Archaeological Excavation
Digging Drumanagh, Season IV
Preliminary Report

Drumanagh Promontory Fort
Loughshinny, Co. Dublin

Consent no.: C786
Excavation ref: E004805
Detection No. R0000443

By
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An Chomhairle Oidhreachta
The Heritage Council

Comhairle Contae
Fhine Gall
Fingal County
Council

Abstract

This report describes the preliminary results of Season IV archaeological excavation, which was carried out under Ministerial Consent C786/E0046805 at Drumanagh Promontory Fort, Loughshinny, Co. Dublin as part of the *Digging Drumanagh-Fingal Community Excavation Project.* Excavation of a single trench took place over 13 days between 19 July -02 August 2023.

Drumanagh Promontory Fort which is a National Monument (Preservation Order No.13/177) a recorded monument (DU008-006001) and protected structure (No.252), is a coastal headland located between the villages of Loughshinny and Rush (ITM 727236/ 756210). Towards the eastern end of the promontory is a Martello Tower (RMP: DU008-006003-; RPS: No.253).

The excavation builds on the initial investigations of a multi-phase research project informed by the *Drumanagh Conservation Study & Management Plan* (2018-2023) and the Drumanagh Archaeological Advisory Group. The ultimate objectives of the proposed 2023 investigations were to address the research and knowledge gaps, investigate the nature and extent of a laneway identified on aerial photos and to inform future works and interpretation of the site.

The focus of the 2023 excavation at Drumanagh Promontory Fort was on establishing veracity of geophysical survey results; examine the topographical anomalies identified and establish if the subsequent land use impact was comparable to that of Season III. The presence of settlement activity was identified; the level of natural subsoil in this area established and prehistoric activity examined.

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1 Introduction

This report describes the preliminary results of an archaeological excavation, which was carried out under Ministerial Consent C786/E0046805 at Drumanagh Promontory Fort, Loughshinny, Co. Dublin as part of Season IV of the *Digging Drumanagh-Fingal Community Excavation Project*. Excavation of a two-part trench took place over 13 days between 17 July and 02 August 2023 .

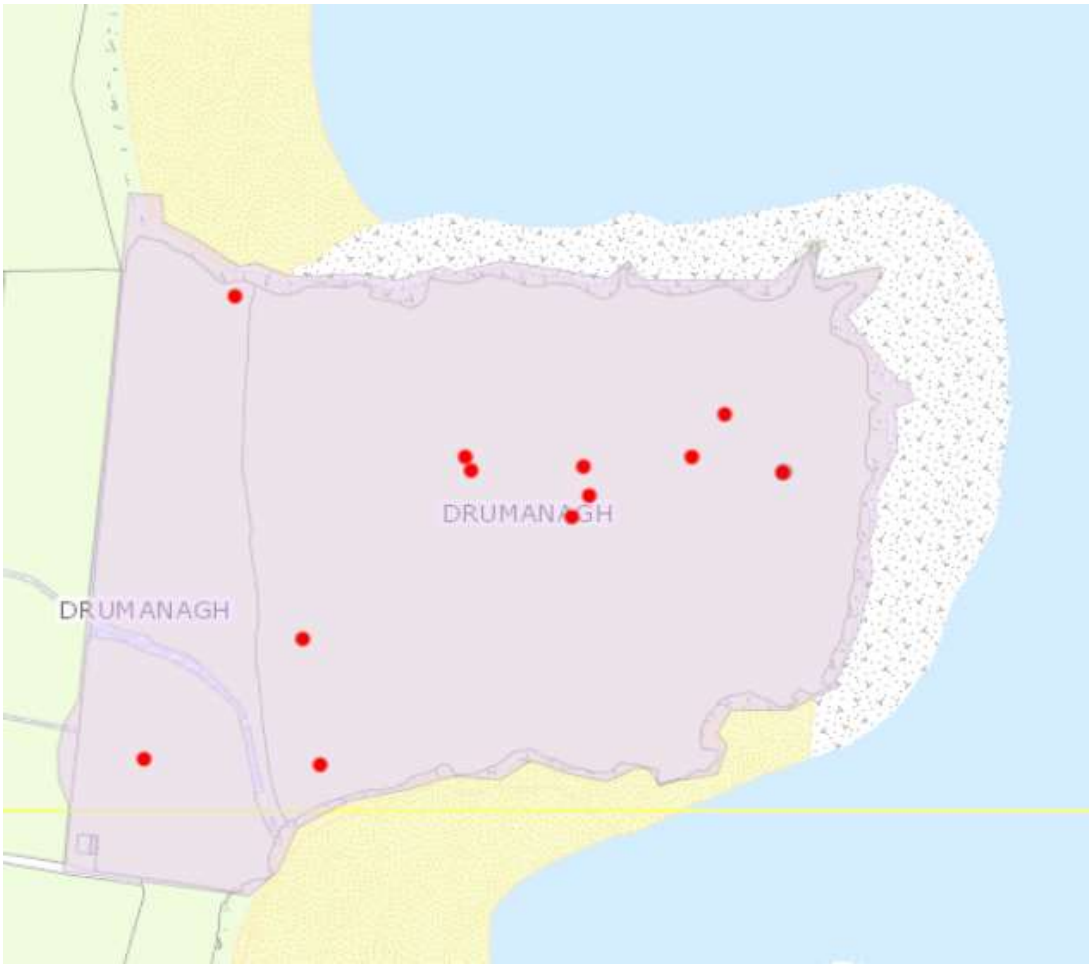
Plate 1: Trench 5 looking south-west to Rush. Photo: Mark Broderick

The *Digging Drumanagh-Fingal Community Excavation Project* was designed to address the research and knowledge gaps identified in the *Drumanagh Conservation & Management Plan* and aimed to;

- Fulfil actions and objectives identified in the *Drumanagh Conservation Study & Management Plan* (2018, download from https://www.fingal.ie/digging-drumanagh)
- Establish the nature, context and significance of the features identified on aerial photos etc.
- Engage, inform and involve the community with Drumanagh Promontory fort and Martello Tower
- Inform the Drumanagh archaeological research agenda

2 Location, topography & geology

Drumanagh Promontory Fort is a National Monument (Preservation Order No.13/177) a Recorded Monument (DU008-006001) and Protected Structure (No.252). Towards the eastern end of the promontory is a Martello Tower (RMP: DU008-006003-; RPS: No.253).



Drumanagh promontory fort is coastally located 0.6 km south of the village of Loughshinny, approximately 1.8 km north of the village of Rush and 0.5 km east of the R128 Rush to Skerries road. It is accessed to the south by a laneway and to the north along a cliff pathway. Approximately 6 km to the south-east is the island of Lambay.

The site consists of a headland of c.46 acres defended by a series of earthworks (L.350m), except where they curve inwards towards the southern limit. The relatively flat promontory is delimited to the west by three closely spaced earthen banks and ditches. A small stream flows along part of the inner ditch to the southern cliff edge. A number of gaps occur along the ramparts, one or more of which may represent an original entrance. The site is bounded to the west by the townland boundary with Ballustree and to the south by the townland boundary with Rush.

The geology consists of glacial till overlying Lower Carboniferous limestone. The soils are Grey-Brown Podzolics, with associated Gleys.

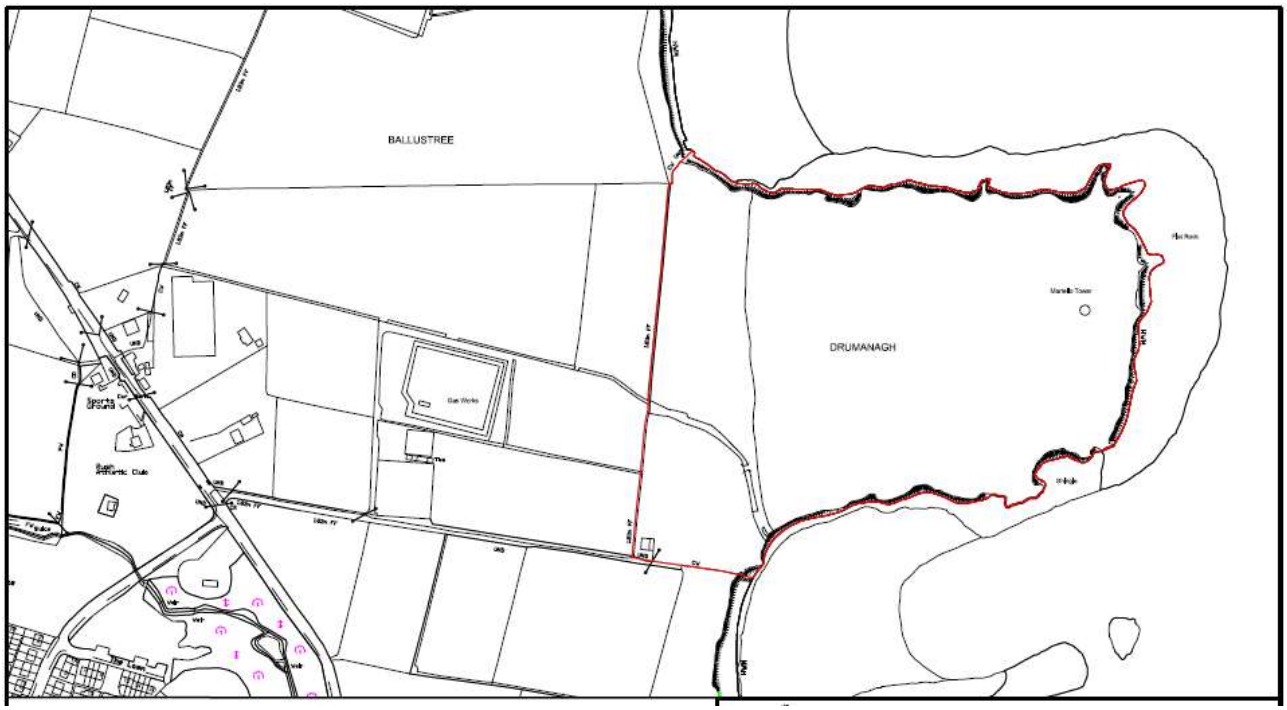


Fig. 1 Site Location Map (at scale 1:5000)

