt areas, noted during the testing phase, proved to be no more than thin spreads of charcoal-rich topsoil.

Site 106 (Powell 2005a) was where Phase 1 testing revealed two potentially significant features; Feature 10 was a spread of charcoal flecked silty soil with stone inclusions, Feature 11 was 13m north of Feature 10 and consisted of a circular spread of ash and charcoal that continued into the northern baulk. In order to investigate the deposits an area measuring 20 by 20m was stripped of topsoil after which several

additional potentially significant features were exposed in plan. In the course of the excavation, twenty-seven contexts consisting of ten cuts and sixteen fills or deposits were investigated. All of the excavated features appear to be related to post medieval agriculture, these include a wall foundation, burnt tree bowls, agricultural furrows and a field drain.

Site 107 (Powell 2005b) at this location one thin spread and one large pit were excavated. Both are thought to have resulted from modern farming activities associated with an adjacent farmhouse.

Site 108 (Powell 2005c) this was Testing Feature 8 discovered in Project Phase 1 (McConway and Lynch 2005). Initially the site consisted of a concentrated charcoal spread 0.66m by 0.8m. Following surface stripping five pits, two of which may be hearths, and one stakehole were discovered and excavated.

Site 110 (Powell 2005d) at this location, testing had discovered a single feature (McConway and Lynch 2005). After clearing the feature measured 0.95m east to west by 0.60m north to south; it was revealed as dish-shaped in profile with a maximum depth in the centre of 0.08m. There was no cut per se as the feature consisting of a burnt patch of clay with charcoal inclusions. The excavated feature appears related to agricultural practice, in particular tree clearing.

Site 111 is an extensive site, laying next to recorded monument (LH 004:041) a Megalithic Tomb (Figs 3 and 4). In Field 18 Feature 1 lay to the immediate north of a beech-lined avenue and in the immediate vicinity of a recorded monument, a 'megalithic structure'. The area was noticeably stony underfoot and many larger boulders protruded through the dense grass cover. This feature consisted of a stony surface measuring approximately 30m north to south by 25m and was identified lying immediately under the topsoil and overlying subsoil. These stones were embedded within a friable soil and appeared delineated with an interrupted kerb of larger boulders. Feature 1 has been interpreted as a collapsed cairn associated with the recorded megalithic tomb. It is likely, given local tradition that the area may also have been used as an infant burial ground.

In Field 17 that was to the immediate south of the beech lined avenue it was noted that large boulders protruded through the grass in the northwest corner of the field, although these may be associated with collapse from a stone field wall. Three areas of archaeological deposits were identified in Field 17. Feature 1 consisted of an isolated spread of grey/brown silt, Feature 2 was roughly circular and measured 3.5m in diameter. Feature 11 was a spread of black charcoal rich silt, burnt-heat shattered stone that was uncovered 75m to the southwest of Feature 1. As uncovered, this deposit measured 3.5 by 2.5m and

continued into both the northern and southern baulks. This deposit has been interpreted as being burnt mound or *fulachta fiadh* material. Feature 3 was a circular feature that was uncovered around .27m east of Feature 1 and lay within a small cluster of archaeological deposits. It consisted of a spread of orange/brown redeposited subsoil identified as Feature 4, which itself measured 3.3m in diameter. A fifth feature was identified within this cluster. Feature 6 was an irregular feature consisting of charcoal rich black silt Feature 5, at least 5m east to west and continuing into the western baulk.

2 A Description of the Works Carried Out

2.1 Reason for the excavation

The principal objectives of the Roads Service in implementing the scheme are to improve the conditions for road users by reducing journey times between the major commercial centres, together with an improvement in road safety. The specific objectives are:

- To contribute to the improvement of the Regional Strategic Transport Network and major transport links with Great Britain and the Republic of Ireland;
- To reduce vehicle operating times and costs;
- To facilitate freight transport;
- To improve road safety and improve pedestrian and cycle access and safety.

2.2 Excavation methods

2.2.1 Phasing

The road works have been divided into 2 phases: Phase 1 included (a) the archaeological evaluation of known sites, possible sites and areas of archaeological potential and (b) the recording and evaluation of standing buildings/structures at identified locations. Phase 2, reported here, includes the resolution of any sites identified by the works.

2.2.2 Desk top study

A desktop study of archaeological and cultural heritage sites was reported in the Environmental Impact Statement for the project (RPS 2002a, 236; 2002b). A particular emphasis was paid to sites with 1km of what was then the proposed route alignment.

2.2.3 Phase 1 archaeological testing

Area 12 is in a zone of fertile soils within an archaeologically sensitive landscape in close vicinity to a number of known archaeological sites (Figs 2 and 3; Section 1.2.3). This area was considered to have high archaeological potential and was investigated and evaluated under Phase 1 of the Contract by means

of test excavation. The Phase 1 report discusses the archaeological findings within Area 12, at Drumsillagh and Aghnaskeagh townlands, between chainages 10925-12150. Patricia Lynch carried out the testing under project sub number A002/003 from the 15th through 26th of November 2004 (McConway and Lynch 2005).

The purpose for and the methodology employed in the Phase I testing included:

- To fully expose, investigate, record and resolve archaeological deposits uncovered in and all deposits associated with these.
- Resolution of the archaeological features described above was carried out by a licenced director, a supervisor, two assistants and four general operatives.
- A 100 by 40m area was appropriately opened over the features under archaeological supervision to the latest archaeological horizon or to the upper surface of natural geology, whichever occurs first. The area will be manually cleaned and examined for further archaeological deposits.
- All archaeological deposits were surveyed in to a site grid and in relation to their position on the road.
- All deposits were recorded and investigated by methods appropriate to their nature and complexity using best archaeological practice.
- Methods used included sectioning, planning and photographing the deposits, investigating the stratigraphic relationship with other deposits if appropriate, compiling a written record of the deposits via a context sheets

Recommendations derived from the testing. Testing in Area 12 was carried out under number A002/003. In Area 12, eight loci of archaeological potential were identified (Figs 4 and 5). At this location, the test excavations revealed five features that required further investigation from the north these were:

- **Feature 7** lay 82m south of Feature 8 that was excavated as Site 108 (Powell 2005c). It was identified as two teardrop shaped spreads of charcoal flecked soil 0.75m and 0.5m in plan. These features lay beside one another and continued into the northern baulk.
- **Feature 6** lay around 6.6m to the south-southeast of Feature 7 and consisted of a spread of brown/grey silt 2.60 by 1.00m in plan. The eastern edge of this spread continued into the baulk.
- **Feature 5** lay 27m to the south-southwest of Feature 6 and consisted of a patch of subcircular silty soil with charcoal inclusions that was 0.34 by 0.24m in plan.
- **Feature 4** lay approximately 42m to the west of Feature 5 and consisted of two apparently discreet spreads of charcoal one 0.50m in plan and the second 0.20m in plan.

- **Feature 3** lay 24m south-southwest of Feature 4 and was the southernmost feature in the cluster of Features 3–7. It consisted of a roughly oval spread of charcoal flecked brown-grey soil 0.50 by 0.55m in plan.

As it was determined likely that additional subsurface archaeological deposits would be associated with the known features it was also recommended that an appropriate area around each feature be topsoil stripped. All features exposed from the stripping were to be fully investigated. If it became apparent that these features form part of a more extensive archaeological landscape then it was recommended that an appropriate area be opened up on plan in order to fully investigate and record any discovered features.

