N8 Cashel Bypass & N74 Link Road

Phase 2 Archaeological Investigations

Licence Number: 03E0392

Site Name: Site 10

Townland: Monadreela / Móin na Draoile

Barony: Middlethird

Parish: St Patrick's Rock

County: Tipperary

NGR: 209670 / 141803 (centre of the site)

OD Level: 149.40 m

Excavation Area: 1,458.83 m²

Fieldwork Date: May 2003

Site Director: Neil O'Flanagan

Report Authors: Richard O'Brien & Mícheál Ó Droma

Client: South Tipperary County Council

Report Status: Final Report

Report Date: April 2013





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EXECUTIVE SUMMARY

This report contains the final results of an archaeological excavation carried out as part of the N8 Cashel Bypass & N74 Link Road (03E0392). Site 10 was situated within the townland of Monadreela, east of Cashel town and comprised a short 20 m long section scheduled for testing. Site 9 lay immediately to the north and Site 11 lay to the south of the site.

An extensive archaeological test excavation programme was carried out as part of the preconstruction phase of the project by Mary Henry Archaeological Services Ltd in 2002 (02E0286). Phase 2 archaeological works were conducted between in May 2003 and involved testing of the area, under licence 03E0392 followed by excavation. The topsoil was stripped from an area measuring 1,458.83 m² using a mechanical excavator under archaeological supervision. A north/south aligned field boundary rediscovered on site was shown to be directly associated with the rural medieval settlement at Monadreela, dated to the late 13th /early 14th century. The presence of the cobbling on the boundary bank proved the ditches and bank not only acted as a boundary but served as a routeway to the settlement. It is clear from the cartographic evidence that this boundary had survived until the middle of the 20th century, before being removed to make the fields larger. The remaining features were all undated and may relate to nearby definitive archaeological features – see various Monadreela final reports.

INTRODUCTION

This report contains the final results of an archaeological excavation carried out as part of the N8 Cashel Bypass & N74 Link Road. The scheme involved an 8 km bypass of the town and a 2 km link road to the N74 (Figure 1). South Tipperary County Council completed the bypass and the new roads opened in October 2004. The project was funded by the Irish Government under the National Development Plan, 2000–6. The total archaeological cost was administered by the National Roads Authority through South Tipperary County Council, as part of the Authority's commitment to protecting our cultural heritage.

Project Background

RPS Consultants Ltd carried out a desk-based archaeological survey of the N8 Cashel Bypass and N74 Link Road route in 1995, recommending an eastern bypass of the town so as to avoid direct negative impacts on the Rock of Cashel, a National Monument (Cronin 1995). There was no Environmental Impact Statement (EIS) prepared for the project. RPS Consultants Ltd compiled an archaeological impact assessment of the route in 1999 (Lane 1999). The report identified five sites of cultural significance that would be directly impacted upon by the construction of the N8 Bypass. In addition five sites of archaeological potential were discovered by the Project Archaeologist from the examination of aerial photographs and a walkover survey of the route in April 2001. Between April and May 2002, Phase 1 Pre-Construction Archaeological Testing of these ten cultural heritage sites was undertaken by Mary Henry Archaeological Services, under Excavation Licence Numbers 02E0286, 02E0287, 02E0288, 02E0374, 02E0375, 02E0376, 02E0377, 02E0378, 02E0379 & 02E0380 (Lennon 2002). Those townlands investigated were Gortmakellis, Ballyknock, Monadreela, Boscabell, George's-Land, Windmill and Farranamanagh. Archaeological features discovered during this work formed the basis of the Phase 2 investigations of the bypass in 2003.

In 2003 a joint venture company Judith Network Archaeology Ltd (JCNA) was contracted by South Tipperary County Council to undertake Phase 2 works. This involved further archaeological testing of areas of the bypass previously unavailable, carried out under Excavation Licence Number 03E0295. Phase 2 works also involved Fixed Price archaeological resolution of a number of sites discovered in the Phase 1 works. Thus both testing and resolution works often occurred within the same field. This work began in April

and continued until August 2003, during which the main construction contractor Roadbridge Ltd began on-site works. The bypass officially opened in 2004. Initial post excavation works began in August 2003 but were suspended as JCNA Ltd went into liquidation in January 2004. Over the succeeding years some preliminary reports were issued by the various licence holders on an individual basis, while some specialist works were undertaken. Between 2008–10 the baulk of report writing and specialist analysis was completed under the supervision of the NRA Project Archaeologist. Remaining work since 2011 was undertaken directly by the NRA Project Archaeologist.

Project Description

The N8 Cashel bypass began north east of Cashel town, c. 3.5 km from the Rock of Cashel, in the townland of Gortmakellis. The bypass generally kept to the east side of Cashel for most of its length so as to minimise visual impacts on the Rock of Cashel. It continued south through flat, good agricultural land, before rising gradually and cutting through the eastern end of Ballyknock Hill, c. 166 m OD, at the western end of the Slieveardagh ridge. The bypass continued south through slightly undulating ground, skirting the eastern side of the Monadreela ridge, c. 151 m OD. The lower part of this ridge was low-lying, heavily water-logged ground. The bypass continued southeast through relatively flat land, before terminating 2 km south of Cashel in Owen's and Bigg's-Lot townland. The mainline of the bypass measured c. 70–80 m wide.

The N74 Link Road began in Windmill townland c. 400 m from the old N8 Cork road end of the bypass, heading west and then northwest for its length. The route skirts close to the hilltop enclosure at Windmill TS061-072, before descending through Windmill along flat, good agricultural land, before cutting through a low ridge in Deerpark townland. The route descended through Farranamanagh townland continuing north toward the N74 Tipperary road. The link road was 2 km in length, and c. 60 m wide.

The project was designed to avoid in as much as practical all known archaeological sites located close to the CPO such as Gortmakellis ringfort TS061-003, Gortmakellis tower house TS061-011, Ballyknock ringfort TS061-008, Boscabell moated site TS061-027, Rathordan ringfort TS061-074, Windmill ringfort TS061-072, Windmill Leper Hospital (*site of*) TS061-073, Windmill moated site TS061-167 and Farranamanagh ringfort TS060-084. The investigation of the *Rian Bo Phadriag* roadway (TS061-071) was the only

example where the bypass directly impacted a known RMP site and this was unavoidable as the roadway had to be traversed by the bypass.

Excavation Methodology

The investigations began across the entire bypass although lands at Owen's and Bigg's-Lot were unavailable for investigation until July. All sites were investigated by mechanical excavators under constant archaeological supervision. The topsoil was removed down to the natural glacial till, or to the top of archaeological features, depending on what was encountered first. In the main the natural consisted of compacted yellow / orange clay. In areas of water-logged conditions such as at Monadreela, George's-Land and Owen's and Bigg's-Lot the natural changed to grey / white malleable clay. In areas of higher ground in Ballyknock, Windmill and Deerpark bedrock limestone outcropped close to the base of the topsoil. In particular on the northwest-facing slope of Windmill Hill (Sites 31–35) and Windmill/Deerpark ridge the natural contained bedrock outcropping and bands of gravel (Sites 38–39). A cave is shown on the 1st Edition OS Map at the extreme southwest corner of Hughes'-Lot East, near the Corporation Boundary junction with Waller's-Lot.

A total of 56 Excavation Licence Numbers were issued by the Department of Environment, Heritage and Local Government during the course of the bypass archaeological works. This total included the general archaeological testing licence 03E0295 which was used across the scheme, the specific testing of the *Rian Bo Phadriag* roadway (TS061-071) in Owen's and Bigg's-Lot 03E1211, and the archaeological monitoring of bypass outfall drains across various townlands, 03E1087. In most instances the licence issued for specific archaeological testing of a site was retained for the subsequent resolution of that site, as resolution followed on immediately once archaeology was definitively identified.

The following tables list those sites on the N8 Bypass mainline and N74 Link Road where excavations uncovered definitive archaeological remains (see below). What is clear from these tables is the multi-period nature of many of the sites investigated. Such discoveries have been mirrored on both NRA-funded projects north and south of Cashel, although it is clear the density of sites uncovered around Cashel is exceptional (McQuade 2009, xiii). Although it could be explained that this higher site density was due to Cashel's prominence as an ancient royal capital in the early historic era, the higher numbers of prehistoric sites appears to indicate intense settlement around Cashel from the beginnings of the Early

Bronze Age. The good quality farming land, based on brown podzolic soils over limestone bedrock, was a main attraction for settlement. Coupled with this was Cashel's strategic location south of the bog lands around Littleton/Thurles, and north of the Galtee Mountains and River Suir plain. Although Cashel has no river many number of small streams (Arglo, Black, Halfmile & Maddock) fed by a widespread system of ponds served as convenient water sources: it was no coincidence that when excavations occurred beside these ponds i.e. Monadreela, Boscabell and Owen's and Bigg's-Lot, multi-period sites were uncovered.

There was only one RMP site in Monadreela, (TI061-020), which lay on the eastern boundary of the townland. It was a large oval enclosure open at its north-west corner, c. 200 m from the CPO and bulldozed sometime after the mid 1950's as it was not depicted on the 3rd Edition OS Map. The nearest upstanding archaeological site to Site 10 was the moated site in Boscabell townland (TI061-027), located c. 360 m to the southeast.

A comprehensive programme of archaeological testing was undertaken by Mary Henry Archaeological Services Ltd during Phase 1 works in spring of 2002 (02E0286). No features of archaeological significance were identified on this site during the testing (Lennon 2002). However, in light of the fact that this site lay between areas of high archaeological potential discovered during the testing, it was considered prudent to conduct additional testing in this area.

Further archaeological testing directed by Neil Fairburn of Judith Carroll Network Archaeology Ltd (JCNA Ltd) was undertaken as part of Phase 2 investigations in April 2003 in advance of the bypass (licence 03E0392). Several features including pits, furrows and a N/S oriented double ditch and bank were identified. An archaeological excavation was carried out in May 2003 under the same licence to ascertain the full extent and archaeological significance of these features (Hughes 2003a; Hughes & O'Flanagan 2006c).

C:4- N-	Licence	Townland	M1:41-:	N1:41-:-	C 1	Early Bronze	Middle	Late Bronze	T A	Early	Madianal	Post
Site No	No.	Townland	Mesolithic	Neolithic	Copper Age	Age	Bronze Age	Age	Iron Age	Medieval	Medieval	Medieval
	-		7000–4000 BC	4000–2400 BC	2400–2200 BC	2200-1600 BC	1600–1100 BC	1100-800 BC	800 BC-400 AD	400–1200 AD	1200–1500 AD	1500–1900 AD
1i	03E0673	Ballyknock										
1ii	03E0740	Ballyknock										
1iii	03E0727	Clonmore										
5	03E0299	Monadreela										
7	03E0300	Monadreela										
8	03E0379	Monadreela										
9	03E0345	Monadreela										
10	03E0300	Monadreela										
11	03E0346	Monadreela										
12	03E0393	Monadreela										
13	03E0378	Monadreela										
14	03E0395	Monadreela										
15	03E0394	Monadreela										
16	03E0427	Boscabell										
17	03E0413	Boscabell										
18	03E0425	Boscabell										
19	03E0426	Boscabell										

20	03E0470	Boscabell					
21	03E0480	Boscabell					
		George's-					
22	03E0503	Land					
		George's-					
23	03E0508	Land					
2.4	0250507	George's-					
24	03E0507	Land					
		Kilscobin &					
25i	03E0731	Hughes'-Lot East					
		Kilscobin &					
		Hughes'-Lot					
25ii	03E0730	East					
		Hughes'-Lot					
25iii	03E0746	East					
		Hughes'-Lot					
25iv	03E0807	East					
25v	03E0756	Rathordan					
		Waller's-Lot					
27	03E0289	& Rathordan					
29	03E0287	Waller's-Lot					
30i	03E0754	Cooper's-Lot					
30ii	03E0762	Cooper's-Lot					
30iii	03E1086						
50111	0511000	Owen's and					

		Bigg's-Lot					
42	03E0582	Gortmakellis					
TI061:071	03E1211	Owen's and Bigg's-Lot					

Table i: Excavations undertaken on the N8 Cashel Bypass mainline

Site No	Licence No.	Townland	Mesolithic 7000–4000 BC	Neolithic 4000–2400 BC	Copper Age 2400-2200 BC	Early Bronze Age 2200–1600 BC	Middle Bronze Age 1600–1100 BC	Late Bronze Age 1100–800 BC	Iron Age 800 BC-400 AD	Early Medieval 400–1200 AD	Medieval 1200–1500 AD	Post Medieval 1500–1900 AD
31	03E0391	Windmill										
32	03E0399	Windmill										
33	03E0398	Windmill										
34	03E0418	Windmill										
35	03E0424	Windmill										
36i	03E0675	Windmill										
36ii	03E0676	Windmill										
37	03E0419	Windmill										
38	03E0760	Windmill, Deerpark &										

		Farranamanagh					
39	03E0757	Farranamanagh					
40	03E0502	Farranamanagh					
41	03E0674	Farranamanagh					

Table ii: Excavations undertaken on the N74 Link Road

Table ii illustrates the very prominent geophraphical attraction of the upland areas of Windmill Hill and Windmill / Deerpark, being the focus of settlement and ritual activity throughout prehistory. For Windmill Hill itself (Sites 31–36i) there is an apparent hiatus in activity between the Late Bronze Age and Medieval periods, centred round the hilltop enclosure (TI061-072): it is likely the enclosure itself was occupied during this time with the surrounding fields perhaps used for agriculture rather than settlement.