3 Historical and Archaeological Background

The historical and archaeological background has been dealt with extensively in the *Drumanagh Conservation Study & Management Plan* (Section 5 Understanding the Monument pp.9-52) available for download from https://www.fingal.ie/digging-drumanagh-2018

To summarise:

1.3.1 Prehistoric Context

The extensive coastline of Fingal with its low-lying interior and naturally occurring flint pebbles was attractive to the earliest settlers who left behind ephemeral remains in the form of flint scatters and shell middens. Ms Gwendoline Stackpoole in her study of the north Dublin coastline identified nearby Kenure as 'One of the largest and richest sites on the County Dublin coast, and appears to be almost inexhaustible '(1963, 42). On nearby Lambay Island, evidence for the quarrying of the distinctive porphyry was uncovered. Links between Lambay, the coastline, Wales and Scotland indicate the emergence of a coastal and island network of communication and exchange. Approximately 600m south of Drumanagh is the site of Giant's Hill or Knocklea Passage tomb (DU008-013001-).

The Bronze Age is synonymous with the exploitation of mineral sources, the emergence of metal-working and the increased development of trade from Spain to the Baltic through the Irish seaways. Drumanagh is not only prominent in terms of being an identifiable landmark along the coastline but is located close to the copper ore deposits of Loughshinny. Mined in the late eighteenth and early nineteenth centuries it is highly likely that this resource was the focus for earlier activity. A number of enclosures, ring ditches and cists of probable Bronze Age date have long been known along the Fingal coastline. Almost 300m north of the headland along the coast south of Loughshinny is an enclosure or possible ring ditch (DU008-051----). Three cists (DU008-013002-) were associated with the earlier passage tomb at Knocklea (Cahill & Sikora 2011, 176-180).

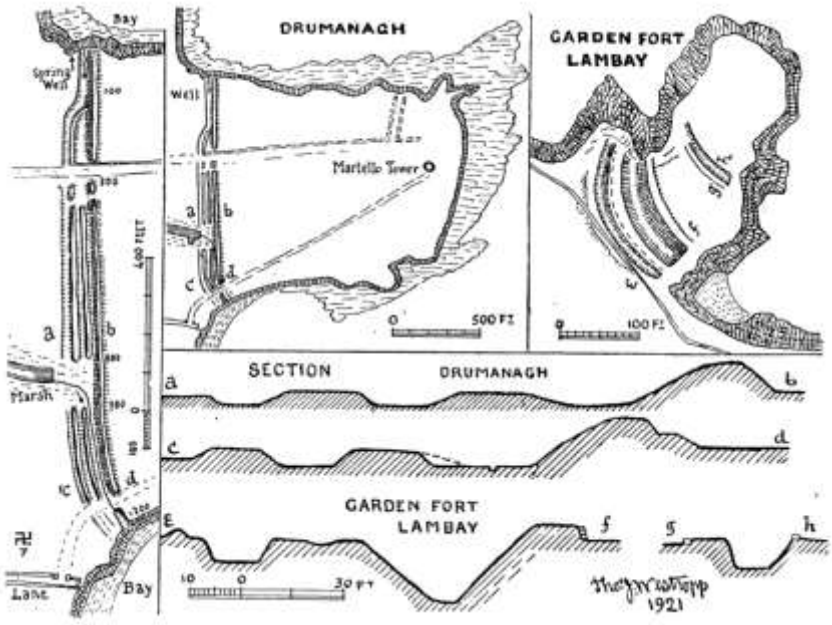


Fig.2 : Drumanagh and Lambay promontory forts (Westropp, 1921)

There are four promontory forts within Fingal. Drumanagh, is the largest and visible across the sea on Lambay Island are two further promontory forts, the Garden Fort which is defined by three large ditches and Scotch Point which was defended by a single ditch and bank. The size of the former indicates that it was for short term use, although its impressive rock-cut ditch indicates that it may have been a statement of power. The other large-scale promontory is Dungriffen fort, Howth. Recently, a number of possible promontory forts identified at Shenick Island (DU005-116), Giant's Hill, Rush (DU008-090) and Ireland's Eye (DU015-133) have been added to the Sites and Monuments Record.

1.3.2. The Roman Connection

In recent years there has been in-depth analysis of the connections between the Romanised world and Ireland, not least of which was The Discovery Programme's *Late Iron Age and 'Roman' Ireland* (LIARI) project (2011-2014). In the 1920s work on the harbour on Lambay unearthed several burials accompanied by weaponry and jewellery. Analysis of the artefacts including a sword and shield, bronze fibulae and a beaded torc showed them to be from the Romanised world, perhaps northern England. In the 1970s ploughing on Drumanagh led to the discovery of Roman material including Gallo-Roman Samian ware and subsequent unauthorised metal-detecting of the fort and surrounding lands produced extensive metalwork from the Roman World.

Drumanagh was acknowledged as being of great significance in the context of Roman trade along the east coast (Raftery 1994, 207). Parallels have been suggested between

Drumanagh and the trading port of Henigistbury Head, Dorset which was also defined by multivallate ramparts, contained evidence for metalworking, was located on the borderland between territories and had a role as a distributional centre. Newman has proposed that there is a significant routeway from Drumanagh-an extremely important entrepôt with the Romano-British world-through Damastown, Garristown, Edox and Skreen to Tara (2005, 379).

Another significant interpretation of the material recovered is that it is representative of a manufacturing centre at Drumanagh. Over forty ingots of copper bronze and brass were recovered from the site and its environs all of which are suggestive of metalworking on site (Cahill Wilson 2014, 26). A comparable ingot recovered from Damastown (c.13km from Drumanagh) is also similar to Romano-British specimens from copper-rich areas in Wales. While it has previously been assumed the Damastown ingot was imported from Roman Britain (Raftery 1994, 208) an examination of wider imperial trade patterns suggests that this was unlikely when copper was being imported to the continent from Roman Britain (Daffy 2003, 98). It is even more unlikely that copper was being imported into Drumanagh given the proximity of deposits of copper along the Loughshinny coastline.

1.3.3. Early Medieval to Modern

The development of the ecclesiastical system was closely tied to the complex secular dynastic system and ecclesiastical centres were often dependent on the largesse of particular kin-groups. St Patrick's Island is highly visible from Drumanagh as is the site of St Daman's foundation (now St Catherine's Church) at Kenure to the west and is likely that the Christian influence was felt by the communities occupying Drumanagh.

While there is as yet no direct evidence of the Vikings at Drumanagh the Norse influence in the region is extensive. The prominence of Drumanagh as a landmark for seafarers, the opportunities for landing in proximity to rich ecclesiastical centres such as Lusk, and the surviving placenames of Scandinavian origin including that of nearby Lambay infer extensive Norse activity in the vicinity of Drumanagh.

When ploughing disturbed the interior of Drumanagh in the 1970s it was noted that some of the internal earthworks may represent a medieval village on the site (NMI Files 1A/27/77). Medieval pottery was also recovered during fieldwalking of the west of the site in 2014. Drumanagh was part of the land of *Kinure* of the manor of Rush. The manor of Rush was in turn grouped with the manors of Balscadden and Turvey and frequently granted and leased throughout the medieval period by the Butlers of Ormond. Drumanagh is not recorded separately in the *Civil Survey of 1654-56*, but is encompassed within the holdings of *Kinure* held by Robert Walsh, which comprised

300 acres of mainly arable land a mansion house, ruined chapel and was bounded to the east by the sea. Kenure was occupied subsequent to this by Lord George Hamilton of Strabane, and then became the seat of Echlin family until 1765 when it came into the ownership of the Palmer family.

During the 18th century Drumanagh was noted by naturalist John Rutty 'as the richest spot by repute' (1772). This was reflected in an advertisement in *Saunders Newsletter* on 6 April 1780;

'To be let for such term of year as may be agreed on from the 11th May next the Townlands of Drumanagh and part of the lands of Rush and Kinure, thereto adjoining, now in the possession of Mr Richard Flood containing 154a 3 r 29 p. Part of the estate of Roger Palmer esq on which lands there are a good farmhouse and offices. These lands are remarkably fine fattening meadow and Pasture grounds, well enclosed and in high Order; and as they lie within half a mile of the Town of Rush and but 13 miles from Dublin they would make answer extremely well for a Dairy or Draw farm. Proposals in writing only to be received by Roger Palmer Esq at John Eden Brownes esq Great Winchester-dress London or by Mr Denis at Rush House or his house, Dawson St. Dublin'

1.3.4. Drumanagh, Martello Tower No.9

One of twelve Martello towers that extend along the coast of Fingal, Drumanagh Martello tower was positioned on the promontory 'for the defence of Rush Strand and River, the pier and cover at Drummanagh Point'. A Lieutenant-Colonel Benjamin Fisher was put in charge of construction which included the choosing and marking out of sites for the towers and gun batteries, employing assistants, overseers and legal advice and engaging contractors to build the towers (Bolton et al 2010, 22). Work began on the first nine towers on the north side of Dublin Bay on 1 September 1804 but construction was postponed until the spring of 1805. The towers were built so quickly that negotiations with the owners for the price of the land often took place after the towers had been built. The deed for Drumanagh and Rush Martello towers between Robert Palmer and Benjamin Fisher dates to 22nd October 1806 when the land was purchased for £132.13.9. This was just over the average plot price of £50 per tower in Fingal but substantially less than the £600 the Earl of Howth received for plots at Howth and on Ireland's Eye (Bolton *et al* 2012, 22). The original approach to the tower survives as a sunken trackway. A system of eighteenth and nineteenth relict field boundaries also extend across the promontory.