2.2.4 Phase 2 archaeological excavations

Recording strategy. Recording was by means of ‘best archaeological practise’ with the primary records of these excavations consisting of written and drawn records, photographs, survey data, finds and samples. The stratigraphic record was primarily made on context record sheets, of the standard type used by ADS. These are supplemented by information from the site daybook, photographs, notebooks, plans and sections. Field surveying equipment consisted of an Ashtech DGPS surveying suite, which allowed real-time data collection with horizontal accuracy of 0.005m +1ppm and vertical accuracy of 0.010m +2ppm.

All Phase 2 archaeological excavations were carried out in accordance with the Specification for Archaeological Rescue Excavation on Known Sites document (ADS 2005). Field methods included:

- An appropriately sized area around each of the deposits was fenced off and access to these areas by machinery and personnel denied until they have been resolved.
- The removal of topsoil was by judicious use of a machine fitted with a toothless bucket under the constant supervision of a suitably qualified archaeologist.
- All trenches were excavated to the latest archaeological horizon or to the upper surface of natural geology, whichever occurred first. If archaeological features were revealed these deposits were in the first instant, cordoned off using high visibility tape and access to these areas by machinery denied.
- All deposits were hand investigated using methods appropriate to their composition, nature and date and time was allowed for the archaeologist to undertake the appropriate level of recording.
- The level of recording depended on the nature and extent of the archaeological remains encountered. All deposits were recorded on plan (in relation to the site grid), photographed and if appropriate, their location surveyed in advance of hand excavation.

- Excavation of deposits was carried out by sectioning using methods appropriate to their composition and nature.
- Archaeological contexts were sampled for palaeobotanical material, radiocarbon dating, soil micromorphology, petrology, wood identification, etc.
- All sections and cut features were photographed and drawn.
- The position of all finds and samples were recorded in three-dimensions (when practicable) in relation to the site grid.
- Sampling strategies depended upon the dimensions, make up and complexity of the archaeological remains encountered.
- A day book was maintained where all archaeological features were recorded in writing utilizing ADS context sheets, scaled field illustrations and by both slide and digital photography.
- All finds were logged according to context, bagged and catalogued.
- A contract conservator was on call if necessary.
- All finds are stored in our post excavation unit at Kells, Co. Meath and will ultimately be stored in whatever facility the State will provide.
- Excavation or preservation by record was carried out on archaeological deposits that will be impacted on by the construction of the road scheme.

2.2.5 Health and safety documents

It is the policy of ADS to comply with the Health & Safety at Work Acts and the Construction Safety, Health & Welfare Regulations and to ensure so far as reasonably practicable the safety, health and welfare of all employees whilst at work, and to provide such information, training and supervision needed for this purpose. To comply with these acts and regulations the works were conducted following the procedures and principles laid out in the company health and safety document (ADS 2003). Special attention to health and safety will be paid in areas close to rivers, streams, woodland, marshy ground and overhead power lines. ADS can confirm that the excavation crews all hold a valid safe pass certificate.

2.2.6 Staff involved

The director (Caroline Powell) would like to acknowledge site supervisors James McKee and Deirdre Malone and site assistants Tara Clark, Caroline Cosgrove and Colm O'Brien.

3 The Excavations-Phase 2

Site 109 was testing Features 3-7 (McConway and Lynch 2005). The site was divided into four areas, each of which was composed of at least one of the features discovered in testing and features found while clearing the anomalous areas identified in the Phase 1 testing before the Phase 2 excavations (Section 2.2.3). In each of the four excavation areas that constituted Site 109, a 20 by 20m grid was centred over the area where testing had indicated the potential for archaeological remains (McConway and Lynch 2005). These areas were then surface stripped of topsoil and hand cleaned of spoil following which all observed features with archaeological potential were hand excavated.

- Area A was topsoil stripped to address Features 6 and 7 from the testing these were the northernmost features at this site.
- Area B was the original Testing Feature 5 it lay 30m to the south-southwest of Area A and consisted of a patch of subcircular silty soil with charcoal inclusions that was 0.34 by 0.24m in plan. This became context (056) in the current report.
- Area C was cleared to address Testing Feature 4; the original 20 by 20m topsoil stripped area was expanded approximately 3m to the east.
- Area D was stripped to re-expose Testing Feature 3

3.1 Area A

Testing Feature 6 was designated Site 109 Area A (Figs 5 and 6; Table 1; Appendix I). After topsoil stripping a 20 by 20m area around the feature, four contexts were assigned. Cut **(202)** was the ‘teardrop’ shaped feature identified in the testing. However testing had indicated there were two of these features adjacent to each other but when cleared for excavation only one feature was observed. Within the topsoil stripped area was a second newly found feature **(203)** that was upon excavation determined to be a root bowl. Both features **(202)** and **(203)** were determined to be the likely results of field clearing or levelling (Section 1.2.1) and were not of archaeological significance.

Table 1 Area A contexts

Cut	Fill	Size (L x W x D)m	Description
(202)	(200)	0.62 by 0.52 by 0.26	NAS.* Stone socket. Cut of tear-dropped shaped feature deep filled by mid grey/brown topsoil with modern glass, ‘Granny Ware’, flint debitage and a pottery sherd.
(203)	(201)	0.38 by 0.26 by 0.07	NAS. Root bowl fill loose black with brown (wood) flecks, occasional pebbles.

* NAS Not of archaeological significance.

3.2 Area B

Area B was the designation given Testing Feature 5; it was located 27m to the south-southwest of Feature 6 (Area A) and consisted of a patch of subcircular silty soil with charcoal inclusions that was 0.34 by 0.24m in plan. Upon topsoil stripping a 20 by 20m area around the feature, eight possible archaeological contexts were revealed and investigated through hand excavations (Figs 5, 6 and 7; Table 2; Appendix I).

Table 2 Area B contexts

Cut	Fill	(L x W x D)m	Description
-	(051)	-	NAS.* Topsoil. Loose mid to dark grey/brown clay silt with occasional pebbles, rare to occasional charcoal flecks and modern pottery in places.
-	(052)	-	NAS. Subsoil, natural.
(054)	(053)	0.83 by 0.76 by 0.12	NAS. Modern sub-rectangular pit; fill (053) was moderately loose grey/brown silty clay with moderate amounts of pebbles and a fragment of corroded iron (essentially topsoil). Juxtaposition to furrow (059) suggests a plough 'turn-around' or return pivot.
(056)	(055) (057)	0.35 by 0.33 by 0.11	NAS. Small circular pit, likely a stone socket or burrow, upper fill is loose and resembles topsoil. The context contained two fills: Fill (055) was friable grey/brown silty clay with frequent charcoal and occasional pebbles. Fill (057) consisted of friable orange/brown silty clay with occasional charcoal flecks and pebbles.
(059)	(058)	1.70 by 0.42 by 0.10	NAS. Modern furrow, crescent shaped in plan, steep sides flat base. The northeast edge is cut by pit (054). Fill (058) was loose-friable, pink/brown clayey silt with occasional charcoal flecks, small rounded and angular stones (essentially topsoil). Runs in a southeast to northwest direction that is the same as the current field boundaries.
(060)	(061)	1.95 by 0.43 by 0.03	NAS. Modern furrow slightly curved, very shallow, runs parallel to (059). Runs in a southeast to northwest direction that is the same as the current field boundaries.
(065)	(064)	0.74 by 0.48 by 0.15	NAS. Modern deposit of topsoil in what was probably a stone socket. Fill (064) is loose grey/brown silty clay, with infrequent charcoal flecking, small stones and modern crockery (essentially topsoil).
(067)	(066)	1.10 by 0.75 by 0.19	NAS. Modern deposit of topsoil in what was probably a stone socket. Fill (066) is loose grey/brown silty clay, with infrequent charcoal flecking and small stones (essentially topsoil).
(068)	(062)	0.32 by 0.26 by 0.10	NAS. Shallow oval pit. Fill (062) is loose grey/brown silty clay with many pebbles and occasional charcoal flecking (essentially topsoil).
(069)	(063)	0.40 by 0.37 by 0.10	NAS. Shallow circular pit. Fill (063) is loose grey/brown silty clay with many pebbles and infrequent charcoal flecking (essentially topsoil).