Table iii lists those sites where licenes were issued and investigations proved to be non-archaeological:

Site No.	Licence No.	Methodology	Townland
1iii	03E0727	Resolution	Clonmore
2	03E0297	Testing	Ballyknock
3	03E0296	Testing	Ballyknock
4	03E0298	Resolution	Monadreela
6	03E0349	Testing	Monadreela
25vi	03E0747	Resolution	Rathordan
25a	03E0294	Resolution	Waller's-Lot
26	03E0347	Resolution	Rathordan
28	03E0292	Resolution	Waller's-Lot
43	03E1087	Monitoring	various
1, 1a, 25, 30, 36, 38	03E0295	Testing	various

Table iii: Excavations which produced non-archaeological sites

No further works were undertaken on these sites.

As the bypass was a design-and-build-type project design changes were made during the construction period in 2003. Such changes only involved works within the Compulsory Purchase Order lands (CPO), and were subject to the prior approval of South Tipperary County Council. These changes meant that some areas which had been archaeologically tested were not impacted further and therefore archaeological remains were preserved *in situ*. Such areas have been identified in each relevant final report and notified to the Archaeological Survey of Ireland:

Site	Licence	Townland	NGR	Description
Site 22	03F0503	George's-Land	209522 / 141100	ploughed-out <i>fulacht fia</i> dated to the Early Bronze Age
		George's-Land	209520 / 140985	undated pits & ditches
		Hughes'-Lot East		western portion of an Early Medieval ringfort
		Hughes'-Lot East		eastern portion of an Early Medieval ringfort
		Rathordan	209140 / 140070	pits & ditches, one date from the Late Bronze Age

Table iv: Excavations where portions of the archaeology was preserved in situ within the CPO

Local Information

The route of the bypass traversed a number of upstanding townland boundaries generally consisting of high clay and/or stone banks topped with hedging, occasionally with a ditch either on one side or both. In some cases these ditches were active streams (Boscabell / George's-Land boundary; George's-Land / Hughes'-Lot East boundary). The townlands of Gortmakellis, Ballyknock, Monadreela, Boscabell, George's-Land, Kilscobin and Rathordan were located within St. Patricks Rock parish. At the George's-Land / Hughes'-Lot East boundary (Site 25i) the route entered St. John Baptist parish, formerly the Cashel Corporation Municipal Boundary too, and included the townlands of Hughes'-Lot East, Waller's-Lot, Cooper's-Lot and Owen's and Bigg's-Lot. On the link road Windmill was located within Part of St. Patricks Rock parish. At the junction of Windmill / Deerpark (Site 38) the route entered Farranamanagh in the parish of Hore Abbey. The profiles of townland boundaries were recorded during excavation and incorporated into the relevant final report. Changes to these boundaries over time can be traced in the Historical Background section below.

There are many interesting placenames around Cashel recorded cartographically and / or in historical sources, such as *Poulmawkeorish* in Castlelake; *Poulagower* in Attykit; *Foresdin* in Hill's-Lot; *Carrigeenedeen* and *Fawnsuir* in Carron; *Parknapeast*, *Turreen Spring* and *Mullenavivva Pool* in Ballinamona; *Knockananulla* in Hore Abbey; *Granias Well* in Deerpark; *Loughroentaggart*, *Lough Nahinch* and *Doon Fort* in Farranamanagh; *Ogaunoch and Coun* [Rathcoun?] *and the hill of Tubbiradoon...a well called Tubbiradoon near Doon Fort* (Davis White 1866, 47); *Goul's Pool* in Waller's-Lot; *Corralough Well* in Corralough; *Gallows Hill* in Hughes'-Lot East; *the Fahy and the common lands of the town alias Cottyne* (Fiants 1994, 485); *'Brockroghtie and a meadow near Gallows hill called Monyarnycrohy'* (IMC 1966, 281).

GEOLOGY & SOILS

The Cashel environs are situated on the eastern edge of the Golden Vale, and the southern edge of the central limestone plains of Ireland. The landscape has been formed by glacial meltwater and morainic deposition. The bypass route traversed the low-lying, fertile, well-drained and easily worked soils with underlying calcareous tills, which sweep away from the Knockmealdown and Galtee Mountains and Slievenamon to the south.

Ballyknock, in the north of the main route, and Windmill, in the southern part of the link road, are high prominent landmarks. The undulating land is made up of gently sloping rounded ridges oriented east/west. The streams create a cross-drainage system running between the ridges and along the bottom of the slopes, eventually flowing to the west, towards the River Suir drainage basin. The rock type of the area is composed of limestones from the Carboniferous period. On the west and southwest are the Hore Abbey Limestone and Lagganstown formations. To the southeast is the Ballyadams formation, with the Killeshin Siltstone and Clogrenan formations to the northeast and north respectively. The Hore Abbey formation consists of pale grey bedded limestone with chert, with the Lagganstown formation made up of dark thin cherty limestone. The Ballyadams formation is a Burren-type limestone with thick ledges. The Clogrenan formation is bluish-grey limestone with irregular nodules of black or blue chert, wackestones and packstone limestones. The Killeshin Siltstone formation is composed of muddy siltstone and silky mudstone (Archer, Sleeman & Smith 1996).

Geological features such as swallow holes are recorded in Cooper's-Lot and Owen's and Bigg's-Lot. There is a cave marked on the 1st Edition OS six-inch map at the southwestern edge of Hughes'-Lot East near its junction with Waller's-Lot: the site is not recorded on later mapping. Locations of stepping stones and fords are first recorded on the 2nd Edition OS six-inch map in Hughes'-Lot East, possibly associated with the Cashel Reservoir on the Dualla Road. On the same map disused limekilns are shown in many townlands such as Farranamanagh, Rathcoun, Rathordan, Spafield and Windmill. The dominant soil type is the grey brown podzolic which are fertile, well-drained soils ranging in depth from 0.20–0.60 m. It is an excellent soil type for agriculture, in particular horse breeding, for which this area of south Tipperary is renowned for.

ARCHAEOLOGY OF THE CASHEL AREA

Prior to the bypass archaeological excavations little was recorded of Cashel's prehistory, with a few uncontexted finds from around Cashel including a stone axe head, and various artefacts of bronze (axes, javelins / spearheads) and curiously, 262 bronze rings (see Appendix i). No prehistoric settlement sites were recorded – a situation that was to change with the bypass investigations. To the east of Cashel a Bronze Age burial had been discovered in Fussough townland, Dualla in 1933: a stone-lined cist burial containing an urn and human bones was dug up from a sandpit at the western base of the Kill Hills TS053-096 (O'Brien 2007, 93–4; Waddell 1990, 134).

The prehistory of Cashel has emerged slowly from beneath the citadel of the Rock of Cashel, whose mix of ecclesiastical and secular architecture generally dominates all discussion and research. The discovery from the middle of the 19th century onwards of metal artefacts from around Cashel, mainly bronzes such as axes, hinted at prehistoric activity in the area (Shearman 1852, 203). The recovery of artefacts from the Rock of Cashel summit is recorded from as early as 1849, with a bronze bell being found (Wyse Jackson 1956, 18). Perhaps the first archaeological excavation in Cashel occurred in the 1850's with investigations inside the Round Tower on the Rock (Fitzgerald 1857, 292). This may have been spurred by the establishment of the Cashel Chapter House Museum on John Street by Mr. Newport B. White in 1855. Two publications by his brother Rev. John Davis White listed a range of objects housed in the Museum, many of which were described as being found from around Cashel (Woodworth 1989, 149).

John Davis White included amongst the museum collection a large helmet [and human bones] found in Farranavarra, northeast of Cashel, possibly associated with the 1170's battle between the Irish and Anglo-Normans (Davis White 1892, 12). In his history of Ireland Giraldus Cambrensis described earthworks being thrown up near Cashel during a battle between the Anglo-Normans and Irish – As [Raymond le Gros] was advancing towards Cashel...he heard that the men of Thomand had...come to block his path in the pass of Cashel. By laying down broken branches of trees and digging trenches they had greatly broken up a terrain already naturally difficult, and had also built a very strong palisade right across the path...the stockade was completely broken down and destroyed, not without great loss of life among the defenders, and they opened up a path with their swords, and then enlarged it (Scott and Martin 1978, 161–3). The location of this ancient pass of Cashel is still unknown. Davis White also reported on the discovery of human skulls and bones in Doon Fort, Farranamanagh, possibly associated with the Desmond Rebellion of 1581 (Davis White 1866, 46–7).

Following in the footsteps of Davis White a later cleric, Rev. Robert Wyse Jackson began recording antiquities around Cashel's hinterland in the 1950's, and some of the objects he discovered are listed in Appendix i (Wyse Jackson 1956a, 21). Cashel's Anglo-Norman moated sites were included in Barry's seminal study of this monument type in the 1970's, including the Boscabell moated site TS061-027 (Barry 1977). These and the other rural sites around Cashel were visited and listed as part of Reynolds's 1975 survey of Tipperary South Riding, followed by Cahill's 1982 study of the barony of Middlethird, as part of an unpublished Master's thesis for UCC. Local historians such as A. Finn, P. J. Davern, J. Knightly, M. 'Bob' O'Dwyer and E. Dalton have over the years lectured and occasionally published about Cashel (see Moloney 1994).

Prior to the bypass excavations in 2003 no discoveries of Mesolithic sites had been made in the Cashel area – the nearest such activity was represented by the uncontexted flints found at Ballybrado House, near Cahir (Woodman & Finlay 2001, 189); a Mesolithic date from the Bronze Age site of Curraghatoor, Co. Tipperary is considered unreliable (Cleary 2007, 39); a single Mesolithic macro flint was found in a medieval context in Toureen Peakaun near Cahir (Ó Carragáin 2011, 341–2) while a possible Mesolithic object, a single retouched jasper point from Chancellorsland, Co. Tipperary is paralleled with objects from the later Mesolithic site at Ferriter's Cove, Co. Kerry (Doody 2008, 329).

Cashel did not feature as a place of recorded Neolithic activity with no megalithic monuments nor house sites known. Only three flints were retrieved from the Rock of Cashel excavations in the 1990's further no details are known at present (www.homepage.eircom.net/~dunamase/Dunamase.html) There are a number of undated megalithic structures around Clonoulty and Hollyford northwest of Cashel, recorded by the Archaeological Survey of Ireland. The nearest megalithic tomb is the portal tomb at Lissava TS075-045 near Cahir, c. 18 km south of Cashel. In Rathcoun townland southwest of Cashel four undated barrows TS060-107007-TS060-107010 and one unclassified cairn TS060-107011 are recorded clustered together.

A number of the metal artefacts now in the National Museum of Ireland have been assigned in the Early Bronze Age period (Grogan 2005, Fig. 3.1–3.4, 24–29) – see Appendix i below. Recently three standing stones have been identified northeast of Cashel and are now RMP sites: Palmer's Hill TS061-052, Corralough TS061-053 and Ballyknock TS061-054 – these may date to sometime in the Bronze Age and significantly are located along the prominent Ballyknock ridge, as is a newly discovered ploughed-out burnt spread / *fulacht fiadh*, overlooking many of the N8 Bypass

prehistoric sites (O'Brien 2003 17–26; O'Brien 2006, 15–23; O'Brien 2007, 87–96; O'Brien 2009, 72–4). Other recent discoveries around Cashel have been made from field walking including further ploughed-out burnt spreads / fulacht fia in Ballinamona (two sites), Ballinree (one site), Carron (two sites), Gortmakellis (one site), Kilscobin (one site) and Newtown (eight sites) (O'Brien 2008, 73–82), and artefacts such as a thumbnail scraper from Ballinamona, worked flint from Boscabell and Kilscobin, slag from Ballyknock, stone spindle whorls from Ballykelly, George's-Land and Ballinamona respectively, and a hammer stone from Ballinree and George's-Land (O'Brien 2003a, 48–52; www.facebook.com/rathnadrinna). These discoveries have been incorporated into the relevant final reports.