1.3.5. Drumanagh, Port?

A map from the *Fourth Report of the Commissioners of Irish Fisheries of their proceedings for 1822* depicts the suggestion of a port along the northern limit of Drumanagh promontory. It is listed in the appendix as a 'fishing station'. However, it does not

appear on previous or subsequent historical maps (refer 3.1) nor is there physical evidence under the water line and may have been temporary in nature or a proposal.

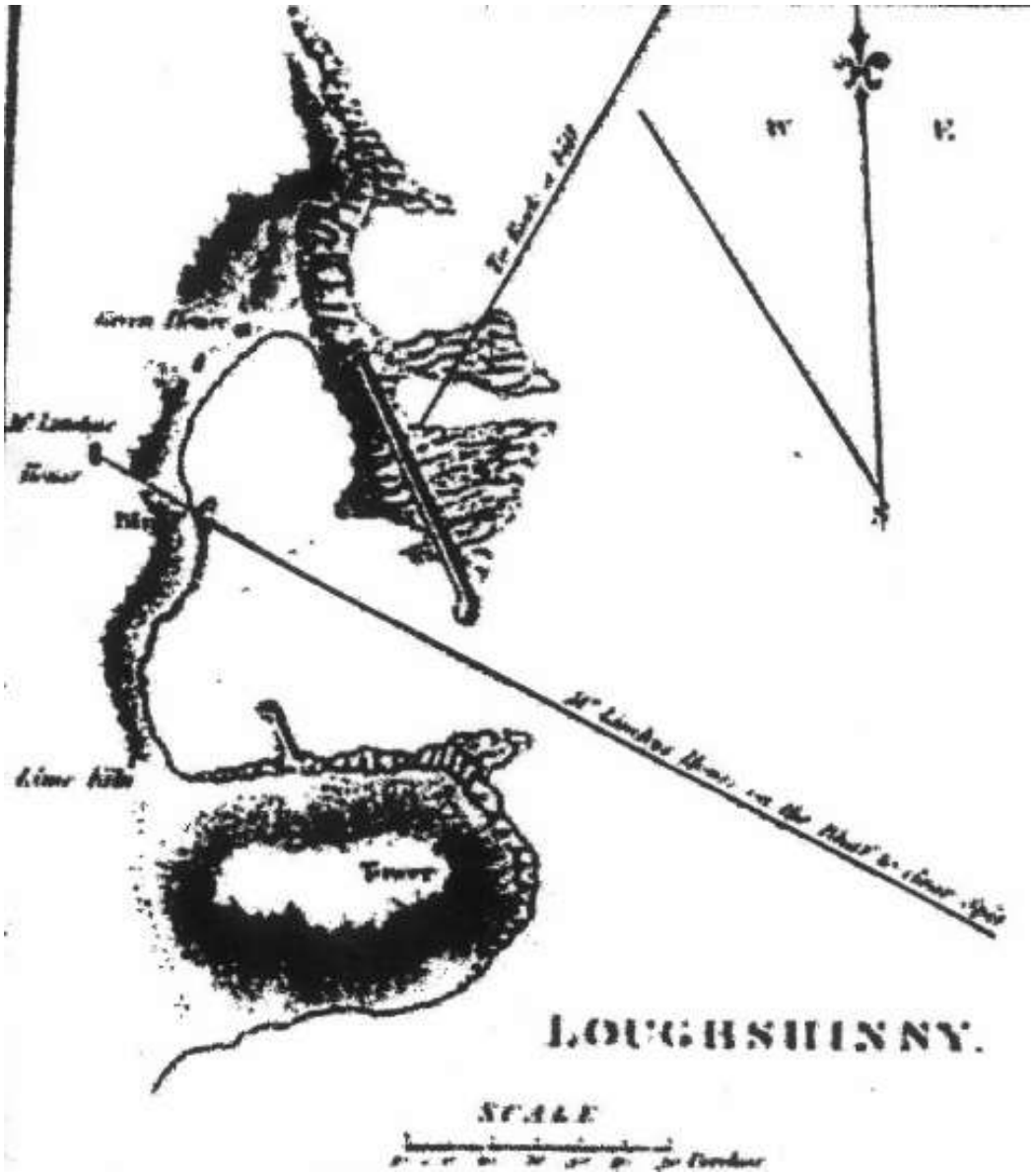


Fig.3: Fisheries Report 1822/23 courtesy of Rory McKenna

An examination of navigation, port and revenue maps of the 18th and 19th centuries note Drumanagh or Drumangh Bay indicating a landmark for maritime

Fig. 4: Map of Dublin's Coast from Baldoyle to Skerries, published by William Richards in 1765
https://www.dublinportarchive.com/collection/historical-map-collection/

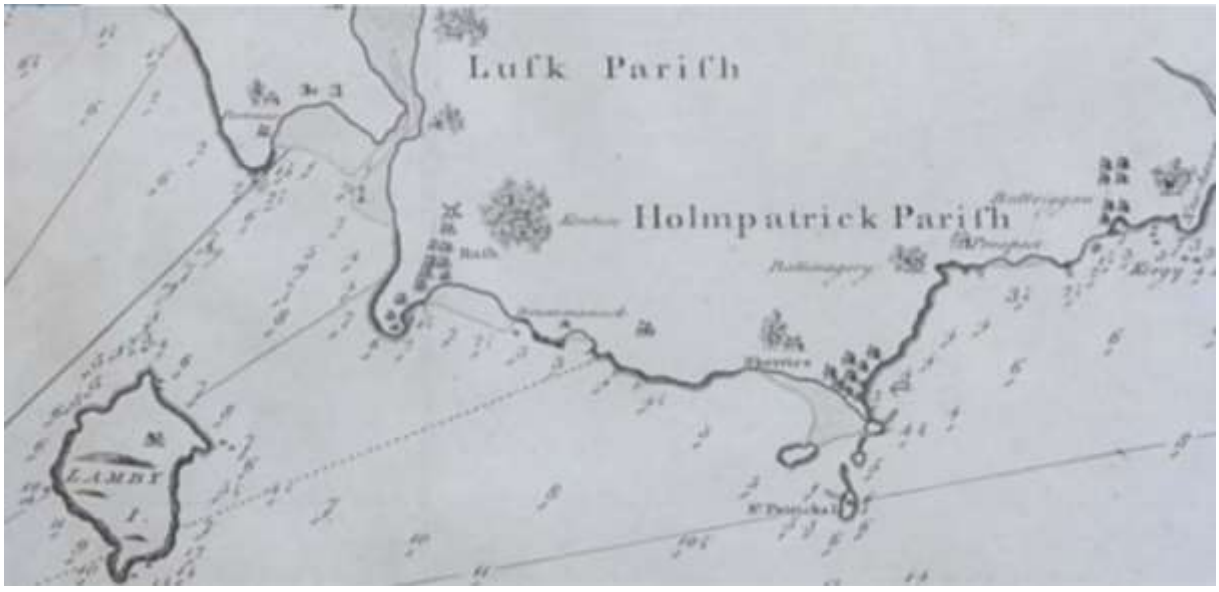


Fig.5 The East Coast of Ireland from Wicklow to Skerries surveyed by M. McKenzie c.1775
https://www.dublinportarchive.com/collection/historical-map-collection/

3.1 Cartographic Evidence

The Down Survey Parish and Barony maps produced c.1656 depict the promontory, almost to the point of exaggeration. Drumanagh while not labelled is very clearly shown as part of Kenure (Figure 4).

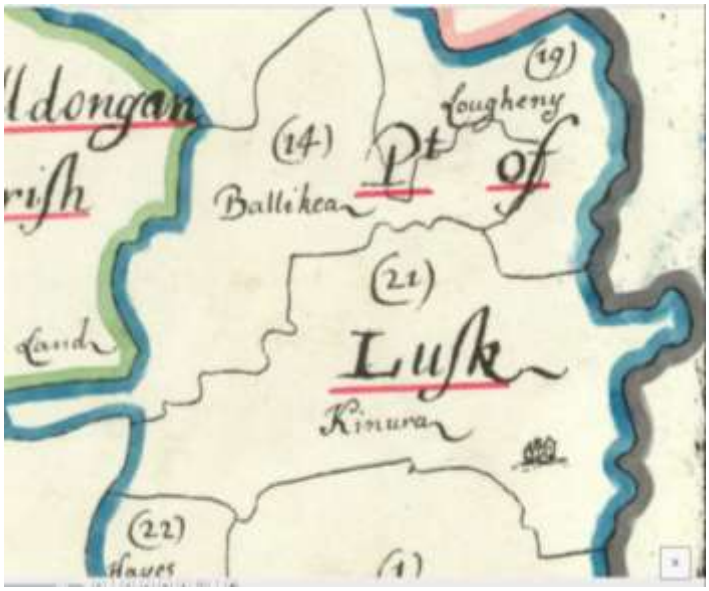


Fig. 6 Down Survey Barony Map c.1656

Rocque's Map of 1760 is particularly detailed. It depicts *Drummahaugh Land* surrounded by a wall. The western and southern boundaries are walls in contrast to the hedgerows and laneways that surround it. The nearest walled area is the demesne surrounding Rush House (later known as Kenure House). The Old Castle of Kinure and the Church in ruins date from the medieval period, elements of both survive at St Catherine's today.