* NAS Not of archaeological significance.

Excavations in Area B determined that none of the potential archaeological features, either Feature 5 discovered in Phase 1 testing or those discovered in Phase 2 topsoil stripping, were of archaeological interest. It was determined that two of the features were plough furrows and one was a probable plough pivot. The remainder contained fills similar to the local topsoil and are thought to represent hollows, burrows or other small irregularities at the top of the natural left from stone removal and field levelling (Section 1.2.1).

3.3 Area C

Area C was where Phase 1 testing had identified Feature 4 that was described by McConway and Lynch (2005) as two apparently discreet spreads of charcoal one 0.50m in plan and the second 0.20m in plan (Figs 4, 8 and 9; Appendix I; Table 3). Feature 4 was approximately 42m to the west of Feature 5, which was excavated as Area B (Section 3.1). Upon topsoil stripping a 20 by 20m area around the feature location, numerous soil stains and burnt patches were revealed some of which were natural or of recent agricultural origin, and some of which were archaeological.

The features of archaeological interest are the group of stakeholes/postholes at the south of the site consisting of contexts **(108)**, **(110)**, **(112)**, **(114)**, **(116)** and **(126)** with a spatially associated pit **(118)**. A second group of seven pits was located near the centre of the topsoil stripped area. These consisted of **(104)**, **(131)**, **(132)**, **(133)**, **(134)**, **(140)** and **(153)** of which **(104)**, **(132)**, **(133)** and **(140)** may be archaeological. Lastly, were two relatively isolated pit features; **(122)** located at the northwest of the topsoil stripped area and **(129)** located to the west of the area.

3.3.1 Features at the southeast of Area C

In the southeast of Area C were two short stakehole/posthole alignments within a 1.2 by 0.60m area (Figs 8 and 9; Appendix I; Table 3). Two of the features stakehole **(108)** and posthole **(110)** form a short, 0.60m northeast to southwest alignment while just 0.55m to the east are features **(112)**, **(114)/(126)** and **(116)** that form a north to south alignment 0.50m long. At any given time, the second alignment would have likely consisted of three stakeholes as stakehole **(114)** cuts **(126)** indicating repair or reuse of the feature represented by this alignment. Between stakeholes **(116)** and **(114)/(126)** is a shallow trough-like depression that may be the remnants of a foundation ditch.

Table 3 Area C contexts

Cut	Fill	Size (L x W x D)m	Description
(104)	(103) (105) (106)	1.44 by 1.13 by 0.58	Sub square pit with very uneven sides and base. Fill (103) was loose brown/grey silty clay occasional charcoal flecking, rare small stones (similar to the topsoil) and two small thin modern sherds. Fill (105) was brown/orange fine silt (redeposited natural) with a moderate percentage of pebbles and occasional charcoal fleck. Fill (106) was grey gravely silty sand, very compact.
(108)	(107) (121)	0.32 by 0.15 by 0.13	Stakehole associated with (110), (112), (114), (116) and (126). Fill (107) was friable charcoal rich brown clayey silt with occasional pebbles. Fill (121) was brown clayey silt with frequent charcoal flecks.
(110)	(109)	0.26 by 0.20 by 0.09	Posthole/stakehole associated with (110), (112), (114), (116) and (126). Fill (109) was grey/brown silty clay with frequent pebbles.
(112)	(111)	0.10 by 0.12 by 0.11	Stakehole associated with (108), (110), (114), (116) and (126). Fill (111) was grey/brown clayey silt.
(114)	(113) (124)	0.13 by 0.23 by 0.13	Stakehole associated with (108), (110), (112), (116) and (126). Cuts stakehole (126). Fill (113) was grey/brown clayey silt with frequent charcoal flecking. Fill (124) was grey/brown clayey silt with frequent charcoal flecking and occasional small stones.
(116)	(115)	0.19 by 0.15 by 0.10	Stakehole associated with (108), (110), (112), (114) and (126). Fill (115) was orange/brown clayey silt.
(119)	(159) (160) (161)	0.81 by 0.22 by 0.14	NAS?* When excavated it was unsure if this pit was the result of root or tree burning. The upper fill (159) was loose yellow/brown silty clay with frequent charcoal flecking and occasional small and medium angular stones. Fill (160) was loose brown clay slit with frequent charcoal and small gravels; the deposit was in two discrete lenses. Fill (161) was loose orange/brown clay silt with frequent charcoal flecking.
(122)	(123)	1.30 by 1.25 by 0.42	Pit, fill (123) consisted of loose brown/grey sandy clay with a moderate amount of small rounded stones and a post medieval pottery sherd.
(126)	(125) (127)	0.18 by 0.14 by 0.12	Stakehole associated with (108), (110), (112), (114) and (116). Cut by stakehole (114). Fill (125) was orange brown silty/clay with occasional small stones. Fill (127) consisted of brown clayey silt with frequent charcoal flecking.
(129)	(128)	0.65 by 0.42 by 0.12	Shallow pit with fill (128) that consisted of loose grey/brown sandy clay.
(132)	(141)	0.70 by 0.65 by 0.15	Shallow circular pit associated with pits (133) and (140) with regular sloping sides and a bowl shaped even base. Fill (141) consisted of grey sandy clay.
(133)	(144)	0.70 by 0.65 by 0.11	Small shallow circular pit associated with pits (132) and (140) regular sloping sides and bowl shaped uneven base. Fill (144) consisted of grey sandy clay with frequent amounts of medium stones.

Cut	Fill	Size (L x W x D)m	Description
(140)	(145) (146) (147) (148)	1.20 by 0.80 by 0.30	Sub circular pit with gradually sloping sides and an uneven base; associated with pits (132) and (133). Fill (145) is brown redeposited natural; (146) was grey sandy clay with occasional small stones; (147) consisted of loosely compacted dark grey sandy clay with a moderate percentage of medium stones and (148) was brown sandy clay (redeposited natural).
-	(101)	-	NAS. Topsoil. Loose mid to dark grey/brown clay silt with occasional pebbles, rare to occasional charcoal flecks and modern pottery in places.
-	(102)	-	NAS. Subsoil, natural.
-	(120)	-	NAS Root bowl (no cut given).
-	(139)	-	NAS Decayed stone (no cut given).
(131)	(130)		NAS. Stone socket filled with topsoil.
(134)	(138)		NAS. Stone socket filled with topsoil.
(149)	(142)	-	NAS. Pit within the larger tree/root bowl (152).
(150)	(143)	-	NAS. Pit within the larger tree/root bowl (152).
(152)	(151)	-	NAS. Tree/root bowl cut by small shallow pits (149) and (150).
(153)	(154) (155)	-	NAS. Pit containing large stones, probably utilized in field clearance.
(158)	(156) (157)	-	NAS? Small subcircular bowl shaped pit with gently sloping sides and slightly convex base. Fill (156) was loose pink/brown clayey silt with moderate amounts of pebbles and rare charcoal flecks, may be burnt topsoil. Fill (157) was loose pink/orange/brown gravelly silt; fill is adjacent to an area of extensive root disturbance. Probably burnt natural.