In later prehistory high status activity in the wider area is well represented; the discovery of two Late Bronze Age gold rings at Ardmayle, beside the River Suir and dated to the late 13th – early 12th centuries BC (Cahill 1989, 146), a Late Bronze Age Class IV sword from Aughnagomaun dated c. 700 BC (O'Brien 2007, 89–90), and a gold reel containing small gold balls (NMI W306) recorded as being found from Cashel (Cahill 1995, 66). The discovery of the Aughnagomaun sword is significant as earlier Middle / Late Bronze Age evidence was found in the same townland at (E2361) on the M8 North Project (Moore *et al* 2009, i). The lack of Bronze Age settlement sites was highlighted by Doody (1997, 94).

Iron Age Cashel was best represented in literature and with very occasional archaeological discoveries: the Clonura leather shield, *c*. 20 km northeast of Cashel. However recent excavation in advance of development has identified potential and definitive Iron Age sites: the discovery of a blue glass bead in Deerpark (Sherlock 2008, 350) may point to Iron Age activity and in the wider Cashel area a possible ritual site in Knockgraffon. The latter site consisted of an arc of eight postholes dated to 380–50 cal BC (SUERC–25889) while an internal posthole to the arc was contemporary, dated to 380–90 cal BC (SUERC–25890). Artefacts recovered included unidentified prehistoric pottery, a polished stone axe, three highly polished stones, two copper-alloy fragments and cremated bone (MacLeod 2012, 200–1).

Although Cashel was located on the south-eastern periphery of the Discovery Programme's North Munster Project nevertheless its inclusion saw a number of sites traditionally and locally classified as ringforts re-classified as prehistoric. Upstanding monuments such as Camus TS060-028 [classified as a ringfort on www.archaeology.ie], Carron / *Rathnadov* TS069-002001 [also classified as a henge], Knocksaintlour TS060-179, Lalor's-Lot / *Rathnadrinna* TS061-089001 and Windmill TS061-072 were classified as hilltop enclosures (Grogan 2005, Fig. 7.6, 116). A number of other

monuments perhaps could be added to this list; Ballyknock TS061-008 due to its very prominent location at over 180 m OD, Hughes'-Lot East enclosure 05E0671 (143 m OD), Rathordan TS061-074 at 140 m OD, and the multi-ramparted Ballinree TS060-110 are worthy of future study. Based on current evidence the nearest hillfort to Cashel is Kedrah TS075-040, located on the eastern side of the River Suir near Cahir, *c.* 16 km south of Cashel. The only definitive crannog in south Tipperary is recorded from Marhill TS069-072 just south of Rockwell College. Significantly this site is located in the same townland as a Middle Bronze Age site (E2269) and Medieval sites (E2124 & E2268) discovered on the M8 Cashel to Mitchelstown Road Project (see below).

The *Dhuvcloy* earthwork TS061-022 (road / hollow-way) in Charterschool Land TS061-022 has recently been associated with kingship processional rites (Gleeson 2012). In the extents of the Lands of Monecurialy of 1688 the highway from Cashel to Deansgrove was mentioned and the blacke ditch commonly called the *Doocly* (Davis White 1863, 5). Another road TS060-025 which serves as the townland boundary between Farranananagh and Rathcoun is now classified as a redundant record (www.archaeology.ie/NationalMonuments/Flex/Viewer/). However on the 1st Edition OS six-inch map the boundary is shown as *Boheragaddy* and a much earlier reference and description of *Bothar Gadie*, 'a double-ditched road (*a biffosario lapideo*)' is found in an Inquisition taken at Clonmel in 1553 (Curtis 1941, 15). In the same source another road called *Botherewolyngyhy* has been equated with Windmill (www.logainm.ie).

Exotic material is represented by the Roman-period occultist's stamp from Spital-Land in Golden, c. 7 km west of Cashel (Bateson 1973, 74), and the Roman-type fibula, a dolphin brooch (Type H), the earliest datable find from the Rock of Cashel (Cahill 1982a, 101). The evidence of international trade is further represented by Romano-British pottery sherds and Bii amphorae sherds from the Rock of Cashel; the Bii amphorae were also found at Derrynaflan c. 15 km northeast of Cashel (Kelly 2010, 59–60). Other well-known objects from Cashel include bronze bells, a silver brooch (decorated with Scandinavian thistle design from the late Norse period), a gilded copper crozier-head (set with turquoise and sapphire), the Kennedy-Crux Crozier, the silver-gilt Cashel Pyx, and various chalices and seals (Wyse Jackson 1956, 18–20; see Appendix i). A rare zoomorphic pennanular brooch dated to c. 600 AD was found in *Loughnafina*, west of Cashel town (Henry 2000, 200–1).

Early medieval Cashel is well attested in historical sources with the dominance of kings on the Rock under *Éoganachta*, *Uí Briain* and *Meic Carthaig* dynasties (see Historical Background below; Hodkinson 1994; Collins 1997; Gleeson 2012). In Rathcoun a complex of ecclesiastical sites

include a church TS060-107002, recorded as *(site of) Templemobee* [Mobhi], the unclassified religious house TS060-107003 *(site of) Monastery*—the only monastic site marked around Cashel and holy well TS060-107004. Rathcoun and Templenoe are two townlands southwest of Cashel that preserve the word 'temple' in their name.

The plethora of ringforts and possible *Óenach* sites in the region point to a vibrant early medieval hinterland. Some of the forts around Cashel are recorded in historical sources. In the *Life of Saint Declan of Ardmore* a stone fort called *Rath na nIrlann* is specifically identified as being on the western side of Cashel (Power 1914, 28) – this fort may equate with Ballinree TS060-110. *Lis na nUrlann* (location unknown) is recorded in the Yellow Book of Lecan as being associated with the twelfth-century inauguration of the kings of Munster (Fitzpatrick 2004, 178–9). In a description of the lands of James Boiton recorded in the Calendar of the Patent and Close Rolls Elizabeth I 1594–6 local names such as *'High Rathe on the east'* and *'the lands of Asmon, otherwise Boiton Rath'* [Boytonrath] are recorded (Morrin 1862, 392). Could the *'High Rathe on the east' either* be referring to one of the Ballyknock forts TS061-008 or else to the Hughes'-Lot East enclosure [05E0671], (see below)? In the Patent Rolls of James I, Pat. 7 c. 1610 the following entry for the Windmill area is very informative – *'the stone house, towns and lands of the Windmill, Fleming's Rath, and Parkinigrogory in the southern part of Cashell'* (IMC 1966, 146). Could *Fleming's Rath* be Windmill hilltop enclosure TS061-072?

King Brian Uí Briain is recorded as fortifying Cashel c. 995 (AI) - this annalistic reference may not be restricted to fortifying of the Rock itself. King Muircheartach Uí Briain had a house at Cashel c. 1091(AFM) and within 10 years had handed over the Rock to the church in 1101 (Bracken & Ó Riain-Raedel 2006). Cormac's Chapel, with its' renowned Romanesque architecture was consecrated in 1134 (Ó Carragáin 2010). Although the OPW-funded excavations of the 1990's on the Rock still remain unpublished, two of the burials excavated in Area 1 have been dated by the Mapping Death Project to cal AD 1029–1155 and cal AD 1033–1155 (Gleeson 2013, 22). These burials are contemporary with activity at two of the bypass sites: oats from the lower fill of a cereal-drying kiln in Boscabell (Site 19, 03E0426), and a single adult femur displaying trauma, from the upper levels of the Hughes'-Lot East bivallate fort (Site 25ii, 03E0730); see respective final reports.

The archaeological inventory for South Tipperary has been updated and new data added to RMP sites around Cashel, see www.archaeology.ie. A recent rural excavation unearthed evidence of a ploughed-out ringfort / enclosure at Hughes'-Lot East (Hurley 2005, 348). Significantly, this site

was located on a hillock to the southeast of the town, and its discovery suggested every such elevated location around Cashel was utilised as some form of defended settlement.

The last 20 years witnessed profound development changes in and around Cashel town itself, with a corresponding increase in the number of licence archaeological excavations taking place (Hughes & Ó Droma 2011, 19–20). Despite the large number of investigations little in the way of pre-13th/14th century AD material has come to light, equally compounded by a lack of publication. One of the more significant Cashel excavations was that in Friar Street in 1998 (O'Donovan 2004). New discoveries are still being made in Cashel town: a medieval carved head in the Dominican Friary (O'Brien 2010) and, a carved capital, probably from the Franciscan Friary was found built into a wall on the Dualla Road in Hughes'-Lot East (Hughes 2011).

A number of Anglo-Norman moated sites are recorded around Cashel including an elevated example at Windmill TS061-167 and one at Boscabell TS061-027, which was located close to the edge of the bypass (Sites 18–20). Gortmakellis tower house TS061-011 is a fine example of a five-storey late medieval structure, and the bypass was designed to avoid all impacts on this castle and its' environs.

Recent NRA Excavations Around Cashel

From 2005–7 archaeological discoveries around rural Cashel greatly increased - south of Cashel as far as the county boundary with Limerick on the M8 Cashel to Mitchelstown road and north of Cashel as far as the county (and provincial) boundary with Kilkenny on the M8 Cullahill to Cashel road. These excavations revealed sites containing multi-period activity similar to that found on most of the Cashel excavations too.

The following list summarises the archaeological excavations made south of Cashel on the M8 Cashel to Mitchelstown Road Project, final reports for which were produced in 2007 (all townlands are in Co. Tipperary unless otherwise stated).

Neolithic sites - Suttonrath (E2128), Caherabbey Lower (E2266), Loughfeedora (E2292) & Caherabbey Upper (E2298)

Early Bronze Age sites - Ballylegan (E2265), Ballydrehid (E2267), Cloghabreedy (E2273), Dogstown (E2288), Dogstown (E2289), Templenoe (E2290), Racecourse Demesne (E2297),

Caherabbey Upper (E2298), Caherabbey Upper (E2299), Carrigane (E2303 Co. Cork) & Brackbaun (E2338 Co. Limerick)

- Middle Bronze Age sites Killemly (E2126), Suttonrath (E2128), Ballydrehid (E2267), Marlhill (E2269), Knockgraffon (E2270), Knockgraffon (E2271), Cloghabreedy (E2273), Cloghabreedy (E2274), Shanballyduff (E2275), Dogstown (E2289), Clonmore North (E2294), Raheen (E2295), Lissava (E2296), Caherabbey Upper (E2299), Carrigane (E2303 Co. Cork), Brackbaun (E2306 Co. Limerick) & Brackbaun (E2339 Co. Limerick)
- Late Bronze Age sites Killemly (E2126), Suttonrath (E2128), Ballylegan (E2265), Ballydrehid (E2267), Knockgraffon (E2270), Cloghabreedy (E2274), Loughfeedora (E2292) & Caherabbey Upper (E2299),
- Iron Age sites Killemly (E2126), Ballylegan (E2265), Caherabbey Lower (E2266), Ballydrehid (E2267), Knockgraffon (E2270) & Knockgraffon (E2272),
- Medieval sites Marlhill (E2124), Marlhill (E2268), Suttonrath (E2127), Ballylegan (E2265), Knockgraffon (E2271), Tincurry (E2293) & Brackbaun (E2339 Co. Limerick)

Post Medieval sites - Loughfeedora (E2291) & Cloheenafishogue (E2302).

The following list summarises the archaeological excavations made north of Cashel on the M8 Cullahill to Cashel Road Project, final reports for which were produced in 2010 (all townlands are in Co. Tipperary unless otherwise stated):

Neolithic sites - Borris (E2491), Fennor (E2384) & Islands (E2388, Co. Kilkenny)

Late Neolithic sites - Gortmakellis (E2816)

- Early Bronze Age sites Borris (E2378), Borris (E2491), Inchirourke (E2383), Fennor (E2384), Fennor (E2385), Islands (E2386, Co. Kilkenny), Islands (E2388, Co. Kilkenny) & Warrenstown (E2390, Co. Kilkenny)
- Middle Bronze Age sites Parkstown (2368), Rathcunikeen (E2372), Borris & Blackcastle (E2374), Borris (E2375), Borris (E2376), Borris (E2378), Borris (E2379), Inchirourke (E2383), Islands (E2386, Co. Kilkenny), Islands (E2387, Co. Kilkenny), Islands (E2389, Co. Kilkenny) & Foulkscourt (E2391, Co. Kilkenny)

Late Bronze Age sites - Aughnagomaun/Ashhill (E2361), Ballydavid (E2370), Coolcroo (E2818), Borris (E2376), Inchirourke (E2382), Islands (E2386, Co. Kilkenny), Islands (E2388, Co. Kilkenny), Islands (E2389, Co. Kilkenny), Foulkscourt (E2391, Co. Kilkenny) & Glashare (E2394, Co. Kilkenny)

Iron Age sites - Coolkip (E2362), Coolkip (E2363), Ballydavid (E2370), Borris (E2376), Borris (E2491), Inchirourke (E2382) & Glashare (E2394, Co. Kilkenny)

Early Medieval sites - Parkstown (2368), Ballydavid (E2370), Borris (E2376) & Borris (E2491)

Late Medieval sites - Moycarky (E2365), Moycarky (E2366), Moycarky (E2367), Parkstown (E2368), Borris & Blackcastle (E2374), Borris (E2376) & Inchirourke (E2382)

Post Medieval sites - Borris & Blackcastle (E2374)

The results of some of these excavations are incorporated into various Cashel final reports, can be viewed at www.nra.ie/archaeology and see McQuade (2009, 2, Table 1.1). The apparent lack of Mesolithic discoveries on either of these major road projects was mirrored on earlier infrastructure projects in south Tipperary - the Gas Pipeline of 1981–2 (Cleary 1987, vii), the Gas Pipeline of 1986 (Gowen 1988, vii), the Lisheen Mine Project 1996–8 (Gowen 2005, 61), and more recently again from the research excavation at Curraghatoor (Cleary 2007, 39). Clearly then, the hinterland of Cashel, where four townlands spread across the bypass produced Mesolithic material and/or radiocarbon dates, featured significantly in the movement of both people and materials during the Mesolithic. This movement was in no small part facilitated by Cashel's closeness to the River Suir.