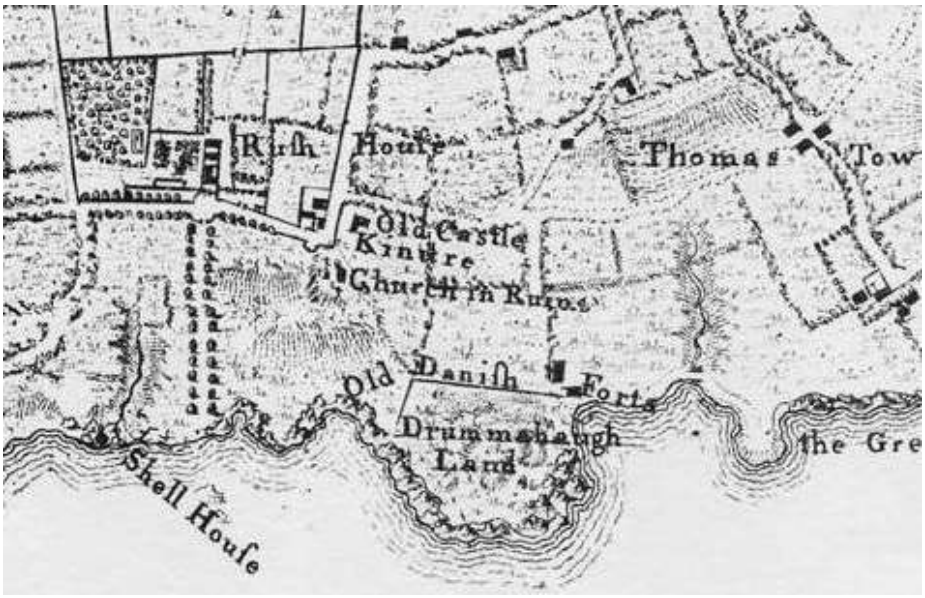


Fig. 7 Rocque's Map of County Dublin, 1760

Also notable is the nomenclature for the area 'Old Danish Forts' which doubtless refers to the ramparts. It was a standard of the time when anything of antiquity was ascribed to the Danes and is reflective of subsequent folklore of the area.

Two structures are depicted to the north-west of the promontory. One structure is aligned east-west along the field boundary, the other north-south at the inlet of the cliff. Remnants of both are still visible in these positions.

Duncan's Map of 1821 is less detailed than Rocque's but depicts the addition of the Tower on '*Drumnough Point'*. This is the first map to illustrate -although somewhat stylistically- the ramparts at the neck of the promontory which are labelled 'Danish Lines'

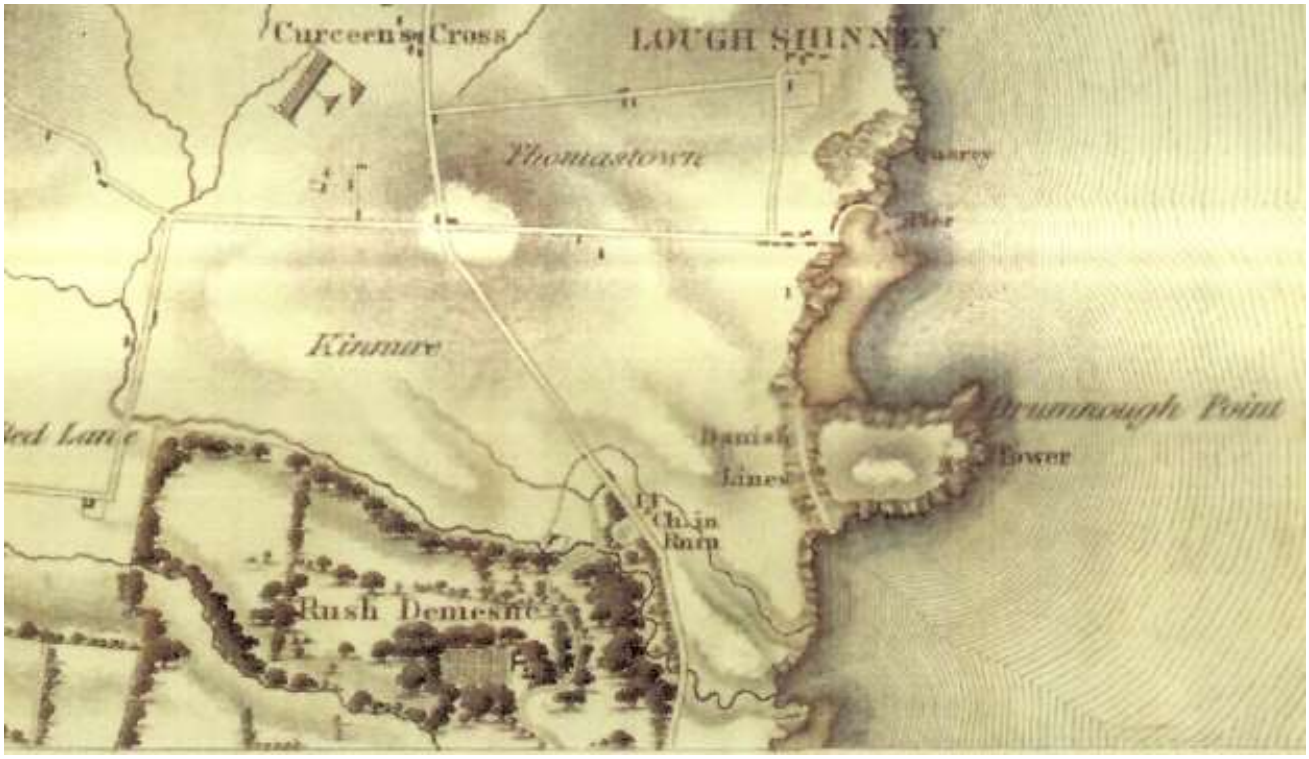


Fig. 8: Duncan's 1821 map

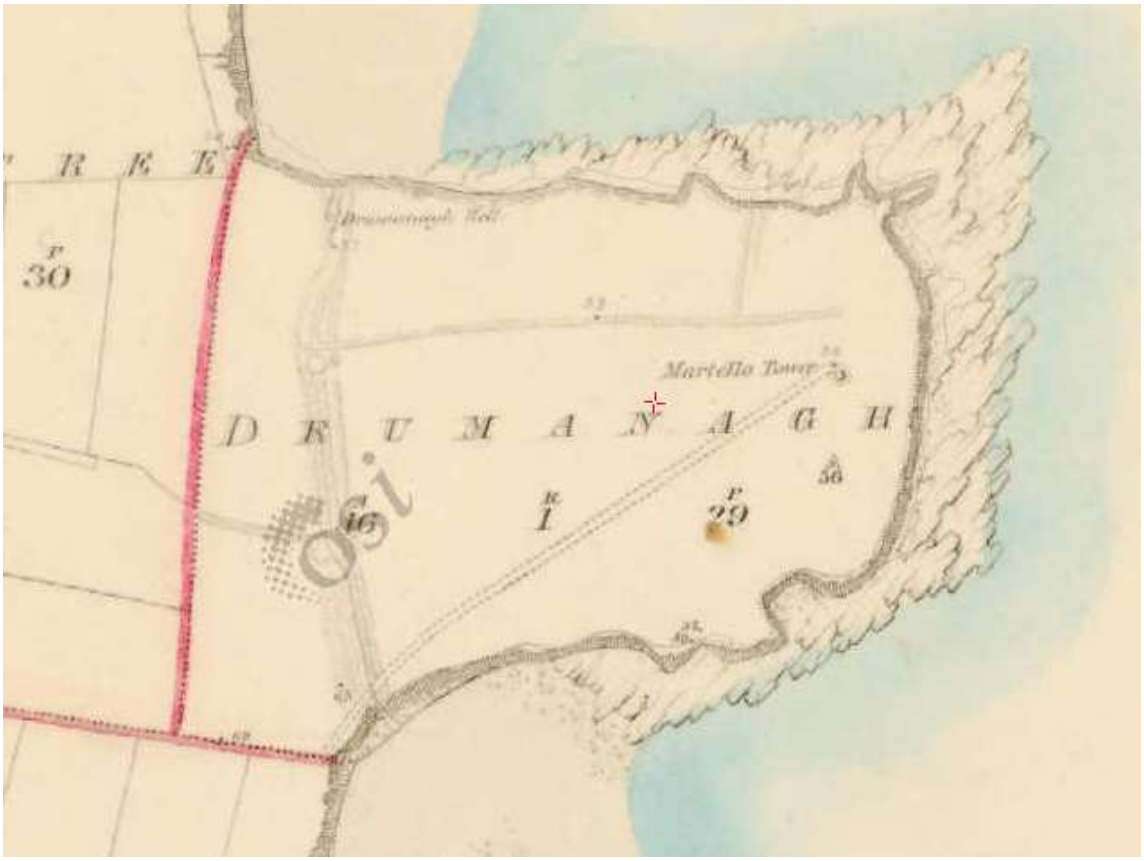


Fig. 9: First Edition Ordnance Survey Map.. Surveyed 1838, Published 1843

The First Edition six-inch Ordnance Survey (OS) map provides a particularly detailed picture of the ramparts. The northern trivallate banks appear integrated with the east-west field boundary, which in turn intersects with a north-south field boundary, indicating the land divison of the time. South of the intersection of ramparts and field boundary are two distinct circular features which may represent the truncation of the ramparts at this point. As the four banks head southwards they become less well defined and more compressed.