* NAS Not of archaeological significance

Feature **(118)** was 0.40m northeast of the second, three-stakehole alignment, the proximity of which suggests that the overall feature or structure formed by the individual stakeholes may have functioned as a screen to this pit feature. In general a screen would be used to shield the feature from the wind; however, pit **(118)** does not show evidence of *in situ* burning nor does its singular fill **(117)** indicate that the pit may have functioned as a hearth or fire pit; it **(117)** being a variation of the local topsoil with occasional glass (Table 2; Appendix II).

A second pit feature **(119)** was 0.45 to the east of the **(112)**, **(116)**, **(114)/(126)** stakehole alignment (Table 2). When excavated it was uncertain if this cut was the result of archaeological or natural processes, its location adjacent to the stakehole alignment suggests a screen-hearth relationship with the possible screen formed by the stakeholes sheltering the possible hearth **(119)** from a westerly wind.

3.3.2 Features in the centre of Area C

Near the centre of Area C there was a group of three pit features **(132)**, **(133)** and **(140)** (Table 3). These pits were within a 2.00 by 2.50m area and are thought to be archaeological while another pit **(104)** was 2.00m north of the group but thought to be a result of field clearing. Although the three spatially associated features were interpreted as archaeological, none showed evidence for burning nor were their relative locations suggestive of a structural function and although they were thought to be of some antiquity none contained temporally diagnostic artefacts.

North of these features were a further three pit features **(131)**, **(134)** and **(153)**, the first two of which were likely stone sockets left from field clearing and the later, the result of field levelling (Section 1.2.1). Still further north, was a large trough like feature **(152)** that was interpreted as a root bowl.

3.3.3 Relatively isolated features in Area C

To the west of the area there were two pit features **(122)** and **(129)** (Table 3). Both of these pits were near circular with bowl or basin shaped bases, attributes that indicate an archaeological origin; however neither contained artefacts or otherwise datable fills.

3.3.4 Area C summary

Area C contained a mix of probable archaeological, agricultural and natural features. In the south of the area there were seven stakehole/posthole like features **(108)**, **(110)**, **(112)**, **(116)**, **(114)/(126)** that are grouped in a manner that would suggest an archaeological origin. The function of the alignments is uncertain but they appear to have formed a short wall or wall segment or perhaps a windbreak. Another possibility is that when considered along with stakehole **(108)** and posthole **(110)** these features may have formed a small hut structure. If the later were the case, the interior of the hut would have measured approximately 2m east to west by around 1.5m north to south. Associated with the stakeholes/posthole are several pit features of dubious archaeological origin that were likely occurrences of tree roots or root bowls.

In the centre of the area, there were seven pit features of which three **(132)**, **(133)** and **(140)** appear archaeological with the remainder **(104)**, **(131)**, **(134)** and **(153)** being a result of probable field clearing. To the north of these features is a trough like root bowl that was recorded as cut **(152)**, within this were two further cuts **(149)** and **(150)**; all of these appear non-archaeological.

In the west of Area C are the last two features **(122)** and **(129)** excavated at this site, both of these are likely archaeological but do not contain temporally diagnostic artefacts or fills that appear easily dateable.

3.4 Area D

Area D was assigned to Feature 3 from the Phase 1 testing; it lay 24m south-southwest of Feature 4 and was the southernmost feature in the cluster of Features 3–7 (Figs 4, 10 and 11; Appendix I; Table 4).

Table 4 Area D contexts

Cut	Fill	Size (L x W x D)m	Description
-	(300)	-	NAS. Topsoil. Loose mid to dark grey/brown clay silt with occasional pebbles, rare to occasional charcoal flecks and modern pottery in places
(303)	(301) (304)	8.00 by 1.07 by 0.25	NAS. Modern field drain runs southwest to northeast paralleling the general lay of the current field boundaries (Figs 3 and 4). Fill (301) is loose grey silty clay with a moderate amount of small to medium sized rounded stones. The bottom fill (304) was of medium compaction orange/grey redeposited subsoil, with occasional charcoal flecks.
(305)	(302) (306) (307)	1.90 by 1.30 by 0.50	NAS. Modern filled hollow, adjacent to (313) cuts fill (309) of pit (310). Fill (302) is a brown sandy clay with occasional mid sized rounded stones, boulders, rare charcoal flecking a possible spectacle lens, three pottery sherds (not further specified) and two sherds of modern white glaze ware. Fill (306) consists of friable red/brown sandy clay with occasional rounded stones and rare charcoal flecking. The bottom fill (307) is red/grey sandy silty clay with small rounded stones and rare charcoal flecking (essentially subsoil).
(310)	(309)	2.19 by 1.32 by 0.63	NAS. Filled hollow likely from field levelling. Irregular-oval pit cut by pit (312), base irregular. Fill (309) is loose grey silty clay with frequent small and medium sized rounded stones. Cuts a pit with
(312)	(311)	0.24 by 0.24 by 0.22	NAS. Modern small pit, cut into fill (309) in pit (310). Fill (311) consisted of loose orange/brown silty clay with a moderate amount of small rounded stones (essentially subsoil).
(313)	(315)	1.20 by 1.00 by 0.25	NAS. Modern pit, irregular in plan with uneven base. Fill (315) is friable brown/grey clayey silt with a moderate amount of small stones and infrequent charcoal flecking. Adjacent to (305) and (314).
(314)	(308)	2.00 by 1.60 by 0.25	NAS. Natural hollow probably filled during field levelling, irregular in plan with uneven base. Fill (308) is friable grey clayey silt with small stones, infrequent charcoal flecking modern white glaze ware pottery and modern glass. Adjacent to (305) and (313).

Feature 3 consisted of two apparently discreet spreads of charcoal one 0.50m in plan and the second 0.20m in plan they lay approximately 42m to the west of Feature 5 or Area C (Section 3.3). Upon topsoil stripping a 20 by 20m area around the original testing location, numerous soil stains and burnt patches were revealed.

All of the features excavated in this area **(303)**, **(305)**, **(310)**, **(312)**, **(313)** and **(314)** were shown to be natural occurrences or the result of recent agricultural activities including draining, rock clearing and field levelling (Section 1.2.1).

3.5 Summary

Of the four discrete areas that had been scheduled for Phase 2 excavations at Site 109, only Area C contained features of archaeological significance. In this area, there were six stakeholes or postholes that may have combined to form a windbreak, a screen or perhaps a small hit. Just to the north of these features were several pits one of which may be archaeological.

4 Conclusions

All of the excavated features in Areas A, B and D appear to be related to post medieval agriculture practices in particular field levelling that according to a local farmer occurred *c.* 30 years ago. Other activities that were revealed by the excavations include the construction of a field drain, removal of trees by burning (either natural or intentional), agricultural furrows from ploughing (these are parallel the current field boundaries), a plough pivot or ‘turn around’ and stone sockets from field clearing.

In Area C there are several features including stakeholes, a posthole and several pit features that are likely archaeological and that warrant post excavation analyses of the bulk soil samples that were recovered from the fills of the features.

5 Quantification of the Materials and Records

5.1 Quantity of the record

The site archive comprises those items listed in Table 1:

Table 5 Records inventory

Form	Number (after voids)
Context Sheets	Total 100; Area A = 4, Area B = 19, Area C = 61, Area D = 16
Photographs (Rolls)	62 frames in 4 rolls
Sections and Plans	27 sections/profiles and 7 plans
Finds	From 9 contexts (metal, glass, flint and pottery)
Samples	8 all from Area C

5.1.1 Context sheets

One hundred context sheets are archived at the ADS Dublin facility and are in queue for entry into the project database.