Recent Geophysical Investigations Around Cashel

Between 2009–12 a number of research-led geophysical surveys were conducted on a number of sites around Cashel. Earthsound Archaeological Geophysics Ltd undertook geophysical surveys at Rathnadrinna fort TS061-089001 and TS061-089002 in Lalor's-Lot. This work revealed complex multi-period sites, with evidence of large-scale earthworks predating the known fort (O'Brien *et al* 2011, 26). Also in 2011 Earthsound undertook geophysical survey at Hughes'-Lot East (Site 25ii, 03E0730) in order to identify the full extent of the Early Medieval ringfort beyond the CPO (Bonsall 2012). The western edge of the ringfort was identified and the results have been

incorporated into the final report for that site. Further research work centred on Windmill Hill sites TS061-072, TS061-073 and TS061-167 in 2011 by UCC and the University of Bradford / NRA and in 2012 by Earthsound Archaeological Geophysics identified archaeological features, some of which appeared to relate to the activity discovered on Sites 31–36i (Gimson 2012). These results are incorporated into the various Cashel final reports.

Appendix i: Catalogue of objects from Cashel in the National Museum of Ireland

Object: Copper alloy harness mount

NMI No: 2004:178 Find-spot: Ballytarsna

Description: Copper alloy harness mount found by Mr. Alfie Coyle in a potato field on the southern side of the old

N8 road, near the junction with Killock Quarry.

Object: Medieval pot sherd

NMI No: 2004:146

Find-spot: Rock of Cashel, surface find at exterior base of Cathedral south wall

Description: Curved pot sherd probably belonging to a medieval vessel. The outer surface of the sherd is glazed.

This glazing is green in colour with random dark green and brown dots. On one area of the outer

surface of the sherd, there are traces of five incised lines. Max L 5.25; max W 3.28; T 6.90

Object: Socketed iron axehead

NMI No: 2002:88

Find-spot: St. Patrick's Rock, garden of Mr. Dinny O'Brien

Description: Iron axehead with modern iron spike thru the shaft hole. The axehead has a widely splayed blade the

sides of which curve inwards towards the shaft hole. This is triangular in shape and folds back to form the perforation to take the handle. In poor condition. Max L of axehead 13.15; W of blade10:00; max

T of blade, max 2.1

Object: Copper alloy ferrule

NMI No: 1992:29

Find-spot: Garden in Dogstown, New Inn

Description: Copper alloy ferrule, decorated bronze mount

Object: Wood NMI No: 1984:107

Find-spot: Curraghtarsna, Cashel

Description: Trough of fulacht, reused from a dug-out canoe. Excavated timber C14 dated to 3120_35 BP (GrN

12618)

Object: Bronze spearhead or javelin head

NMI No: 1968:285 Find-spot: Cashel

Description: Rounded blade with ornamental deep grooves close to the ridge of the socket, broad ribbon loops on

the large squat socket. 1, 6.4cm, 1 of loop 1.5cm, w of loop 2.1cm, diameter of socket mouth 2cm

Object: Bronze spearhead or javelin head

NMI No: 1968:282

Find-spot: St john Baptist Cashel

Description: Bronze spearhead, socketed, looped, with bevelled edges on the blade and decorative ribbing. Conical

socket. Loops are lozenge-shaped and placed midway between blade and mouth of socket. 1.11.3cm, l

of blade 6cm, w of blade 3.5cm, l of loop 1.8cm, diameter of mouth 1.9cm

Object: Iron spike NMI No: 1953:9

Find-spot: Hummocky' field near Ballysheehan Motte-and-Bailey

Description: Iron spike

Object: Fragment of an iron horseshoe

NMI No: 1953:10

Find-spot: Hummocky' field near Ballysheehan Motte-and-Bailey,

Description: Fragment of an iron horseshoe

Object: Five medieval pottery sherds

NMI No: 1953:11–5

Find-spot: Hummocky' field near Ballysheehan Motte-and-Bailey

Description: Five medieval pottery sherds

Object: Bronze spearhead NMI No: 1938:8589 Find-spot: Cashel vicinity Description: Bronze spearhead

Object: Socketed bronze axehead

NMI No: 1937:3678 Find-spot: Cashel vicinity

Description: Socketed bronze axehead

Object: Silver seal matrix

NMI No: 1912:59 Find-spot: Co. Tipperary

Description: Matrix of seal silver with a green stone set inside. The device on the stone is a sea horse. The legend

reads S.IOKIS-CASELL-ARCHID. The matrix was formerly in the possession of Sir William Betham. It has been in the RIA collection for many years. The seal measures 1 1/6inch x 15/16inch.

Object: Stone adze NMI No: 1909:33 Find-spot: Near Cashel

Description: Of very unusual form, of close grained hard black stone. It measures 9 & 1/8 in length and 2 ½ in

breadth. It has a label gummed on which reads "ancient Irish stone adze found at Cashel Co.

Tipperary."

Object: Casts of Cormac's Chapel north doorway

NMI No: 1911:5

Find-spot: Rock of Cashel

Description: Casts of cormac's chapel north doorway also arcading from interior and side of ornamented stone

coffin.

Object: Bronze axehead

NMI No: 1892:49 Find-spot: Near Cashel

Description: Socketed celt. Bronze looped cutting edge curved socket fractured filleted near mouth. Extreme length

2 1/4in. greatest width 1 7/8in. external diameter at mouth of socket 1 1/4in.

Object: Copper axehead NMI No: 1881:133

Find-spot: Dundrum, found in 1842

Description: Copper, broad and flat, surface rough, narrow and straight large gaps in one end of cutting edge,

workmanship very rude. Extreme length 6 ½ inches thickness at centre ¼ inch, greatest width 4 inches,

width at narrow end 1 3/4 inches

Object: Bronze axehead

NMI No: 1880:15 Find-spot: From Cashel

Description: Socketed celt, bronze, brownish, patinated, looped, cutting edge curved, mouth if socket nearly round

portion battered by hammering, length 2 7/8in. width at cutting edge 2 1/4in. greatest external diam. Of

socket 1 ½inch

Object: Silver paten NMI No: 1880:98

Find-spot: Found when digging a grave in burial ground adjoining Cormac's Chapel, Rock of Cashel

Description: Silver circular and thin rim broad and flat centre portion slightly concave cracked in several places

part of rim detached diameter 4 ½ in width 5/8ths inch length detached portion 3 11/16ths inches wt.

1oz. 9dwt. 11gr.

Object: Silver coin Edward II

NMI No: 1875:122

Find-spot: Northeast part of Cathedral, Rock of Cashel Description: Edward II, found with Bronze pin No. 121

Object: Bronze pin NMI No: 1875:121

Find-spot: Northeast part of Cathedral, Rock of Cashel

Description: Pin bronze, stem tapering to a fine point and slightly diminishing towards head, on upper half of its

length ornamented with diagonal hatchings, head formed by two horse's faces turned outwards, length

3 5/8inches, and greatest thickness of stem more than 1/8inch

Object: Copper and silver coins

NMI No: 1877:16 Find-spot: Cashel

Description: Copper square Youghal Token 9/16 inch square.

Silver Mecklenburg shilling

Object: Iron key NMI No: 1877:12 Find-spot: Cashel

Description: Iron brown much rusted, pipe in shank, bow semi-oval and attached to shank by two scrolls. Extreme

length 3 3/8inches, greatest width of bow 1 15/16inch. Measurement across shank and bit 1 inch

Object: Stained glass NMI No: 1877:11

Find-spot: Cormac's Chapel, Rock of Cashel

Description: Fragment of stained glass. Greenish with reddish brown stripes. Portion of latter forming lozenge

shaped ornamentation with central circlet of same colour. Pattern similar to that of fresco painting on walls of Cormac's Chapel, in which structure it was found. Greatest length 1 3/4 inch, extreme width 1

½inch

Object: Bell metal portions

NMI No: 1877:10

Find-spot: Cormac's Chapel, Rock of Cashel

Description: Portions of bell metal (2) brownish green, respective measurements 1 ½ inch x 7/16 inch, and 3/4 inch x

½inch

Object: Copper alloy Lion

NMI No: 1877:1

Find-spot: Found in open space between Cormac's Chapel & Cathedral, Rock of Cashel

Description: Brass lion, greenish in sitting posture, rectangular socketed projection in rear of hind legs, base oblong

and irregularly rounded in front, height 2 ft 20inches length of base 7/16th inch width 5/8th inch

Object: Glass fragment

NMI No: 1877:14 Find-spot: Cashel Description: Greenish grey remains of 'bull's eye' on one of the faces. Extreme length 3 1/8inches greatest width 1

1/4inch greatest thickness 5/8inch

Object: Wooden bow NMI No: R:2470 Find-spot: Near Dundrum

Description: Wooden bow, found in the moat of a square rath near Dundrum

Object: Gold bracelet NMI No: W307–309 Find-spot: Cashel

Description: Three individual gold bracelets

Object: Gold ball & reel

NMI No: W306 Find-spot: Cashel

Description: Gold ball & reel

Object: Copper alloy bell NMI No: W2 WK209 Find-spot: Cashel

Description: Copper alloy bell

Object: Bronze rings (262)

NMI No: W232–493 Find-spot: Cashel

Description: Bronze patinated and tarnished. Apparently solid. Annular but one is cut through showing it to be

solid. Some are circular in cross-section. Some are regular on the inside and some seem to be rough or

unfinished casting. The sizes range from 1.50 external diam with 1.40 internal diam to 2.90cm

HISTORICAL SOURCES

For the historical background to Cashel town and its environs see White (1863: 1866 & 1892), Gleeson (1927), Finn (1930), Bradley (1985), Fogarty (2000), MacShamhráin (2004), Marnane (2007), and more recently Marnane & Darmody (2011). Some key dates in the history of Cashel include:

- AD 370Traditional date of Kings of Munster ruling from Cashel.
- Traditional date for Saint Patrick's visit to Cashel, and baptism of King Aengus.
- 580 Cairpre, King of Cashel died.
- 593 Feidlimid, King of Cashel died.
- Maenach, King of Cashel died.
- 666 Cú-cen-Máthair, King of Cashel [& Munster] died.
- 713 The battle of Carn Feradaig, in which Cormac King of Cashel, died.
- 742 Cathal, King of Cashel died.
- 820 Feidlimid, son of Crimthann, took the kingship of Cashel.
- 821 Artrí, King of Cashel died.
- The first recorded king-bishop of Munster died in Cashel.
- 976 Brian Boru was crowned King of Munster.
- The fortifying [building] of Cashel, Inis Locha Gair, and Inis Locha Sainglenn, and many buildings besides, by King Brian Boru.
- Diarmait, son of Tairdelbach Ua Briain, submitted to Muirchertach, i.e. his brother, and they made peace and a covenant in Cashel and in Les Mór, with the relics of Ireland, including the Staff of Jesus, as pledges, and in the presence of Bishop Ua hÉnna of Cashel and the nobles of Mumu.
- 1095 Cashel [the Rock] was burned [cause of burning unknown].
- 1101 Muirchertach O'Brien, King of Munster bequeathed the Rock to the church.
- 1102 Cashel was attacked and burned by the *Éili* of north Tipperary.
- 1107 Cashel [the Rock] was burned by lighting.
- 1115 Cellachán Ua Cellacháin of Cashel was slain.
- 1118 Mael Sechnaill Ua Faeláin was treacherously slain in Cashel.
- 1127–34 Traditional date for the building of the Cormac's Chapel on the Rock.
- 1130's Benedictine monks settle on the Rock of Cashel
- 1141 The bishopric of Cashel was made Metropolitan.
- 1172 King Henry II of England presided over a synod in Cashel.
- 1178 Cashel was plundered by the Normans.
- 1179 Cashel [the Rock] was burned [cause of burning unknown].
- 1194 Tade, son of Mathgamain Ua Briain, was put to death by the foreigners in Cashel, despite the protection of the legate Archbishop Ua hÉnne of Cashel and Patrick.
- 1216 Cashel was designated as a borough town.
- 1220's References to the old and new vill (town) of Cashel survive.
- 1224–37 Sir David Latimer founded a Leper Hospital of St. Nicholas in Cashel.