The road to the Martello tower extends from the lane-which forms the townland boundary between Drumanagh and Rush- and traverses the ramparts to the south. A stream flows from the western field boundary, that forms the townland boundary between Drumanagh and Ballustree, into the southern ditch and Drumanagh well is depicted to the north. The rocks around the headland are distinctive and extensive.

The manuscript of O'Donovan's survey which appears in less detailed form in the Name Books is headed 'Ancient Remains' and is scaled 12 inches to the mile (Fig. 8). It contains some additional information. Along the northern limit of the promontory the line of a wall is depicted. It is referenced as 'Wall apparently ancient'. It is not continuous perhaps a result of the condition of being 'ancient'. There is a very definite portion of the wall at the north-east point of the promontory where there is a lunular-

shaped inlet. There is a continuous although 'lighter' line that extends around the eastern and southern perimeter. It is unclear if this is a continuation of the apparently ancient wall. The stream pools within the outer banks of the ramparts before flowing within the ditch where it is traversed by the road to the Martello tower. Significantly there are two short parallel banks on the eastern side of the ramparts. These aren't depicted on previous or subsequent maps.

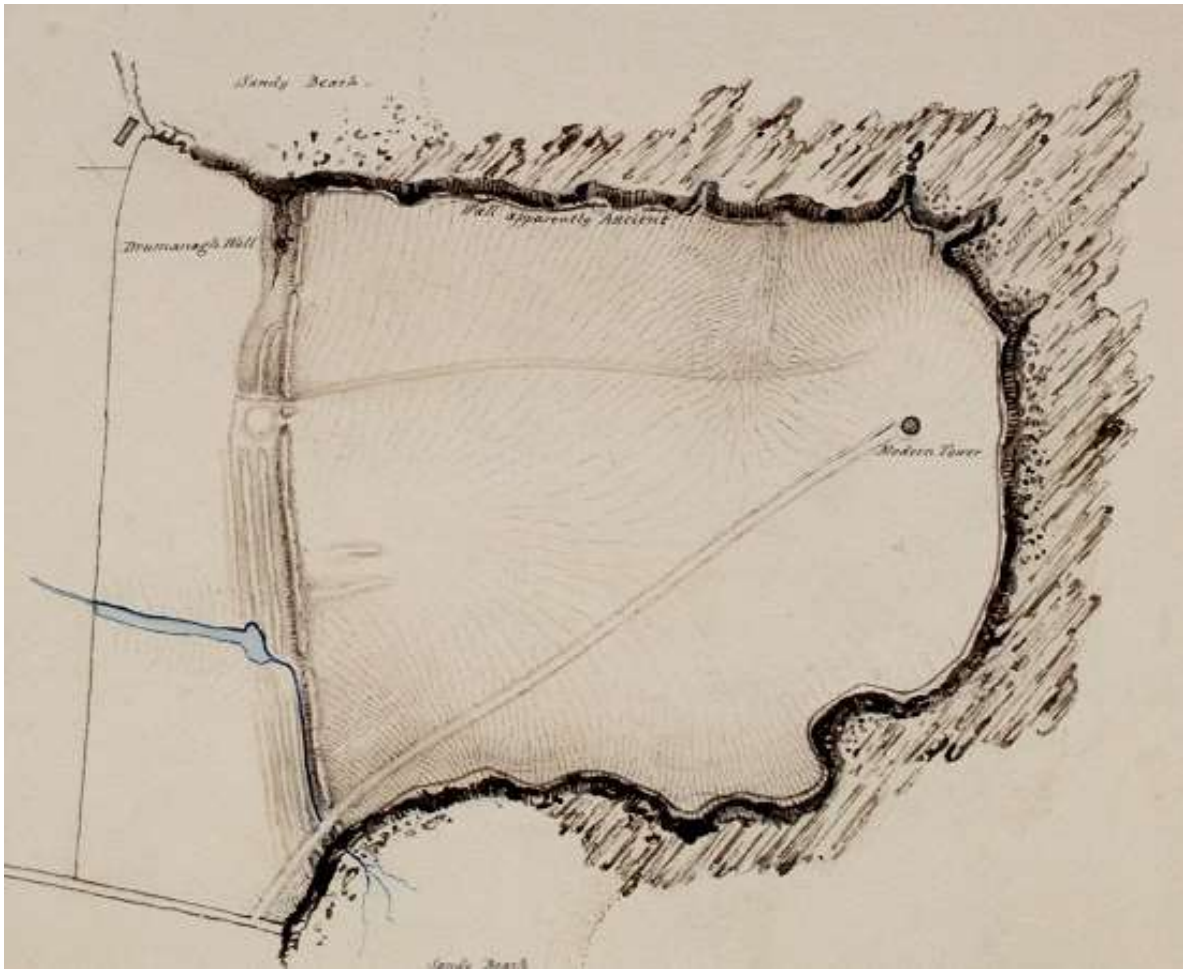


Fig. 10: Drawing 14 C 15(28) (1) Courtesy of the Royal Irish Academy ©

The 25 inch map no longer depicts the road to the Martello tower or the field boundaries to the north of the promontory. The stream no longer pools at the ramparts which are depicted as a single line.

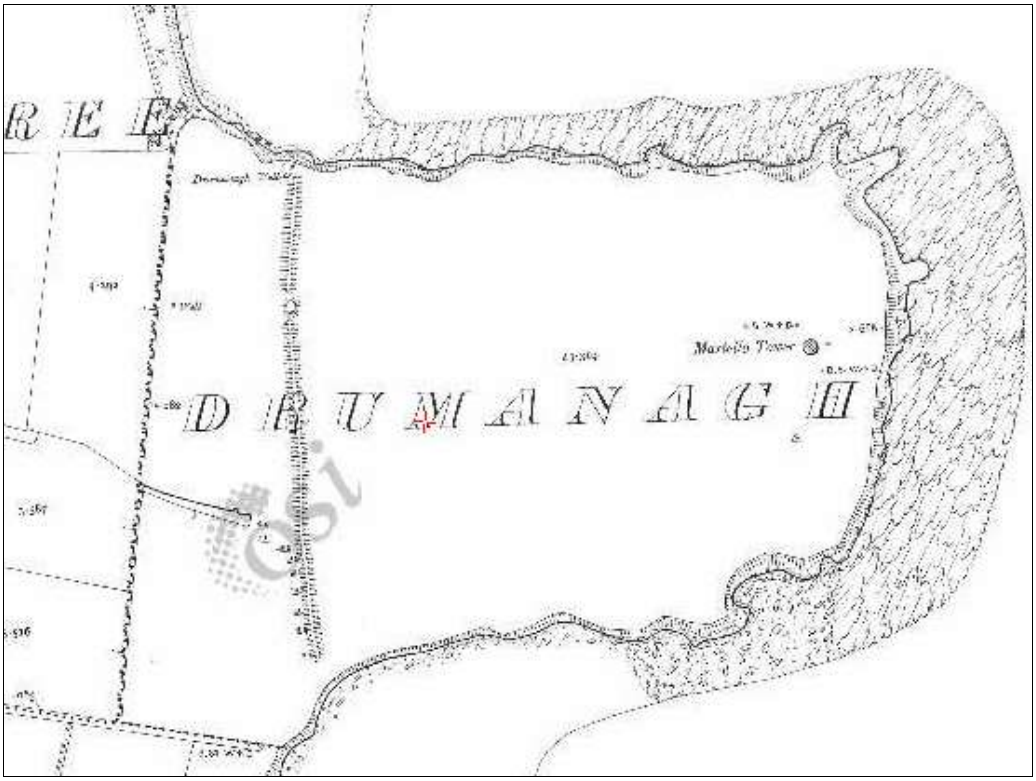
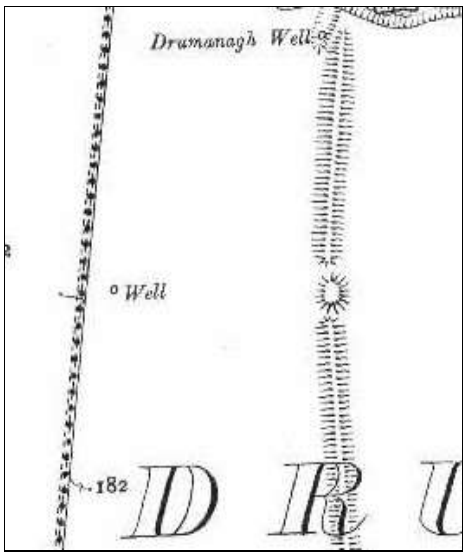
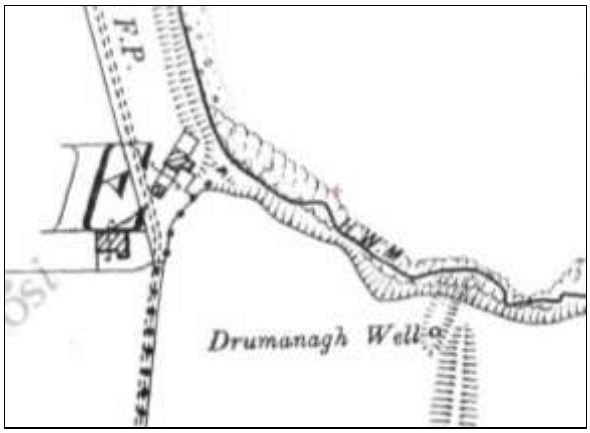


Fig. 11: 25 inch Ordnance Survey Map. Surveyed 1906; Published 1908

A previously unillustrated feature is a well, located east of the western townland boundary. The structure at the cliff edge appears to have been modified and perhaps divided into two structures east of the footpath. A structure has been constructed at the field boundary perhaps on the footprint of the building previously shown on Rocque's 1760 map.