5.1.2 Miscellaneous written records

Site Diary/ Daybook (with supplementary notes and correspondence). Miscellaneous administrative notes and correspondence.

5.1.3 Drawings

Seven plans and twenty-seven sections/profiles.

5.1.4 Finds

Preliminary artefact counts include one piece of corroded metal eleven sherds either post medieval or modern, four glass shards and one piece of flint debitage (Appendix II).

5.1.5 Samples

Eight samples were collected from contexts in Area C (Appendix III). None of the other areas contained features that were convincingly archaeological, most being from field clearance activities

6 Recommendations

6.1 Finds

ADS recommends that the few finds recovered from Site 109 be analysed by the appropriate specialists (Appendix II).

6.2 Samples

6.2.1 Macrobotanical analysis

The single best source of evidence for answering economic questions related to subsistence, fuel use and material culture is macrobotanical, that is, materials that can be seen with the naked eye. Such materials can be quantified and ultimately compared with faunal and other tangible aspects of an archaeological assemblage including information recovered through pollen and other microbotanical analyses. Burned macrobotanical materials are best recovered through flotation of a soils sample. In the case where unburnt materials are suspected in the sample, they can be picked from the overall sample before flotation. If the intent is for the recovered remains to be used for radiocarbon analysis then all botanical materials recovered from the samples should undergo species identification before such analysis.

6.2.2 Microbotanical analyses: pollen and phytolith

Several types of analyses of samples that are botanic in origin can yield information that is important to the understanding or confirmation of the function of a site or its features. At this site, materials for analyses can be recovered as sub samples from the bulk soil samples.

All of the posthole and stakehole features **(108)**, **(110)**, **(112)**, **(114)**, **(116)** and **(126)** were sampled (Appendix III). These samples should first have a sub-sample removed for microbotanical analyses, then samples will then be reduced by flotation to recover any identifiable macro botanical remains that will then be identified to species and quantified.

The sub sample that were removed for microbotanical analysis may undergo both pollen and phytolith analyses. Pollen may be transported by wind and form part of a record of local and regional vegetation. Humans in the course of working with plants may also transport pollen more selectively. Pollen analysis can focus on interpretation of the past environment or also is a good tool for interpreting human exploitation of plants as foods, construction materials, or for a variety of utilitarian purposes. Pollen is surprisingly rugged and survives in sediments that many suppose would not be conducive to pollen preservation.

Phytoliths are silica bodies accumulated by plants when soluble silica in the ground water is absorbed by the plant roots and is carried up to the plant via the vascular system. Evaporation and metabolism of this water result in precipitation of the silica in and around the cell walls in plants that accumulate silica. Phytoliths are usually introduced directly into the soils in which the plants decay. Transportation of phytoliths occurs primarily by animal consumption, man's gathering of plants or by erosion or transportation of the soil by wind, water or ice.

6.2.3 Radiocarbon analysis

ADS recommends that two of the stakehole/posthole features found in Area C at this site undergo radiocarbon analysis. Each of the two sets of features will be dated with the best of the macrobotanical remains from either Sample <1>, context (108) or Sample <2> from context (110). The same choice should be made of the second group of support features with the best of either Sample <3>, context (112); Sample <5>, context (116) or Sample <6>, context (126) analysed. Sample <4>, context (114) may also be a good choice as it is probably the latest of the four stakeholes in this group but the temporal difference between the construction of the features and their last use is unlikely to be seen through radiocarbon dating.

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Appendices

Appendix I Context list

Context	Area	Type	Description
001-050	-	-	Not issued.
051	B	Fill	Topsoil.
052	B	Fill	Subsoil, natural.
052	B	Fill	Fill of sub-rectangular pit (054).
054	B	Cut	Sub-rectangular pit filled by (053).
055	B	Fill	Fill of small circular pit (056).
056	B	Cut	Cut of small circular pit filled by (055) and (057).
057	B	Fill	Basal fill of small circular pit (056).
058	B	Fill	Fill of elongated pit (059).
059	B	Cut	Cut of elongated pit filled by (058).
060	B	Cut	Cut of curved elongated feature filled by (061).
061	B	Fill	Fill of (060) a curved elongated feature.
062	B	Fill	NAS. Fill of shallow oval pit (068).
063	B	Fill	NAS. Fill of shallow circular pit (069).
064	B	Fill	NAS. Fill of small pit (065).
065	B	Cut	NAS. Cut of small pit filled by (064)
066	B	Fill	NAS. Fill of small pit (067).
067	B	Cut	NAS. Cut of small pit filled by (066).
068	B	Cut	NAS. Shallow oval pit filled by (062).
069	B	Cut	NAS. Shallow circular pit filled by (063).
070-100	-	-	Not issued.
101	C	Fill	Topsoil. Loose mid to dark grey/brown clay silt with occasional pebbles, rare to occasional charcoal flecks and modern pottery in places
102	C	Fill	Subsoil, natural.
103	C	Fill	Upper fill of oval pit (104).
104	C	Cut	Oval pit filled by (103).
105	C	Fill	Middle fill of oval pit (104).
106	C	Fill	Basal fill of oval pit (104).
107	C	Fill	Fill of stakehole (108).
108	C	Cut	Stakehole filled by (107) and (121).
109	C	Fill	Fill of posthole (110).
110	C	Cut	Posthole filled by (109).
111	C	Fill	Fill of stakehole (112).
112	C	Cut	Stakehole filled by (111).
113	C	Fill	Fill of stakehole (114).
114	C	Cut	Stakehole filled by (113).
115	C	Fill	Fill of stakehole (116).
116	C	Cut	Stakehole filled by (115).
117	C	Fill	Fill of oval pit (118).
118	C	Cut	Oval pit filled by (117).

Context	Area	Type	Description
119	C	Cut	Root bowl filled by (159), (160) and (161).
120	C	Cut	Root bowl. NAS
121	C	Fill	Basal fill of stakehole (108), below (107).
122	C	Cut	Pit filled by (123).
123	C	Fill	Fill of pit (122).
124	C	Fill	Basal fill of stakehole (114), below (113).
125	C	Fill	Upper fill of stakehole (126), above (127).
126	C	Cut	Stakehole filled by (126) and (127).
127	C	Fill	Basal fill of stakehole (126), below (125).
128	C	Fill	Fill of shallow pit (129).
129	C	Cut	Shallow pit filled by (128).
130	C	Fill	Fill of small circular spread (131).
131	C	Cut	Small circular spread filled by (130).
132	C	Cut	Shallow pit filled by (141).
133	C	Cut	Small shallow pit filled by (144).
134	C	Cut	Stakehole filled by (135), (136), (137) and (138).
135	C	Fill	Upper fill of stakehole (134), above (136).
136	C	Fill	Upper middle fill of stakehole (134), below (135) and above (137).
137	C	Fill	Lower middle fill of stakehole (134), below (136) and above (138).
138	C	Fill	Basal fill of stakehole (134), below (137).
139	C	Fill	NAS (decayed stone).
140	C	Cut	Sub circular pit filled by (145), (146), (147) and (148).
141	C	Fill	Fill of shallow pit (132).
142	C	Fill	Fill of shallow pit (149).
143	C	Fill	Fill of small shallow pit (150).
144	C	Fill	Fill of small shallow pit (133).
145	C	Fill	Upper fill of sub circular pit (140), above (146).
146	C	Fill	Upper middle fill of sub circular pit (140), below (145) and above (147).
147	C	Fill	Lower middle fill of sub circular pit (140), below (146) and above (148).
148	C	Fill	Basal fill of sub circular pit (140), below (147).
149	C	Cut	Small shallow pit filled with (142).
150	C	Cut	Small shallow pit filled with (143).
151	C	Fill	Fill of likely root bowl (152).
152	C	Cut	Possible root bowl filled by (151) and cut by small shallow pits (149) and (150).
153	C	Cut	Pit containing large stones, probably field clearance filled by (154) and (155).
154	C	Fill	Upper fill of stone filled pit (153).
155	C	Fill	Lower fill of stone filled pit (153).
156	C	Fill	Upper fill of small pit (158).
157	C	Fill	Lower fill of small pit (158)
158	C	Cut	Small bowl shaped pit filled by (156) and (157).
159	C	Fill	Upper fill of probable root bowl (119), above (160) and (161).
160	C	Fill	Middle fill of probable root bowl (119), below (159) and above (161)