- 1228 King Henry III returned the town to the ownership of the Archbishop, and a Fair was granted.
- 1243 Foundation of the Dominican Friary of Cashel, north of the town wall.
- 1265 Foundation of the Franciscan Friary of Cashel, east of the town wall.
- 1272 Foundation of the Cistercian monastery of Hore Abbey, south of the Rock.
- 1279 Letters of protection for two years for Adam Stripling, merchant of Cashel, about by the King's licence to go to parts beyond the sea.
- 1317 Edward Bruce of Scotland visits Cashel during his invasion of the country.
- Grant to the bailiffs and worthy men of Cashel, in aid of enclosing the town with a stone wall, that they may take the following customs in the accustomed form for five years from every crannock of wheat, peas, beans and every kind of corn, 1d.
- 1346 Commission to Adam Preston of custody of the castle of Cashel, during the King's pleasure, with the accustomed fee.
- 1378 King Richard II confirmed all the privileges of Cashel' Corporation; in Cashel Royal Service was proclaimed.
- 1378 King Richard II learned that there was no law, justice or good governance in any parts around the town of Cashel, but rather rebellion, extortion, murder, killing, robbery and open war made by the King's Irish enemies and rebels upon that town, so that the provost and commons of that town can scarcely be kept without great relief by the King in this part.
- The town of Cashel was situated in the march and was so devastated by invasions of the King's enemies that it cannot support the household of the King's Lieutenant and other officers except in the houses of the Friars Preachers and Friars Minor of that town; and because of the destruction of the surrounding parts where the said friars are wont to receive alms for sustenance, they have scarcely enough on which to live. Order to pay the Friars Preachers 5m as an aid for repairing their church and houses.
- 1494 The Earl of Kildare, Gerald Mór burned St. Patrick's Cathedral, believing the bishop to be hiding inside!
- 1540 The religious institutions of Cashel were seized by the English Crown.
- During the Desmond Rebellion cattle raids in Cashel result in the deaths of 60 townsmen.
- 1637 King Charles II of England granted a Charter to the town: it was to be known as 'City of Cashel'.
- 1622 Archbishop Miler Magrath of Cashel died.
- 1641 The town of Cashel was invaded by the O'Dwyer Clan and many English settlers killed.
- 1647 The Rock of Cashel was conquered by forces loyal to the English Parliament, led by Irish man Lord Inchiquin.
- 1687 King James II of England granted Cashel a Charter.
- 1749 The roof of St. Patrick's Cathedral was removed.
- 1869 Following a Parliamentary inquiry the Corporation of Cashel was dissolved.

Townland History

The Placenames Database of Ireland lists the following dates in association with Monadreela; AD 1243–44, 1280–90, 1297, 1303, 1304, 1306–1309, 1312, 1327, 1360, 1389, c. 1400, 1636, 1638 & 1640 (www.logainm.ie). These early dates associated with Monadreela come via the *de Druhull* family, also spelt *Druil*, *de Drehull*, *Droyll*, *Droill*, *de Droill*, *Druhill*, *de Drohuill* and *Drule*, a local name also recorded in such sources as the Calendar of Ormond Deeds and Red Book of Ormond. A link with the medieval settlement discovered in Monadreela is obvious (Hughes & Ó'Droma 2011, 28–9).

Civil Survey for County Tipperary 1654–6

In the Civil Survey for County Tipperary 1654–6 the parish of Patrick's Rock was described as follows: "The sd Parish lyeth intirely in the Barony of Middlethird & County of Tipperary. The Tythes of the sd Parish is an intire Viccarage belonging to the Sea of Cashell. The whole Tythes was worth in 1640 £100. The sd parish containeth the severall Townshipps following with their old extent of Irish Acres whereof...Kylscoubine one acre, Georgesland one Acre. Rathdangen three acres; Banadrily one acre, Ballin Knuck five acres. Gort McEllis two acres...Windmill fower Acres..." (Simington 1931, 219–20).

Monadreela was referred to as Banadrilly (probably "gap of the mire") and itemised with the townland of Clonmore to the north, comprising 'two acres old extent'. The townlands were together described as comprising 119 Plantation Acres: 60 acres arable, 58 acres pasture and 1 acre of meadow, valued at £5, none unprofitable. The Proprietor in 1640 was 'Walter Sall of Garrane Irish Papist. The sd lands are bounded on the South with Rathdangan in this parish & Ballykunock in this parish, on the West with the sayd lands of Ballykunock in this parish. On the North with GortmcEllis in this parish, & on the east with the lands of Garranemore in this parish. The sd Walter Sall pprietor in fee by descent from his ancestors. The sd lands are wast without impvemt.' (ibid 223). Although it is impossible to verify, the one acre of meadow may refer to the marshy part of Monadreela beneath Ballyknock hill.

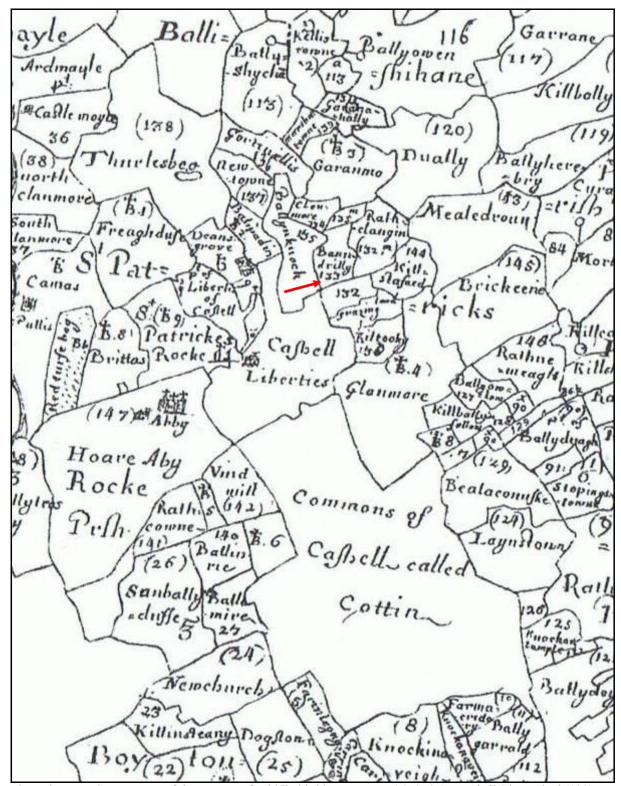


Figure i: Down Survey Map of the Barony of Middlethird by W. Petty, 1654-6. 'Banndrilly' is marked (133).

Books of Survey and Distribution for County Tipperary

In the Books of Survey and Distribution the following proprietors are listed in 1640 for the townlands in the parish of St. Patrick's Rock that were investigated on the bypass:

Proprietor	Townland
Edmond Stapleton, Gortmakellis	Gortmakellis
Walter Sall, Garrane	Bandrilly & Clonmore
John Hanly, Cashel	Kilscobin
Derby Ryan, Cashel	Windmill

Table v: Extracts from the Books of Survey and Distribution for St. Patrick's Rock, 1640 (Marnane 2001)

Walter Sall was a member of the influential Sall family who lived in Cashel (Maccotter 1999). For instance, under the Charter granted to the City of Cashel by James II, 1638 John Sall was named Mayor of Cashel, both Robert and Francis Sall free burgesses, Geofrey Sall merchant and both John Sall Fitz-Geofrey and John Sall Fitz-Walter apothecaries (Finn 1930, 6–7).

Other 17th Century Sources

There are no recorded inhabitants of Monadreela in the Census of Ireland for 1659 (Pender 1939), nor in the Tipperary Hearth Money Records for 1665–7 (Laffan 1911). This may suggest Walter Sall was using the entire lands for grazing animals. In 1666 Monadreela was called *Banedrely / Baunedrilly* (www.logainm.ie).

Smith-Barry Cashel Estate

Much land around Cashel had been granted to the Protestant Erasmus Smith, later of the Smith-Barry estate, for services rendered to the Crown following the Cromwellian confiscations in 1652. One of the descendants, John Smith-Barry inherited these lands in 1755 and Monadreela formed part of the grant. In his analysis of the Smith-Barry Estate, valuable information relating to townlands investigated during the bypass has been recorded by Marnane (2001–2005).

Tenant	Denomination	Acres	Rent p.a.	Tenure
Barnaby Phelan	Gortmakellis, Newtown &	260	£79	3L/1740
	Clonmore			
Wm. Pennefather	Monadreela	73	£18	3L/1729
Richard Lockwood	Windmill & Ballinree	318	£80	3L/1731

Table vi: The Smith-Barry Cashel Estate c. 1755. 'Irish acres, 3L = three lives from that date' (ibid 99)

William Pennefather, of the well-known Pennyfather family of Cashel is the only tenant listed for Monadreela and the lands had been in the family since 1729. In 1766 Monadreela was called *Monedrily* (www.logainm.ie).

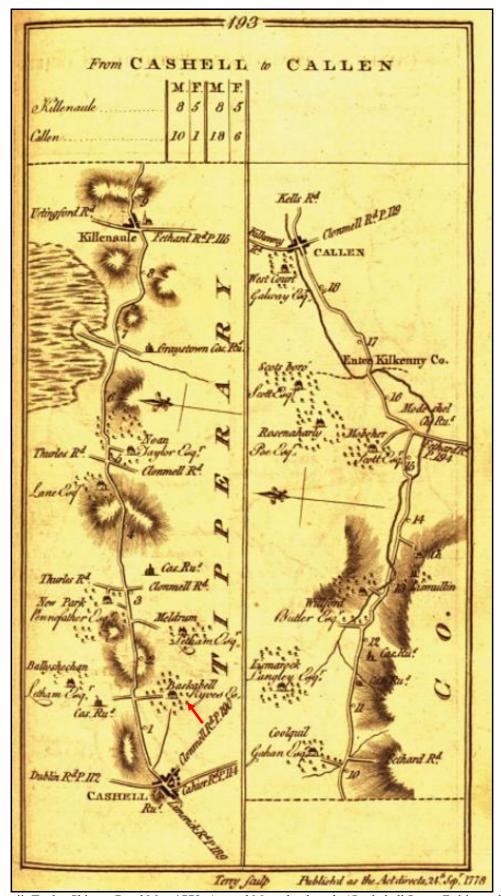


Figure ii: Taylor Skinner Road Map 1778. Around Monadreela only 'Baskabell Ryves Es.' is marked.

Tenant	Denomination	Rent p.a.	
Barnaby Phelan	Gortmakellis	£ 79	
Thomas Pennefather	Monadreela	£ 72	
Sundry tenants	Monadreela	£116	

Table vii: Rental of Smith-Barry Cashel Estate November 1813 (based on Marnane 2002, 60–1)

The above rental shows another Pennefather, Thomas, as a tenant of Monadreela along with unnamed tenants. The combined rent per annum on the lands, £188 was very high in comparison to the rent on lands at Gortmakellis. The rent per annum for Gortmakellis remained £79 from 1755 to 1813, while for Monadreela it increased from £18 rent per annum in 1755 to £188 in 1813. It is unclear why the valuations were so different but it may reflect some of the notorious financial dealings practiced by the Pennefathers siting on Cashel Corporation, for which much has been written (Finn 1930; Marnane 2007)

The Second Report of the Commissioners of Education (recorded 1824, published 1826) listed a Roman Catholic school in 'Moonadrilla', described as a 'thatched house with mud walls, an income of £10, teacher Mr. James O'Donnell and catering for 40 students' (Moloney 1994, 224, Appendix VII). Unfortunately it is not possible to pin-point this school, although the above description would equate with the archaeological findings on the Site 14 excavation 03E0395 (see Final report).