The Martello Road and relict field boundaries remain visible on aerial photographs, subsequent satellite imagery and LiDar images.

Plate 2: Oblique http://lswanaerial.locloudhosting.net/items/show/39958

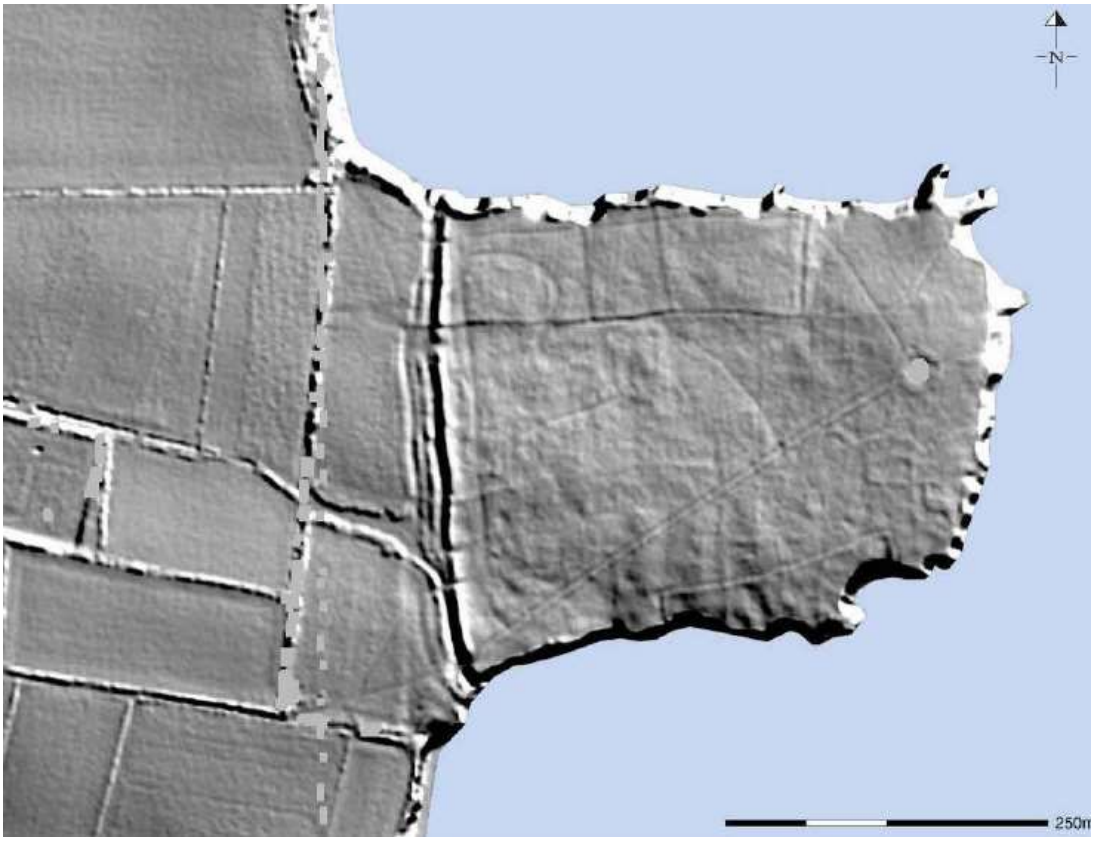


Plate 3: LiDAR image, Fingal County Council and The Discovery Programme 2014

3.2. Geophysical Survey

The National Museum of Ireland commissioned a geophysical survey of the promontory in 1999. As part of the *Late Iron Age and 'Roman Ireland' Project 2011-14* undertaken by the Discovery Programme, six separate areas, comprising 4.7 ha in total were targeted for geophysical survey at Drumanagh and environs (Licence No.: 12R127).

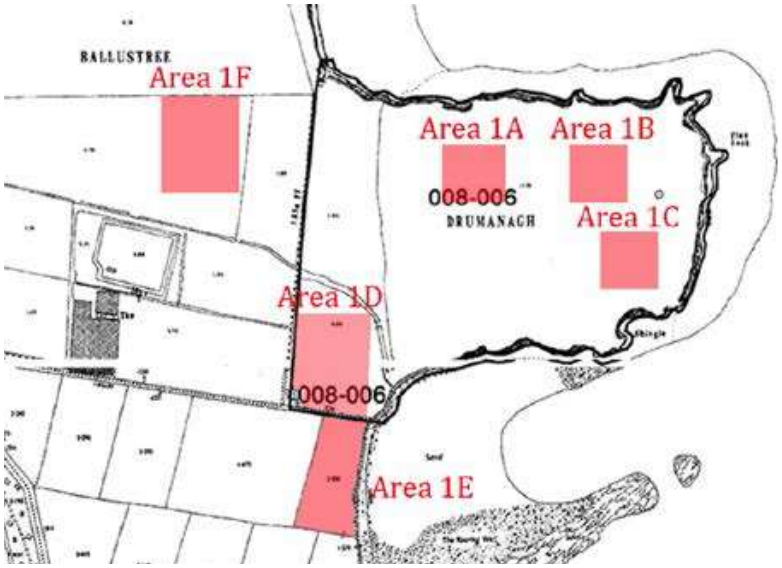


Fig.12: Layout of geophysical survey panels 2014, courtesy of the Discovery Programme

Three areas (1A, 1B, 1C and 1D) were to the east of the promontory and another (1D) was to the west of the ramparts in the south-west of the site. Gradiometry was conducted using 0.25m sample and 0.5m traverse intervals (Dowling 2014, 65). Within the promontory a large D-shaped enclosure (G5/SMR: DU008-006004) 43m NW/SE by 26m NE/SW enclosing a possible structure (G6/ SMR: DU008-006005) was identified. An enclosure with an array of large pit-type anomalies (G8/ SMR: DU008-006007); a rectangular enclosure c.30m in diameter (G7/ SMR: DU008-006006); possible ring-ditch truncated by a field ditch (G13/ SMR: DU008-006008) and another possible ring-ditch with a well-defined pit anomaly at its centre (G14/ SMR DU008-006009). These were interspersed with discrete pit-type anomalies, fragmentary circular anomalies and positive ditch-type anomalies (Dowling 2014, 59-74).

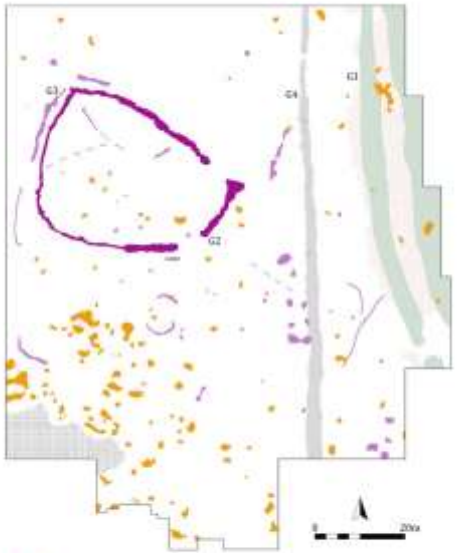


Fig. 13 Geophysical survey results, Area 1D, courtesy of the Discovery Programme

An area (1D) of c.1ha was investigated to the wets of the ramparts extending southwards to the southern boundary of the site. Magnetic disturbance and a scatter of ferrous litter defines the area to the south near the derelict building, but further north in a large oval enclosure measuring approximately 42mEW x 30mNS (G2/ SMR: DU008-094----) (Dowling 2014, 74).

In September 2018 Dr James O'Driscoll, University of Aberdeen and Dr Paddy Gleeson of Queen's University Belfast undertook magnetometry over 2.1 hectares of the site. The survey area was located in the north-west of Drumanagh, outside the ramparts of the promontory. The area was surveyed in zig-zag mode with 0.5m traverse and 0.25m sample intervals using a Bartington 601-2 gradiometry system which incorporates two magnetometers stacked 1m apart. The survey revealed that the enclosing elements i.e. bank and ditches of the fort continue uninterrupted on its northern side, which is significant, as neither the historical mapping nor topographical survey suggested that the earthworks were complete on this side. Outside the fort, the survey recorded a

number of possible relict field boundaries and other geological features. Of potential archaeological origin are a series of ephemeral circular anomalies that could represent hut structures or small, circular burial monuments such as ring-ditches. Furthermore, a series of curious oblong high magnetic responses running in a roughly north–south orientation could similarly be of archaeological significance.