Context	Area	Type	Description
161	C	Fill	Lower fill of probable root bowl (119), below (160).
162-199	-	-	Not issued.
200	A	Fill	Fill of tear-dropped shaped feature (202), mid grey/brown circular spread.
201	A	Fill	Fill of small pit (203), black-charcoal rich.
202	A	Cut	Cut of tear-dropped shaped feature filled by (200).
203	A	Cut	Cut of small pit filled by (201).
204-299	-	-	Not issued.
300	D	Fill	Topsoil.
301	D	Fill	Fill of drain (303).
302	D	Fill	Upper fill of pit (stone socket) (305).
303	D	Cut	Cut of drain filled by (301).
304	D	Fill	Redeposited fill in drain (303).
305	D	Cut	Pit with fill (302), (306) and (307), cut by (313).
306	D	Fill	Fill of stone socket (305) beneath (302).
307	D	Fill	Fill of stone socket (305) beneath (306).
308	D	Fill	Fill of modern pit (314).
309	D	Fill	Fill of oval pit (310).
310	D	Cut	Oval pit filled by (309).
311	D	Fill	Fill of small pit (312).
312	D	Cut	Small pit, cut into fill (309) in pit (310); filled by (311).
313	D	Cut	Modern pit filled by (315).
314	D	Cut	Modern pit filled by (308).
315	D	Fill	Fill of modern pit (313).

Appendix II Finds

Context	Area	Type	Description
Surface	A	Pottery	One post medieval sherd.
053	B	Metal	Crescent shaped piece of corroded iron.
103	C	Pottery	Two small sherds.
117	C	Glass	Modern glass.
123	C	Pottery	One post medieval sherd.
143	C	Pottery	Modern crockery.
200	A	Pottery	One sherd 'Granny Ware'.
200	A	Pottery	One unidentified sherd.
200	A	Glass	Modern.
200	A	Flint	Debitage.
302	D	Pottery	Sherd.
302	D	Pottery	Sherd.
302	D	Pottery	Sherd of modern white crockery.
302	D	Pottery	One body sherd.
302	D	Glass	Possible spectacle lens.
308	D	Pottery	Sherd of modern white crockery
308	D	Glass	Modern

Appendix III Samples

Sample	Cut	Fill	Description
1	(108)	(121)	Possible stakehole associated with (110), (112), (114), (116) and (126). Fill (121) was brown clayey silt with frequent charcoal flecks.
2	(110)	(109)	Possible posthole/stakehole associated with (110), (112), (114), (116) and (126). Fill (109) was grey/brown silty clay with frequent pebbles.
3	(112)	(111)	Possible stakehole associated with (108), (110), (114), (116) and (126). Fill (111) was grey/brown clayey silt.
4	(114)	(113)	Possible stakehole associated with (108), (110), (112), (116) and (126). Cuts stakehole (126). Fill (113) was grey/brown clayey silt with frequent charcoal flecking.
5	(116)	(115)	Possible stakehole associated with (108), (110), (112), (114) and (126). Fill (115) was orange/brown clayey silt.
6	(118)	(117)	Modern oval pit, fill (117) was grey/brown silty clay with occasional small stones, occasional charcoal flecks and modern glass shards.
7	(126)	(127)	Possible stakehole associated with (108), (110), (112), (114) and (116). Cut by stakehole (114). Fill (127) consisted of brown clayey silt with frequent charcoal flecking.
8	(131)	(130)	NAS. Small circular spread infilling a natural hollow. Fill (130) consisted of grey/brown silty clay with rare charcoal flecking and a moderate percentage of pebbles (essentially topsoil).

Appendix IV Photo log

Roll	Photo	Description
1	25	(054) mid excavation.
1	26	(056) mid excavation.
1	27	(059) mid excavation.
1	28	(056) post excavation.
1	29	(060) mid excavation.
1	30	(060) post excavation.
1	31	(054), (059) post excavation.
1	32	(068) mid excavation.
1	33	(065) mid excavation.
1	34	(067) mid excavation.
1	35	(068) post excavation; (069) post excavation.
1	36	(067) post excavation.
1	37	Pre excavation of Site 109 Area C from the east.
2	2	Pre excavation of Site 109 Area C from the south.
2	3	Pre excavation of Site 109 Area C from the west.
2	4	(104) mid excavation.
2	5	(118) mid excavation.
2	6	(108) mid excavation.
2	7	(112) mid excavation.
2	8	(114) mid excavation.
2	9	(116) mid excavation.
2	10	(110) mid excavation.
2	11	(119), (159) mid excavation.
2	12	(120) mid excavation.
2	13	(122) mid excavation.
2	14	(126) mid excavation.
2	15	(104) post excavation.
2	16	(200) pre excavation.
2	17	(201) pre excavation.
2	19	(122) post excavation.
2	20	(108), (110), (112), (114), (116), (126) post excavation; (119) mid excavation.
2	21	(108), (110), (112), (114), (116), (126) post excavation; (119) mid excavation.
2	22	(200) mid excavation.
3	5	(201) post excavation.
3	6	(203) post excavation.
3	8	(118) post excavation.
3	9	(131) mid excavation.
3	10	(132) mid excavation.
3	11	(133) mid excavation.
3	12	(131) post excavation.
3	13	(139) mid excavation.
3	14	(134) post excavation
3	15	(140) post excavation.
3	22	(149), (150) mid excavation.

4	1	Pre excavation of stakeholes.
4	2	Pre excavation of stakeholes.
4	3	Pre excavation of stakeholes.
4	4	(152) post excavation.
4	5	(132), (133), (140) post excavation.
4	6	(153) mid excavation.
4	8	(158) mid excavation.
4	9	(158) post excavation.
4	10	(119), (159) mid excavation.
4	11	(153) post excavation.
4	12	Close up of typical root bowl.
4	13	(119) post excavation.
4	14	(303) mid excavation.
4	15	(302) post excavation.
4	17	(310), (312) mid excavation.
4	18	(305), (313), (314) post excavation.
4	19	(305), (313), (314) post excavation.
4	24	(310) post excavation.

Appendix V Site matrices

In progress, or soon to be.