Tithe Applotment Books for Cashel

In the Tithe Applotment Books for Cashel dating from 1827 although 16 surnames are listed for Moneadrila/Monadula, at least four are duplicate entries (www.titheapplotmentbooks.nationalarchives.ie). Names include Gavin / Gavan, Maher, Ryan, Coonane / Coonan, Smith-Barry, Quishion / Cushion and Keating / Keahry. There is no mention of James O'Donnell and his school; did it no longer exist or had the teacher changed? The Pennefathers are no longer assocviated with Monadreela either. Smith-Barry, Ryan and possibly Gavin / Gavan [Garavan] were still listed in the Griffiths Valuations of 1850 (see below).

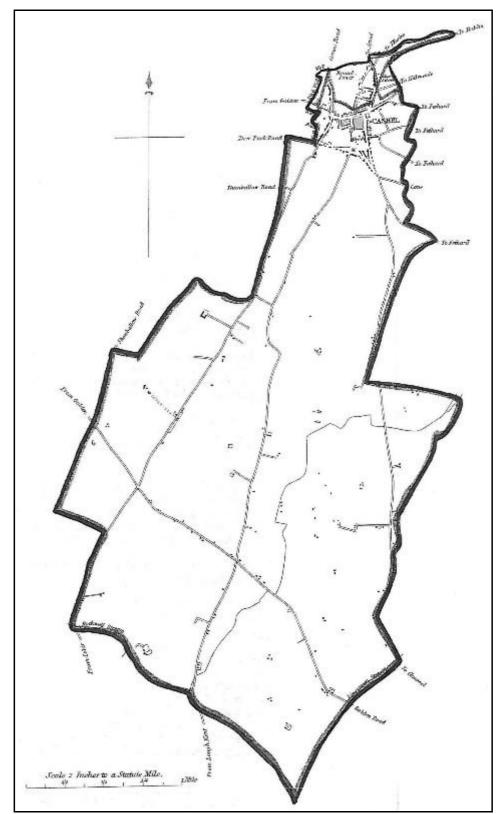


Figure iii: Municipal Corporation Boundaries (Ireland) Proposed Municipal Boundary of the Borough of Cashel, December 1831.

Although Monadreela was located outside the remit of the Corporation, the previous tenants, the Pennefathers had exercised almost autocratic control of Cashel Corporation from the 18th century (Finn 1930, 27).

Ordnance Survey Namebooks for Co. Tipperary 1840

In the Ordnance Survey Namebooks the townland name is given as *Móin na draoile*, the bog of the mire. It was 'on the road from Fethard to the Mail Coach road to Dublin from Cashel & South of that from Cashel to Killenaule and in the Barony of Middlethird. Is all arable and pasture' (Ó' Flanagan 1930, 137). The name probably derived from the wet valley running north/south from Ballyknock Hill.

Census Returns for 1841 & 1851

These census returns reveal the full extents of the Great Irish Famine in the Cashel area.

Census Year			1841				1851	
Townland	Houses	Male F	emale	Tot. Persons	Houses	Male F	emale	Tot. Persons
Gortmakellis	14	-	-	95	8	-	-	43
Ballyknock	13	-	-	88	6	-	-	39
Clonmore	4	-	-	23	2	-	-	9
Monadreela	10	35	33	68	2	4	8	12
Boscabell	16	49	48	97	8	23	25	48
George's-Land	1	4	2	6	1	3	5	8
Kilscobin	2	3	5	8	2	2	3	5
Hughes'-Lot East	10	28	33	61	8	21	22	43*
Rathordan	27	102	92	194	18	58	58	116
Waller's-Lot	6	27	14	41	9	31	25	56*
Cooper's-Lot	7	14	18	32	5	15	18	33
Owen's & Bigg's-Lot	5	17	15	32	5	20	13	33
Windmill	20	57	61	118	8	26	16	42
Deerpark	2	6	8	14	1	4	4	8
Farranamanagh	47	160	159	319	34	92	83	175

Table viii: Census Returns for 1841 & 1851. *indicates part included in Cashel Urban District (Dalton 1994, 167–8; Meskell 1987, 254–6)

Such comparative information allows the full impacts of the Famine to be realised at local level. These figures should be treated with caution, however, as Smyth (2012, 13) has recently illustrated the inaccuracies in the 1841 statistics. Townlands like Clonmore and Windmill saw a 50 % or more reduction in the number of houses over the 10 year period represented in the censuses. Monadreela lost eight of its 10 houses and suffered a drastic reduction in population (68 persons reduced to 12). This would have had enormous negative impacts on the locality, both socially and economically. In Monadreela, the remains of the dwelling discovered on Site 14 may represent one of these mudwalled houses abandoned during the Famine.

1st Edition OS six-inch map

On the 1st Edition OS six-inch map Monadreela was bounded on the west and north by Ballyknock, on the northeast by Clonmore and Ballymackane, and on the east and south by Boscabell (Figure iv). A farmhouse and smaller out-building was located at the junction with Croke's Lane / Boscabell townland boundary, subsequently excavated as Site 14 (03E0395). The farmhouse was orientated east/west at a slight south-easterly angle; the out-building was separate and to the northeast. Both were set within a rectangular tree-lined field which extended east to intersect with a north/south orientated field boundary, and to the south the plot formed the northern boundary of Croke's Lane. Croke's Lane appeared open on this side although there was a suggestion of a gate near the lane. At the southwestern corner of the townland was Ryan's (see below). There was a farm with tree-lined fields beside the watercourse to the immediate west of the excavation.

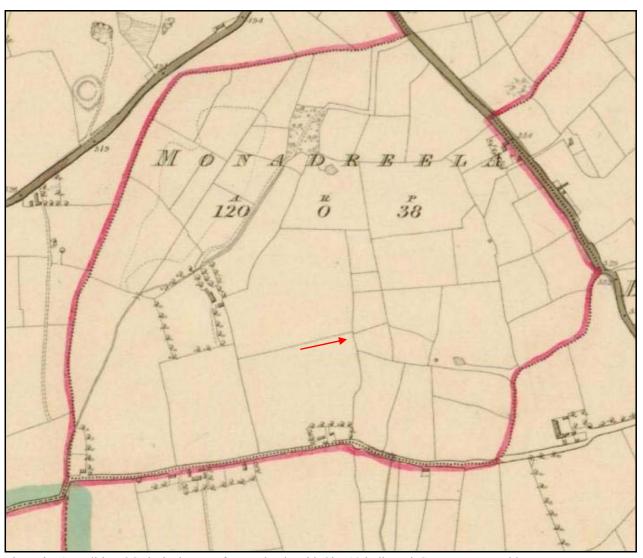


Figure iv: 1st Edition OS six-inch map of Monadreela with Site 10 indicated. Source: www.osi.ie

Primary Valuation of Tenements in St. Patrick's Rock & St. John Baptist Parishes

In the Primary Valuation of Tenements recorded in Griffith's Valuation for South Tipperary taken in August 1850 the following information is of relevance for those townlands investigated on the bypass.

Townland	Acres (roods & perches)	Land £	Buildings £	Total £
Gortmakellis	357 (1 r. 18 p.)	£302 16s	£15 8s	£318 4s
Ballyknock	250 & 27 perches	£200 3s	£10 7s	£210 10s
Clonmore	65 & 15 perches	£47 18s	£4 11s	£52 9s
Monadreela	20 & 38 perches	£68 13s	£2 3s	£70 16s
Boscabell	268 (1 r. 5 p.)	£165 3s	£10 1s	£175 4s
George's-Land	104 (2 r. 5 p.)	£70 8s	£1 2s	£71 10s
Kilscobin	117 (1 r. 16 p.)	£86 2s	£3 4s	£89 6s
Hughes'-Lot East	413 (9 p.)	£680 7s	£140 14s	£821 1s
Rathordan	842 (3 r. & 4 p.)	£848 11s	£37 5s	£885 16s
Waller's-Lot	153	£314 13s	£24 16s	£339 9s
Cooper's-Lot	199 (1 r. 20 p.)	£245 4s	£8 19s	£254 3s
Owen's & Bigg's-Lot	143 & 27 perches	£148 10s	£3 19s	£152 9s
Windmill	299 (2 r. & 31 p.)	£382 15s	£11 5s	£394
Deerpark	152 (3 r. 9 p.)	£276 7s	£35 17s	£312 4s
Farranamanagh	655 (3 r. 10 p.)	£565 16s	£51 5s	£617 1s

Table ix: Extract from the Primary Valuation of Tenements in St. Patrick's Rock & St. John Baptist parishes recorded in the Griffith's Valuation, August 1850, listed per total value of land and buildings.

In Monadreela Smith–Barry, William Corboy, James Garavan [Gavin / Gavan?] and Bridget Ryan were listed as tenants: Smith–Barry himself was the Immediate Lessor and held the lands in fee. Only two houses were listed (the same number as recorded on the 1851 census); James Garavan had one acre (3 roods & 22 perches) valued at 19 shillings and buildings at 15 shillings, with a cumulative value of £1, 14 shillings. Bridget Ryan had 20 acres (1 rood & 37 perches) valued at £13, 7 shillings and buildings at £1, 18 shillings, with a cumulative value of £14, 15 shillings. No vacant houses were listed. The total acreage for Monadreela was 120 acres and 38 perches, with land valued at £68, 13 shillings, buildings at £2, 3 shillings giving a total value of £70, 16 shillings. Clearly then there was a drastic reduction in tenant numbers after the Famine.

The Griffith's Valuation map showed James Garavan's holding as No.1, with Ryan's as No. 2. The latter dwelling still survives as a ruin and was known locally within the last 50 years as 'Annie's

cottage' (a young girl, Annie Ryan was listed as living in the house in the 1901 & 1911 censuses). There is no record of the school in Monadreela.

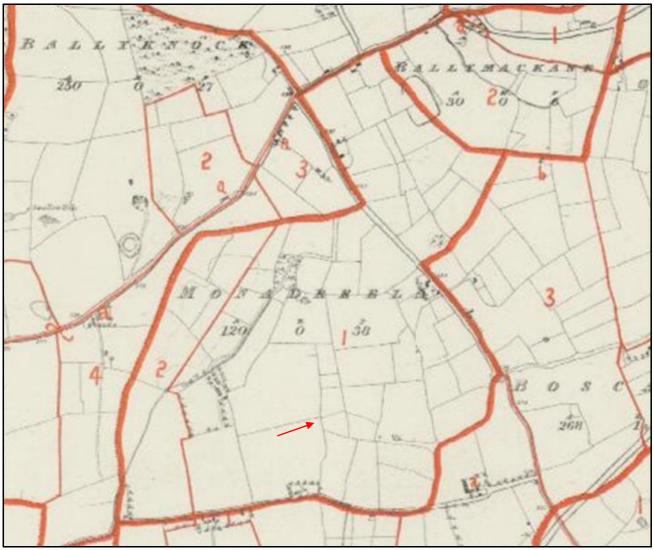


Figure v: Griffith's Valuation Map c. 1850, Site 10 indicated. Source: www.askaboutireland.ie

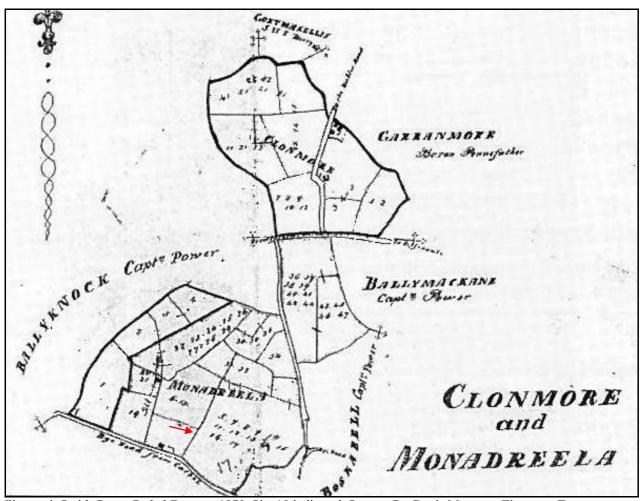


Figure vi: Smith-Barry Cashel Estate c. 1870, Site 10 indicated. Source: Dr. Denis Marnane, Tipperary Town

Figure vi shows a portion of the Smith-Barry Cashel Estate map from c. 1870. In Monadreela, Mr. Patrick Phelan is the tenant of Field Nos 5–47, totalling 96 acres (3 r. & 33 p.) valued at £74, 15 shillings & 2 pence, with a rateable value of £37, 15 shillings. As Mr. Phelan does not appear as a tenant on either the Tithe Applotment Books nor on Griffiths Valuation the lands must have changed hands after the 1850s. Parts of the unsettled estates of Mathew Pennefather of Newpark, near Dualla were advertised for sale in October and November 1851 amounting to over 2,500 acres and premises in Cashel (http://landedestates.nuigalway.ie/LandedEstates/jsp/family-show.jsp?id=2536). The fields to the east of sites 7–14 have been amalgamated into one large field; the Site 14 building was still evident at this time (Figure vi).