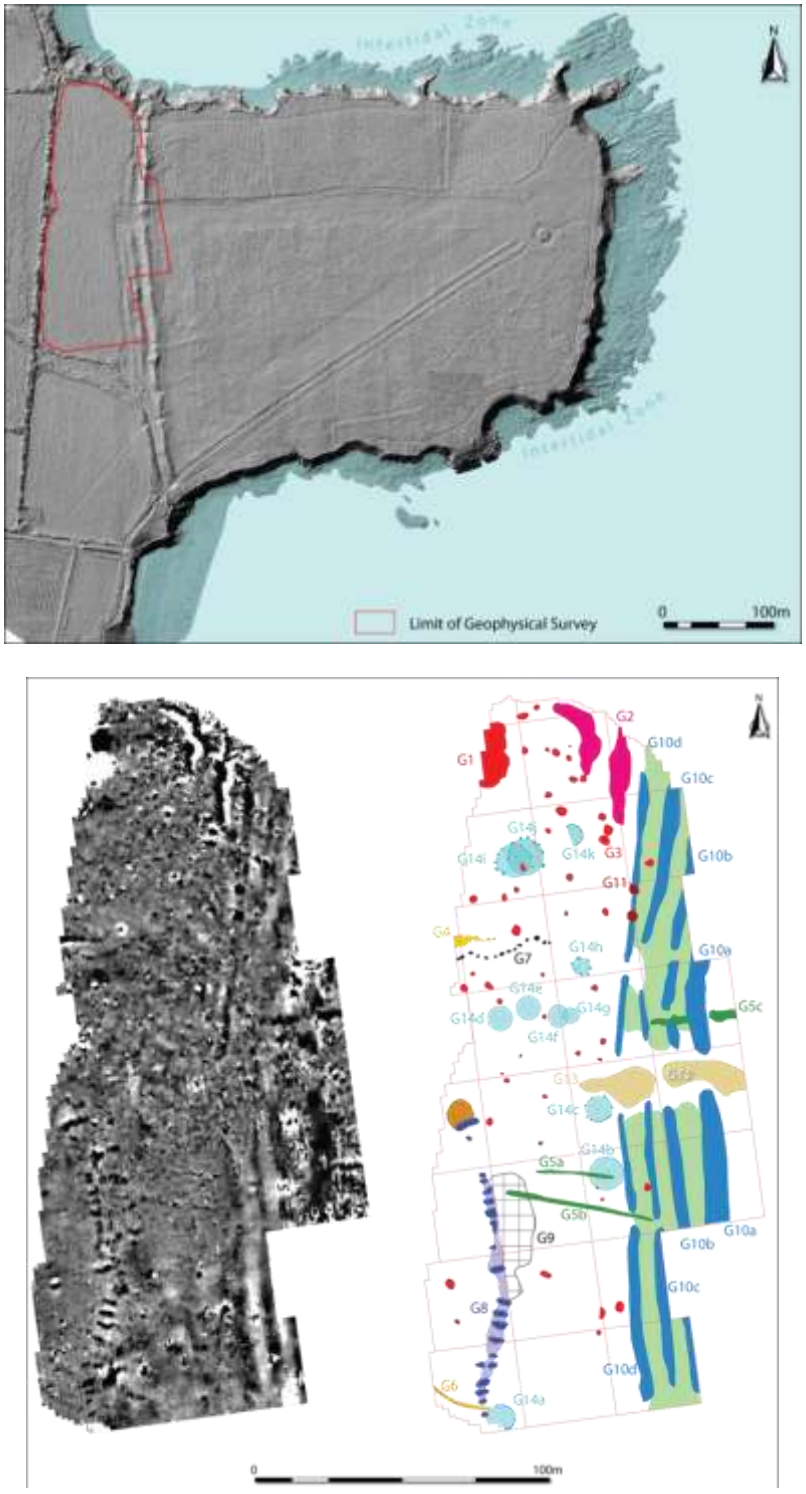


Fig. 14 Location and results of geophysical survey, courtesy of James O'Driscoll & Paddy Gleeson.

2023 Geophysical Survey

In 2023 under an extension to C786 and Detection No.: R0000614 a study area of c.1ha was subject to high-resolution magnetic gradiometry survey and an Electromagnetic Induction Survey by Dr James Bonsall of AMS Ltd.. The former used a Five Sensys FGM650 fluxgate gradiometer with probes was spaced 0.25m apart achieving a spatial resolution of 0.1m accuracy. Data were collected at ten times per second along the lines. The magnetic gradiometry survey identified eleven anomalies of possible archaeological origin including ditch and potential kiln, several pit-type anomalies, the 19th century field boundary and 20th century trackway.

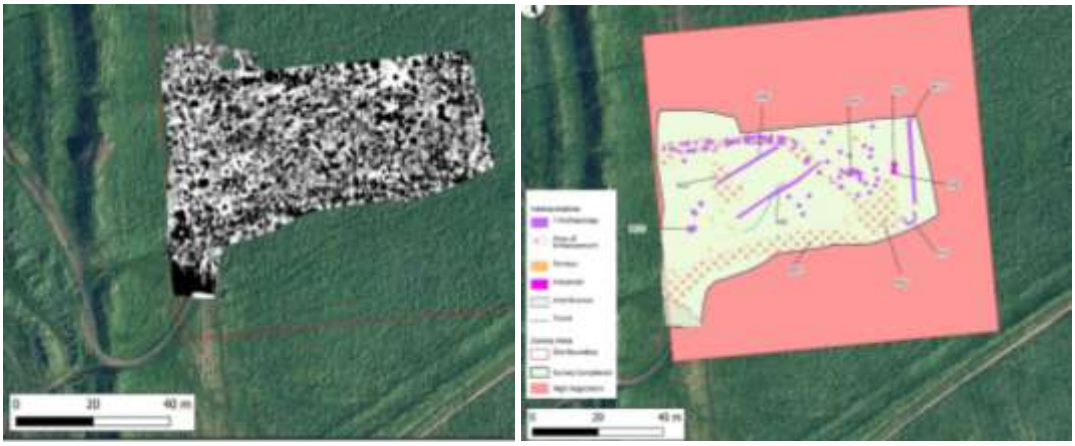


Fig. 15 Location and results of geophysical survey, courtesy of James Bonsall

The EMI uses the collection of inphase and quadrature data to characterise the magnetic and conductivity properties of the underlying soil. The depth range for the vertical dipole (recording data from three levels simultaneously), is 0.5m, 1.0m and 1.8m below the sensor and traverses spaced 0.5m apart, with data collected every 0.3 seconds along the traverse, achieving a spatial resolution of 0.1m accuracy.

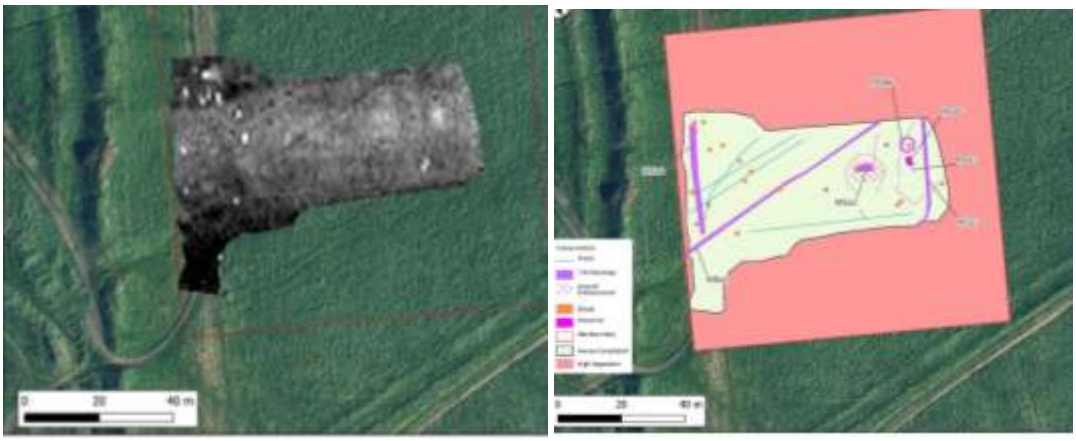


Fig. 16: Level 3 EMI Apparent Magnetic Susceptibility Data and Interpretation

A number of potential archaeological features were identified across the six EMI datasets and were generally reflective of those identified through the magnetometry survey.

3.3 Previous excavations:

Ploughing in the 1970s uncovered a series of hut sites suggesting extensive settlement. A sherd of Gallo-Roman Samian Ware was recovered from the site (Raftery 1996, 19), as was a pin of early medieval date and medieval pottery. A range of artefacts of both native and Romano-British derivation were recovered through illegal metal-detecting.

2014 Ministerial Consent: C601/E4501

In advance of proposed fencing of the headland a programme of auguring was undertaken by Mr Tom Condit, of the National Monument Service in conjunction with members of the Discovery Programme. A total of 122 test pits, arranged in a series of 'runs' comprising six or less bore holes, were excavated as close to the cliff-edge defining the promontory as feasible using an 'auto auger mechanical post hole borer' with a 20cm diameter auger over two days in June 2014. No artefacts or, indeed, soil horizons of clear archaeological significance were encountered (Dowling 2014). A total of 49 surface finds of archaeological and potential archaeological interest were identified including flint (both worked and unworked) and pottery, together with a single fragment of roof slate.

In addition lands outside the fort ramparts on the west were inspected to identify any material of archaeological interest that may have been exposed by ploughing across this area. A total of 49 surface finds of archaeological and potential archaeological interest were identified including flint (both worked and unworked) and pottery, together with a single fragment of roof slate.