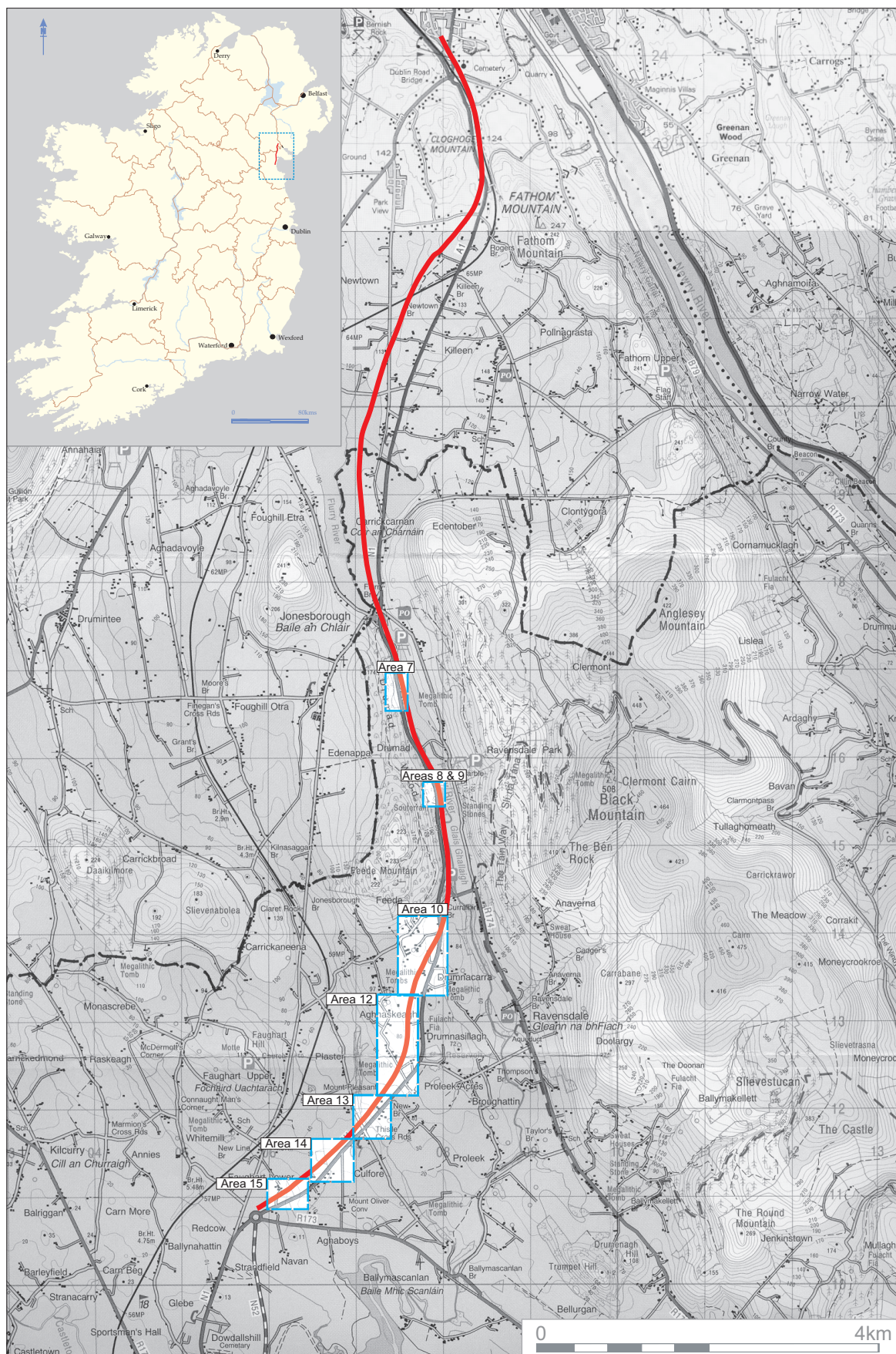


Fig. 1 Location plan for A1/N1.

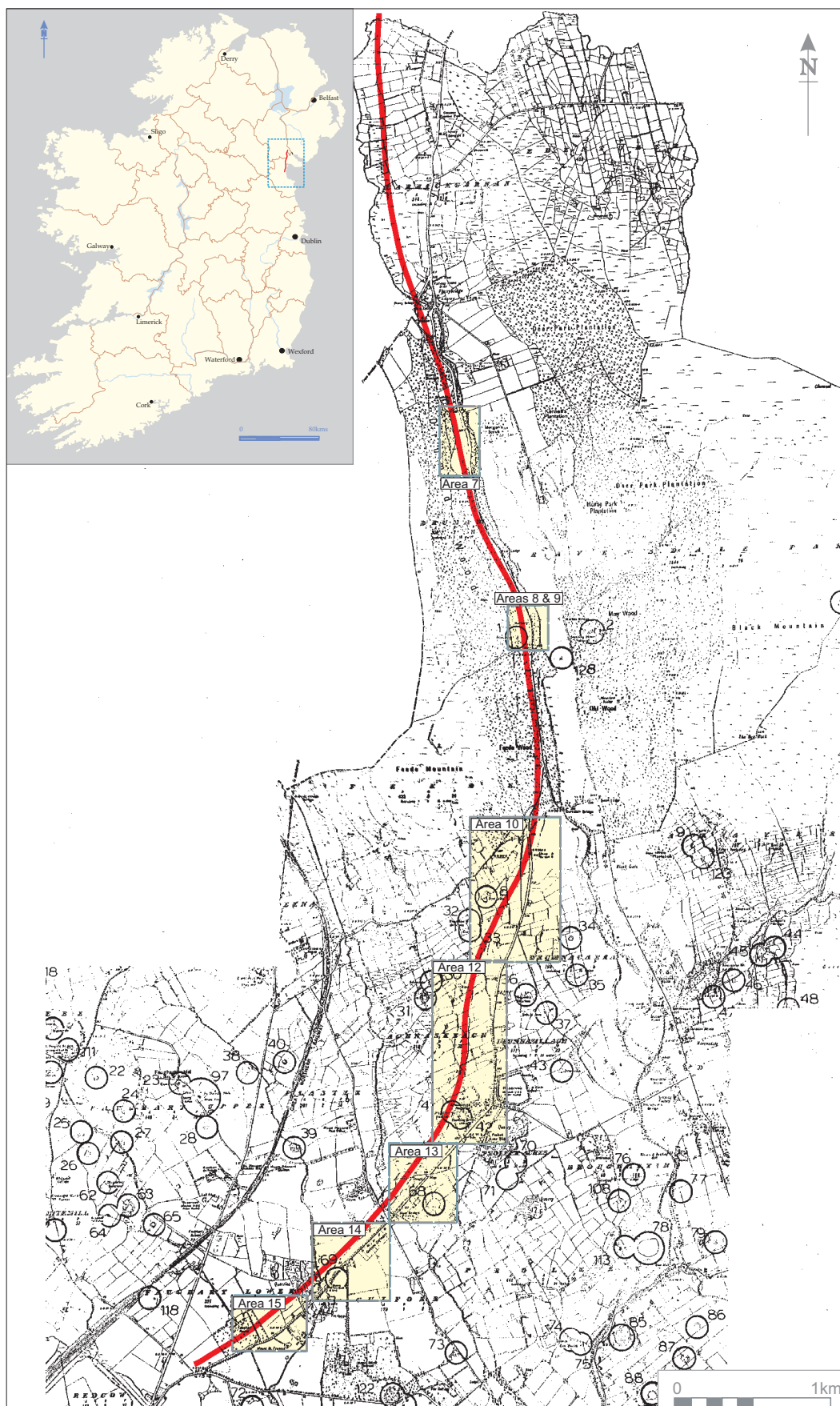
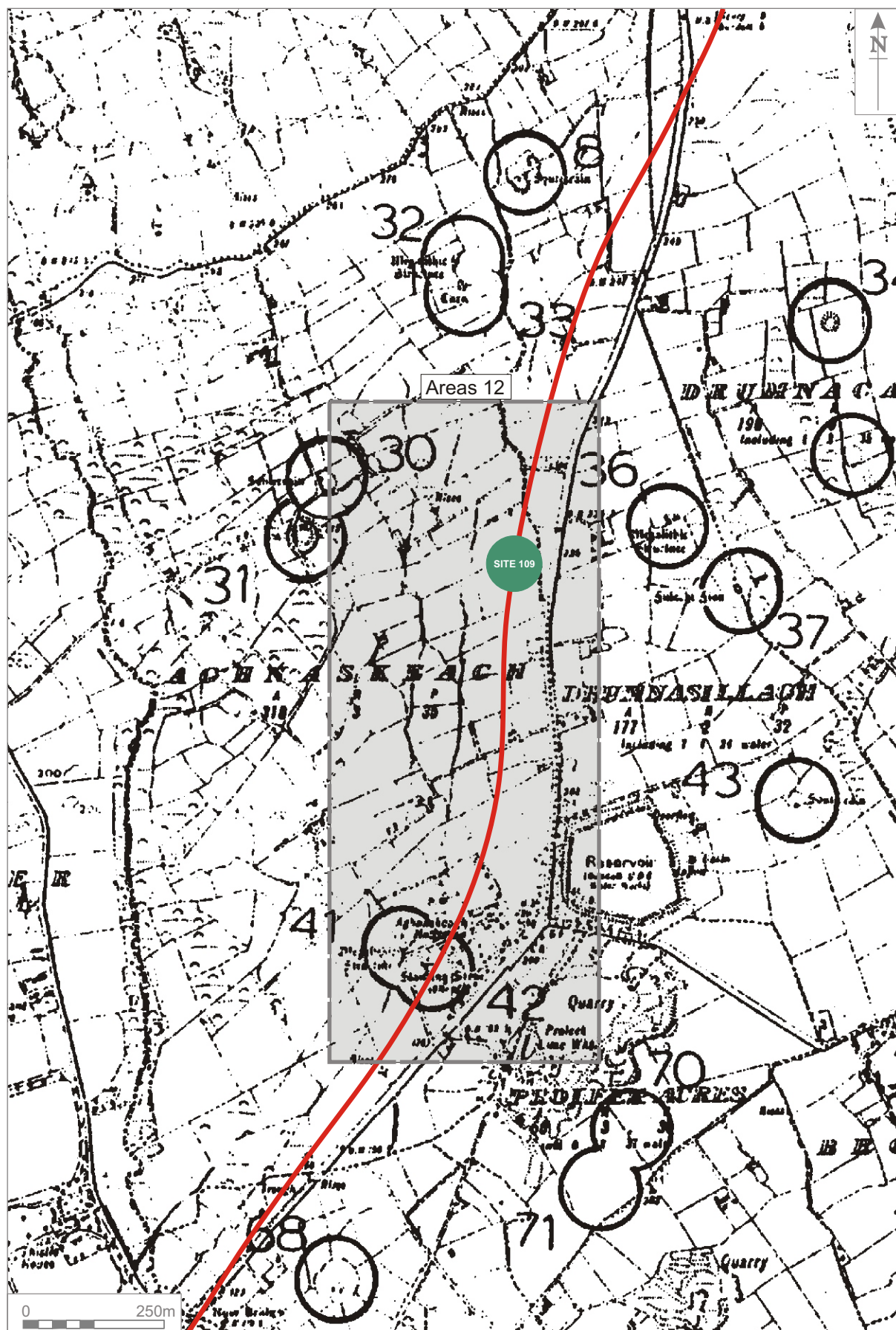