1st Edition OS 25-inch map

By the time the 25-inch map was recorded at the beginning of the 20th century only Ryan's farm remained extant within the townland (Figure vii).

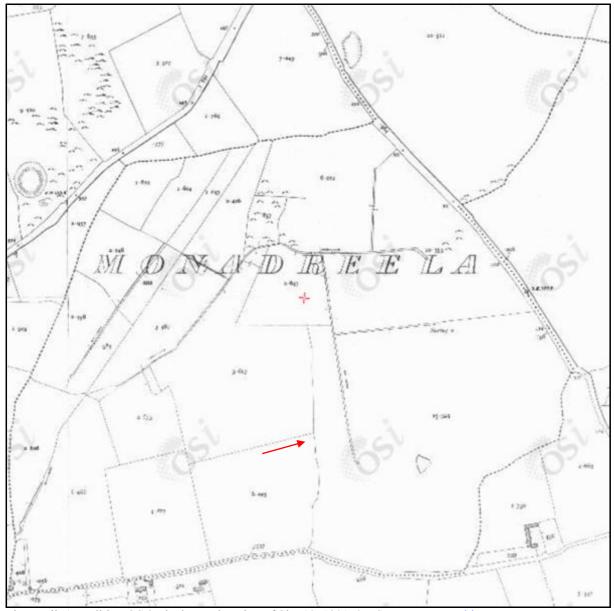


Figure vii: 1st Edition OS 25-inch map location of Site 10, 1901–05. Source: www.osi.ie

There is no change to any of the Monadreela field boundaries on either the 2nd or 3rd edition OS six-inch maps (see Figures ix and x).

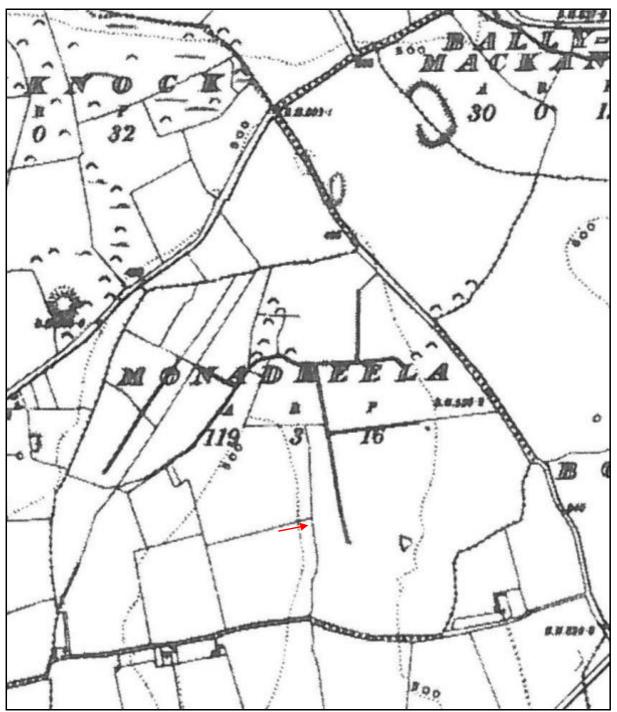


Figure viii: 2nd Edition OS six-inch map location of Site 10, surveyed 1903, published 1906. Source: www.osi.ie

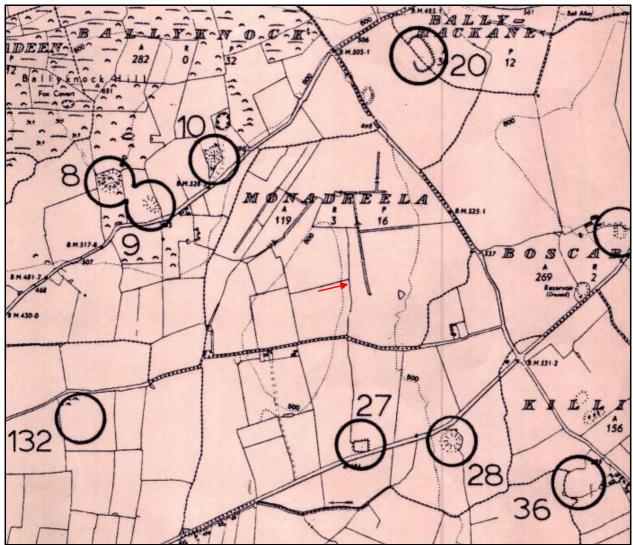


Figure ix: 3rd Edition OS six-inch map location of Site 10, 1954 (revised 1952 & 1954). Source: www.osi.ie

Vertical Aerial Information

As can be seen below significant changes within Monadreela occurred since the 1950s (Plates 1 & 2). The north/south aligned field boundary, common to sites 11–14, was removed prior to 1994. Also, the east/west aligned field boundary between sites 5 and 6 was removed, while to the west of the townland the north/south alilgned field boundary running north from Croke's Lane no longer survives. The east/west aligned field boundary was partially investigated during the Site 5 excavation (03E0299). The removal of such boundaries was a common occurrence post the 1950s as a consequence of increased mechanisation of agriculture, favouring larger fields over small units (Feehan 2003, 375–77). At the time of the JCNA excavations in Spring 2003, sites 5–10 were located within one field, and sites 11–14 within another. The field was under pasture at the time of excavation and the northern boundary of Site 10 was the upstanding field boundary still *in situ*.

Local oral tradition includes a reference to a burial ground in Monadreela location unknown.



Plate 1: Vertical aerial image of Monadreela townland taken in 1994; N to right (source: South Tipperary County Council)



Plate 2: Vertical aerial image of Monadreela townland taken in 2000. The shadow at lower right is flooding from the pond beside where Site 5 (arrowed) was located; N to right (source: Kilkenny Council)

EXCAVATION (Figures x, 4–7 & Plates 3–8)

The sequence of investigations in Monadreela was informed by the results of the Phase 1 archaeological test excavations (Lennon 2002). It was decided in consultation with South Tipperary County Council that the areas be sub-divided for either further testing or fixed price resolution works. Testing consisted of sites 6, 8, 10, 12 and 14 while resolution, where definite archaeology had been found during Phase 1 works, were sites 5, 7, 9, 11 and 13 (Figure x). During excavation some of these sites were combined as the archaeology clearly extended beyond the initial scope of works, such as at sites 8 and 9. As no archaeology was found on Site 6, the area was used for soil storage during topsoil stripping of adjacent sites (Plate 3). On Site 10 the area investigated was 1,458.83 m²; the ground level sloped from west to east *c*. 152–149 m OD, while the centre of the site was *c*. 149.40 m OD. Context numbers began at number 200 and 31 numbers were issued during the excavation.

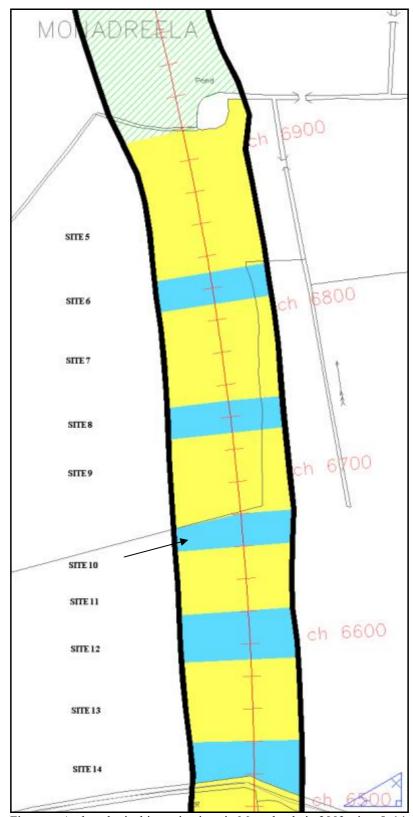


Figure x: Archaeological investigations in Monadreela in 2003, sites 5–14.



Plate 3: Pre-excavation of Site 10, at left, looking southwest

Topsoil

The topsoil (225) was dark brown friable sandy clay with frequent root and organic inclusions. Some sherds of white-glazed ceramics were retrieved but were not retained. The topsoil was homogenous throughout the site and measured between 0.15 m deep (east) to 0.4 m at (west).

Subsoil

The subsoil (226) at site west was light orange silty clay with moderate rounded stones. The subsoil in the eastern low lying area of the site, prone to flooding was compact whitish-grey marl (231).

Medieval Field Boundary / Routeway

The excavation re-discovered the former north/south aligned field boundary, removed after 1954. The boundary was defined by a raised earthen bank (204) flanked by a pair of ditches [207] and [208] and measured c. 5.9 m in width. The ditches and bank formed part of an extant and extensive field boundary located close to the eastern edge of the dry ground with the land to the east being low lying and prone to seasonal flooding. The field boundary extended north for a distance of c. 350 m where it was upstanding prior to excavation and further investigated. It extended south, respecting the Boscabell moated site TS061-027 before terminating at the junction of Boscabell / George's-Land townlands. Portions of the boundary still survive $in \, situ$ in Boscabell townland.

The eastern ditch [208] measured 24.9 m long by 1.6-2.7 m wide and 0.4 m deep and contained fill (229); a mid brown sandy silt with many stones. The western ditch [207] measured 21 m long by 2.1 m wide and 0.44 m deep and contained fill (228), identical in composition and consistency to fill (229). The upper surface of bank (204) was level and in places a cobbled surface (205) was evident. The cobbling was exposed for 21.7 m in length, 1.4-1.8 m wide and 0.15 m deep; it was intermittently preserved and overgrown with vegetation at the time of excavation. This proves it had not been fully removed during the modern landscaping works. The cobbles were sub-rounded to angular in shape, measuring c. 0.1 m in diameter. Excavations on nearby sites proved this field boundary also acted as a routeway in medieval times (see Final Report sites 8, 9, 11 & 12).

Undated Pits

Two pits [202] and [206] were located centrally within the site close to the southern limit of excavation, thereby being adjacent to those features on Site 11 (see final report 03E0346). The pits were similar in morphology and fill.

Pit [202] was kidney-shaped in plan, measured 1.68 m long 0.5 m wide and 0.21 m deep and contained two fills. The primary fill (223) was charcoal flecked orangey brown silty clay and the secondary fill (220) was loose dark brown sandy silt. This secondary fill may have been truncated by later ploughing and/or land improvement activity as its' surface was uneven (Figure 7).

Pit [206] was located 12 m to the east of [202]. It was an irregular oval shape in plan, measured 1.36 m long by 0.5 m wide and 0.16 m deep and contained mid brown sandy silt (219) with

occasional charcoal flecks and gravel inclusions (Figure 7). The pits were of unknown date, function and produced no finds.

Ditches & Drain

Three ditches were located throughout the site. Two of these [212] and [215] were located to the east of the field boundary described above with a single ditch [203] located in the west of the site (Figure 4). None of the ditches produced finds.

Ditch [203] was orientated east/west, measured *c*. 17.1 m long by 1.86 m wide and contained sandy silt (230).

Ditch [212] measured 13.72 m long by 1.57 m wide and 0.35 m deep and contained two fills (222) and (221) (Figures 4, 5 & 7). The lower fill (222) was compact, dark grey brown silty clay with occasional gravel inclusions throughout. The upper fill (221) was loosely compacted mottled light greyish brown sandy silt with frequent gravel inclusions throughout. This fill is thought to represent re-deposited subsoil. It is likely that drain [209] was constructed in association with this ditch as these features most likely represent parts of the original field boundary fabric which survived until c. 1870 (this east/west boundary was clearly removed by the turn of the 20th century (see Figure vii above).

Ditch [215] was located 5.7 m to the east of and orientated north/south, parallel to ditch [208] (see above). The northern edge of ditch [215] abutted the southern side of ditch [209] and its' re-cut [224]. Ditch [215] was oriented north/south, measured 11 m long by 1 m wide and 0.14 m deep and contained compact, dark greyish brown silty clay (216) with occasional gravel and root inclusions. This ditch was of unknown date but most likely was associated with the original field boundary [212]. It is possible that some of these ditches may have been of medieval origin associated with the nearby settlement to the north.

Drain [209] was located to the east of the field boundary, measured 14.5 m long by 0.65 m wide and 0.32 m deep and contained sandy silt (219) with occasional charcoal flecks and gravel inclusions. A re-cutting event [224] was noted running along the entire southern side of ditch [209]. The re-cut was 14.5 m long by 0.77 m wide and 0.32 m deep and contained a single fill (217), with frequent large sub-rounded to sub-angular stones (Figure 7). No finds were retrieved from this feature.