Fig. 2 Extract from RMP Maps of Louth, Sheets 1 & 4. A1/N1 in red. Scale as indicated.



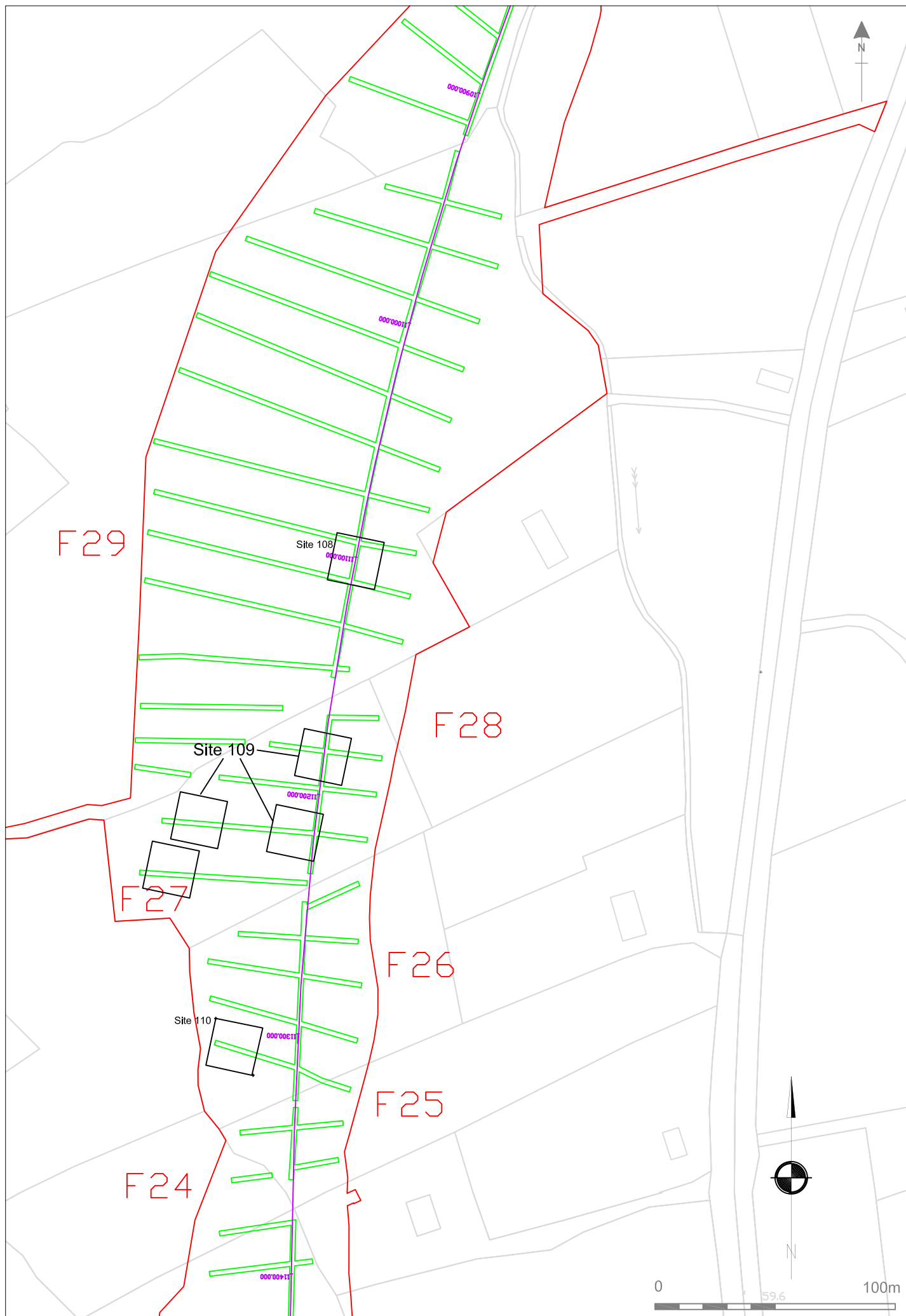


Fig. 4 Plan showing northern stretch of Area 12 and Site 109.