Plate 4: Post-excavation of pit [220], looking west, scales 2 m and 0.5 m



Plate 5: Post-excavation of pit [206], looking west, scale 0.5 m



Plate 6: Mid-excavation of ditch [209] showing fill (219) frame right. Stone rich fill (217) of ditch re-cut [224] at frame left. Looking west, scale 1 m



Plate 7: Mid-excavation of ditch [212], fills (222) & (221), looking west, scale 1 m



Plate 8: Mid-excavation of ditch [215], fill (216), looking south, scale 1 m

Furrows

Five furrows [200], [201], [210], [211] and [214] were partially identified within the site. With the exception of [201] all were orientated roughly east/west. A sandy silt fill (227) was common to all furrows, and they were partially investigated only.

Furrows [200] and [201] were located in the west of the site and were inter-cutting. This indicates that ploughing took place on both an east/west and north/south axis. It was not possible to ascertain the relative chronology due to the homogeneity of the fills. Furrow [200] was orientated east/west and measured 7.8 m long by 0.72 m wide. Furrow [201] was orientated north/south and measured 7.5 m long by 0.5 wide. Two parallel furrows [210] and [211] were located toward the centre east of the site and perpendicular to ditch [207]. Furrow [210] measured 3.96 m long by 0.67 m wide. Furrow [211] measured 3 m long by 0.5 m wide. A single furrow [214] was located to the east of and perpendicular to ditch [208]. Furrow [214] measured 10.37 m long by 0.5 m wide. The furrows are thought to derive from post medieval plough cultivation and are similar to those excavated on adjacent sites 11–14 in this same field (see separate reports).

DISCUSSION

The archaeological findings from this site were generally agricultural in character. The earthen bank [204] flanked by ditches represents both an element within the field system, a routeway and possibly a barrier to floodwaters when the seasonal inundation of the flat low lying ground to the east would have occurred. The presence of the cobbling in the former upstanding north/south aligned field boundary is suggestive that the ditches and bank not only acted as a boundary but served as a routeway to the medieval settlement at Monadreela, dated to the late 13th /early 14th century (Hughes & O'Droma 2011, 29). It is clear from the cartographic evidence that this boundary had survived until the middle of the 20th century.

The ditches and drain to the east of this field boundary are thought to represent further attempts to drain the low lying ground in this area. The fills of the ditches in this area are thought to derive from natural sedimentation over time. The stone rich fill of the re-cut in drain [209] is thought to be an attempt to create a crude "french" drain to further facilitate the movement of water away from the area to the east of the field boundary. Cumulatively these land improvements may reflect an expansion of tillage production into the reclaimed fringes of the Monadreela wetland. This improvement continued with the more recent removal of the same field boundary in the last 50 years.

Pits [202] and [206] are of unknown date and function. They may date from any period given the proximity of known prehistoric and medieval activity to the north and south. Ditches [212], [215] and drain [209]/[224] existed until the end of the 19th century. It is possible that some of these ditches may have been of medieval origin associated with the nearby settlement to the north.

The furrows identified on the site suggest that arable cultivation took place and given the presence of prehistoric and medieval activity on the adjacent sites it is possible that they may date to any period. The furrow located to the east of the field boundary suggests that the attempts to drain this area were at least in the short term successful, perhaps brought under cultivation in a period of dry weather when the low lying ground was flooded to a lesser extent. The isolated and intermittent evidence for cultivation furrows does not indicate that tillage production was confined to these locations. It is likely that the furrows here were dug to the same depth as elsewhere on the site and that those locations where the furrows were identified as subsoil cuts corresponds to locations where topsoil cover was thinner.

The post medieval archaeological findings from the excavation were found to closely correspond with the documentary evidence. The medieval settlement at Monadreela had long been abandoned by the time the Civil Survey was compiled in the mid-17th century and the later evidence shows that although the townland of Monadreela continued to be inhabited, the nature and location of the settlement within the townland had changed (Hughes & Ó'Droma 2011, 29). Two of the dwellings depicted on the 1st Edition OS six inch map (Figure iv above) within the townland fronted onto the bohereen known as 'Crokes Lane' with the largest dwelling situated a short distance from this bohereen along a trackway. The area formerly occupied by the medieval settlement on the adjacent sites 9 and 11 had long since reverted fully to agricultural use.

By the time the 1911 survey was conducted a single family with farming listed as their occupation were listed as residing within the townland of Monadreela. A single dwelling house depicted on the 2nd Edition OS six inch map (Figure viii) likely corresponds with the dwelling house listed in the 1911 census, 'Annie's Cottage'.

The Cashel region in the post medieval perod was, as was typical elsewhere in Ireland, one where agriculature was the primary economic activity. Small scale mixed agriculture by tenant farmers with surpluses traded at local markets was the economic paradigm. Attempts were made throughout the period to increase production by technological and other means. The application of lime to the soil was one such widespread, and at least in the short term, successful method of increasing the yield of these small holdings. Drainage and reclamation of marginal wetland and upland ground were also conducted throughout the period with mixed results. The construction of a dense network of small fields bounded by ditches and hedgerows was as much a response to societal and cultural pressures leading to subdivision of landholdings, rather than any overt attempt to create more productive land divisions. The later, and in many cases relatively recent, removal of these field systems was driven by economic factors. Larger individual landholdings were necessary to generate the economies of scale that large scale mechanised agricultural practices had made possible and ultimately became essential for each farm to remain profitable. The small farms of the 18th, 19th and early 20th century were no longer economically viable entities by the late 20th century. The removal of the ditches and banks necessary to create the new large farms was facilitated by the easy availabilty of machinery and financial aid to the individual farmer provided by the post-war boom of the 1950's. Prior to the excavation the land was in pasture with grazing cattle.

CONCLUSION

All excavation works have finished in association with the N8 Cashel Bypass & N74 Link Road. The archaeological findings from this site were comprised of an earthen bank, ditches, drains, furrows and subsoil-cut pits. With the possible exception of the pits which are of unknown date, the archaeological findings from this site were post medieval in date and agricultural in character. Some of the undated ditches may be contemporary with the medieval settlement identified to the north and where these boundaries now survive beyond the roadtake, they should be further recorded. No further archaeological activity was identified on the site and following the excavation the road was built over the site.

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Appendix 1 Context Register

Context	Type	Description	
No.			
200	Cut	Furrow, E/W orientated. Measured 7.5 m long x 0.68 m wide. Filled by (227).	
201	Cut	Furrow, N/S orientated. Measured 7.8 m long x 0.72 m wide. Filled by (227).	
202	Cut	Pit, kidney-shaped in plan. Gradual break of slope at the top on the southern edge. The southern side is very shallow & irregularly cut with the remaining edges with a more acute angle sloping towards an irregular base. Measured 1.68 m long x 0.6 m wide x 0.21 m deep. Filled by (223) & (220).	
203	Cut	Ditch/furrow, E/W orientated. Measured 17.1 m long x 1.86 wide. Filled by (230). Not excavated.	
204	Deposit	Earthen bank. Part of former upstanding field boundary. Centrally located between ditches [207] & [208]. Had steep sides & a flat top. Measured 21.7 m long x 0.91–2.1 m wide & approx 1 m high.	
205	Deposit	Stone layer. Located at top of earthen bank (204). Intermittently preserved & overgrown in vegetation at time of excavation. Measured 21.7 m long, 1.4–1.8 m wide & 0.15 m deep. Cobbles were sub-rounded & sub-angular, & measured an average of 0.1 m in diameter.	
206	Cut	Pit. Irregular oval shape in plan with a gradual break of slope at the southern & northern edges, shallow but steeply sloping eastern & western sides with a sharp break of slope to flat base. Measured 1.36 m long x 0.5 m wide x 0.16 m deep. Filled by (219).	
207	Cut	Ditch. Orientated N/S located W of earthen bank (204), Measured 21 m long x 2.1 m wide x 0.44 m deep. Filled by (228).	
208	Cut	Ditch. Orientated N/S located E of earthen bank (204). Measured 24.9 m long x 1.6–2.7 m wide x 0.4 m deep. Filled by (229).	
209	Cut	Drain. Orientated E/W. Sharp break of slope top with regularly sloping concave sides breaking imperceptibly at south to a gently rounded base. Measured 21 m long x 0.6 m wide x 0.22 m deep. Filled by (218), cut along south side by [224].	
210	Cut	Furrow orientated ENE/WSW. Measured 3.96 m long x 0.67 wide. Filled by (227). Not excavated.	
211	Cut	Furrow orientated ENE/WSW. Measured 3 m long x 0.5 m wide. Filled by (227). Not excavated.	
212	Cut	Ditch. Orientated east/west. Irregular break of slope top, irregular concave sides breaking imperceptibly to a gently rounded base. Measured 11 m long x 1.23 m wide x 0.35 m deep. Filled by (222) & (221).	
213		Cancelled	
214	Cut	Furrow, orientated east/west. Measured 10.37 m long x 0.5 m wide. Filled by (227). Not excavated	
215	Cut	Ditch, east/west oriented with gradual break of slope at the top, shallow concave sides sloping to an irregular base. Measured 11 m long x 0.94 m wide x 0.13 m deep. Filled by (216).	
216	Fill	Fill of ditch [215]. Compact, dark greyish brown silty clay with occasional gravel, root & organic fibres throughout. Measured 11 m long x 0.94 m wide x 0.13 m deep.	
217	Fill	Fill of furrow [224]. Loosely compacted mottled dark grey silty clay with frequent large limestone & sandstone fragments, & occasional red brick fragments throughout. The redbricks were not retained for specialist analysis. Measured 21 m long x 0.81 m wide x 0.32 m deep.	
218	Fill	Fill of drain [209]. Compact, dark greyish brown sandy silt with occasional gravels & plant root inclusions throughout. Up to 21 m long, 0.6 m wide & 0.22 m deep. Cut by [224], a re-cut of [209].	
219	Fill	Fill of pit [206]. Compact mid brown sandy silt with occasional charcoal flecking & gravels throughout. Measured 1.36 m long x 0.5 m wide x 0.16 m deep.	
220	Fill	Upper fill of pit [202]. Friable dark brown sandy silt with occasional charcoal flecks & gravels throughout. Measured to 0.4 m long x 0.54 m wide x 0.1 m deep. Located above (223).	
221	Fill	Fill of drain [212]. Loosely compacted mottled light greyish brown sandy silt with frequent gravels throughout. Measured 11 m long x 0.58 m wide x 0.24 m deep. Above	

		(222). Interpreted as re-deposited natural subsoil.		
222	Fill	Fill of drain [212]. Compact, dark grey brown silty clay with occasional gravels		
222	ГШ			
222	D'11	throughout. Measured 11 m long x 1.23 m wide x 0.26 m deep. Situated below (221).		
223	Fill	Fill of pit [202]. Compact, orange brown silty clay with occasional charcoal flecks,		
		stones & gravels throughout. Measured 1.68 m long x 0.5 m wide x 0.2 m deep. Below		
		(220).		
224	Cut	Re-cut of drain [209]. Very sharp break of slope at the top, steep concave sides which		
		slope towards an irregular concave base. Measured 21 m long x 0.8 m wide x 0.32 m		
		deep. Filled by (217). Cuts [209].		
225	Topsoil	Dark brown friable sandy clay with frequent root & organic inclusions. Sherds of		
		modern white glazed ceramics were retrieved from this deposit but were not retained.		
		The topsoil was homogenous throughout the site. Measured between 0.15 m deep at site		
		west to 0.4 m at site east.		
226	Subsoil	Subsoil at west of site. Light orange silty clay with moderate rounded stones.		
227	Fill	Fill of furrows [200], [201], [210], [211] & [214]. Mid brown sandy silt with occasional		
		small rounded stones.		
228	Fill	Fill of ditch [207]. Mid brown sandy silt with moderate small rounded / angular stone &		
		moderate large angular / sub-rounded stones.		
229	Fill	Fill of ditch [208]. Mid brown sandy silt with moderate small rounded /angular stone &		
		moderate large angular / sub-rounded stones.		
230	Fill	Fill of ditch [203]. Mid brown sandy silt with occasional small rounded / sub-angular		
		stones.		
231	Subsoil	Subsoil at east of site. This area was low lying & prone to flooding. The subsoil in this		
		area was white grey compact marl. Peat deposits had formed above this subsoil		
		indicating long periods of water logging & inundation.		
<u> </u>		materials long periods of water rogging & mandation.		

Appendix 2 Finds Register

Apart from a few sherds of white porcelain, clearly 20th century in date and not retained by the archaeologists on site, there were no finds from the excavation.

Appendix 3 Drawing register

Sheet No.	Scale	Description
1	1:10	North-facing section of [215]
1	1:10	North-facing section of [206]
1	1:10	East-facing section of [202]
1	1:20	West-facing section of [209] & [224]
1	1:20	East-facing section of [212]

Appendix 4 Sample Register

No samples were taken during the excavation.

Appendix 5 Photography Register

There are eight digital photographs of the excavation retained in the archives.