Plate 4: Auger holes locations 2014 survey (blue) and 2017 survey (red), courtesy of the Discovery Programme

2017 Ministerial Consent: C786/E4805

In advance of the installation of boundary fencing and access gates, a two day programme of augering was undertaken by Ger Dowling and Gary Devlin, Discovery Programme and Christine Baker, Fingal County Council. A total of 56 auger holes were excavated. No artefacts or soil horizons of archaeological significance were identified although a high level of modern disturbance was evident, particularly along the north-western and southern boundaries. In addition monitoring of the removal of modern detritus and a cow shed was undertaken at the south-west limit of the site. A boundary stone associated with the Martello Tower was recovered.

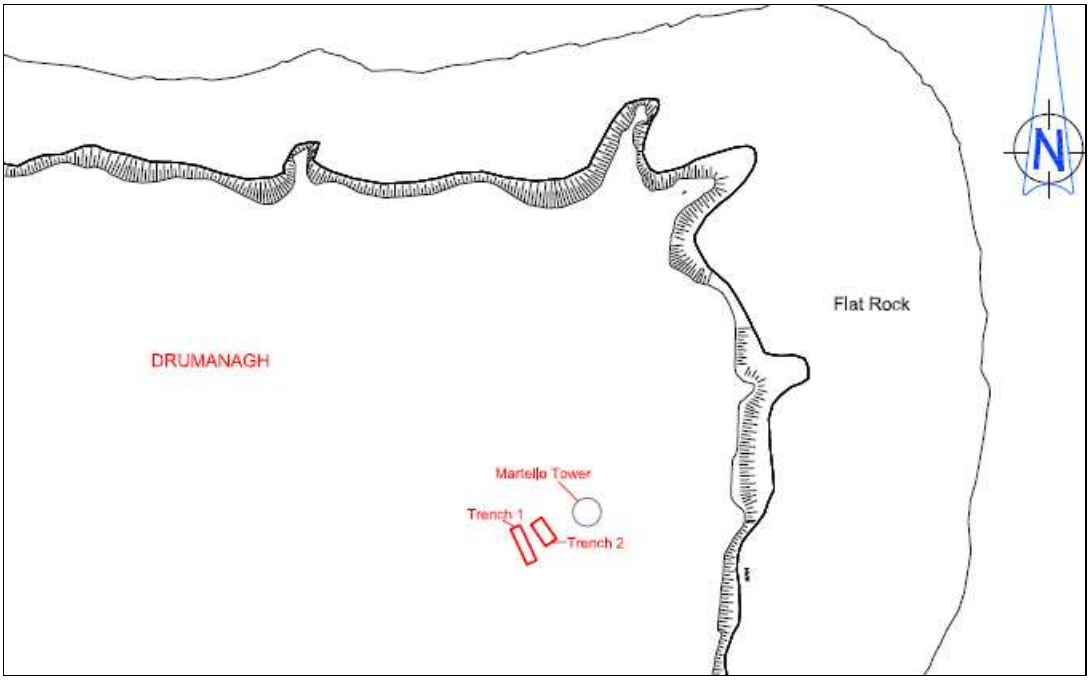


Fig. 17: Season I, Trench layout, at scale 1:2000

2018 Ministerial Consent: C786/E4805

Season I of Digging Drumanagh was undertaken by Christine Baker, Community Archaeologist, Fingal County Council over 10 days between 21 -31 May 2018. The focus of the 2018 season of excavation at Drumanagh promontory fort was the Martello road in the vicinity of the early 19th century Martello tower, towards the eastern limit of the headland. Two trenches (T1 and T2) were excavated and the level of natural subsoil (hitherto unknown) was attained in both trenches; the nature and construction of the Martello road was investigated and the level of impact of its construction on earlier stratigraphy ascertained.

Plate 5: Antler combs. Photograph: John Sunderland

The insertion of the Martello road impacted on Iron Age activity that as characterised by the recovery of two antler combs which were for personal use and probably locally made (Katharina Becker pers. comm.). Two sherds of Dressel 20 pottery were also recovered from what would have been the original ground level disturbed by ploughing to the south of the Martello road. This pottery was from amphorae used for the transportation of olive oil. Dressel 20 was produced between the 1st and 3rd centuries AD in the Roman province of Baetica in Southern Spain. The hilt of a Raftery Type 2b/Rynne Ultimate La Téne sword was also recovered from this disturbed area. Carved from bone, the hilt would have come from a small, almost dagger-like sword which was considered to have developed in the 2nd-3rd centuries AD, away from the direct influence of the Roman military (Siobhan Duffy pers. comm.).

Plate 6: Sherds of Dressel 20 from Drumanagh; amphora

A number of fragments of human bone were also recovered form the Season I excavation and examined by Dr Linda Lynch. These fragments include the cranial fragment of a female individual aged between 18 and 45 years at the time of death. From a disturbed context, the fragment returned a radiocarbon date of BC 170 – cal. AD 52 (UBA-38844; 2042+/-44 BP, 95% probability). A long bone identified as an adult femur was recovered from the area south of the Martello road which returned a date of cal. BC 49 – cal. AD 118 (UBA-38843; 1976+/-35 BP, 95% probability). This indicates at least two in this area of the site that were disturbed by the insertion of the Martello road and subsequent ploughing south of it.

Plate 7: Royal Downshire belt brace; Royal Artillery button

There were also extensive remains associated with the Martello tower and its occupants. A belt plate of the Royal Downshire Militia dating to the period 1794-1800 AD was recovered. This was an unusual find in that it was common practice to return all such militia items to a central store. It also predates the construction of the Martello tower by five years. The Royal Downshires were given a commission in the Royal

Artillery of Ireland who were stationed at Drumanagh. A shako plate of the Royal Artillery and two buttons were also recovered.

Plate 8: Layout of Trench 3 , Season II and Trenches 1 and 2, Season I

2019 Ministerial Consent: C786/E4805

Season II of Digging Drumanagh was undertaken by Christine Baker, Community Archaeologist, Fingal County Council over 13 days between 15 -29 May 2019. The objective of the 2019 excavation was to investigate the impact of the insertion of the original approach road to the Martello tower towards the western end of the site. A single trench (T3) traversed the Martello road c.350m west-south-west of the Season 1 trenches. Trench 3 originally measured 20m NS x 5m and extended across the width of the extant Martello roadway. A variation to the agreed methodology to extend the trench by 14sq.m along its eastern limit was agreed with the National Monuments Service, in order to investigate the nature of features impacted by the Martello road. Trench 3 was excavated to subsoil to the east and south, to a maximum depth of 0.45m.

Natural subsoil was attained to the north and east of the trench at an average of 0.35m below present ground level generally and 0.75m below the banks of the Martello road. Natural subsoil was overlain by an occupation layer (F49/50) through which a series of pits, postholes and stakeholes were cut and levelling layers (F39, F40, F36) which were cut by furrows. Centrally to the trench was a distinct metalled surface (F46) and stone platform (F26) which was overlain by a series of gravel deposits (F27, F23) that

formed the surface of the Martello road. Cut by wheel ruts (F24, F25) the road surface was delineated by banks to the north (F34) and south (F33). Topsoil averaged between 0.08m and 0.26m across Trench 3.

Plate 9: Trench 3, aerial photo mid-excavation

A total of 232 artefacts were registered. These can be divided into pottery (87), stone (6), glass (1) and bone (7) artefacts. There were a further thirty three possible worked bone items. Metal finds were divided into iron nails and objects, tiny fragments of copper alloy and two lead fragments. Finds of prehistoric date included a fragment of a long-handled comb, five fragments of bone pins and a carved stone bird.

Plate 10: Weaving comb recovered from F51. Photo: John Sunderland

There are a number of distinct phases of prehistoric activity identifiable within Trench 3. To the north-east of the site was a series of stakeholes and postholes that indicate a structure that appears to extend north and eastwards beyond the limits of the excavation. The next phase of activity was a levelling event or spreading of material to form a surface. This layer was animal bone rich and contained pottery including an amphora base, worked bone tools, copper alloy pins and a spindle whorl. The focus of early activity uncovered during Season II was located centrally to Trench 3 and had been impacted by the insertion and use of the Martello road. Interpreted as a working platform this activity was characterised by a metalled surface (F46), large stone flags (F26) and a series of gravel deposits (F45, F38). Material of probable Iron Age date and artefacts of Romano-British origin were present in both these deposits. Radiocarbon dates from pits and postholes indicate activity with dates ranges from AD 17-139 to AD 253-403.

Plate 11: Stone bird. Photo: John Sunderland

Plate 12: Trench 4, aerial photo post-excavation

2022 Ministerial Consent: C786/E4805

Excavation of a single trench during Season III of Digging Drumanagh community excavation took place over 13 days between 17 -31 August 2022. The focus of the 2022 season of excavation at Drumanagh promontory fort was to establish the nature of a potential trackway, that extends from an area of at the north-western limit of the headland identified as a possible landing place and extends across the promontory to the ramparts, identified on aerial photographs, geophysical survey and hill shade analysis. While there was little evidence of the trackway, a structure was identified and the stratigraphy in this area ascertained. There was a distinct concentration of activity located in the southern 10m of Trench 4 which corresponded with the western limit of a rectilinear hollow, identified post-vegetation removal. Interpreted as a structure this activity was characterised by rectilinear cut (F100) with basal metalled surface (F96/F97)), packed soil (F99, F102), posthole (F93), large stone flags (F79) and a series of internal occupation deposits (F88, F95, F78) and stone disturbance (F70, F77). Material of probable Iron Age date and artefacts of Romano-British origin were present in these deposits.

The discovery of a 1977 aerial photograph subsequent to excavations, shows a linear area of ploughing that is contiguous with what was previously interpreted as a trackway.

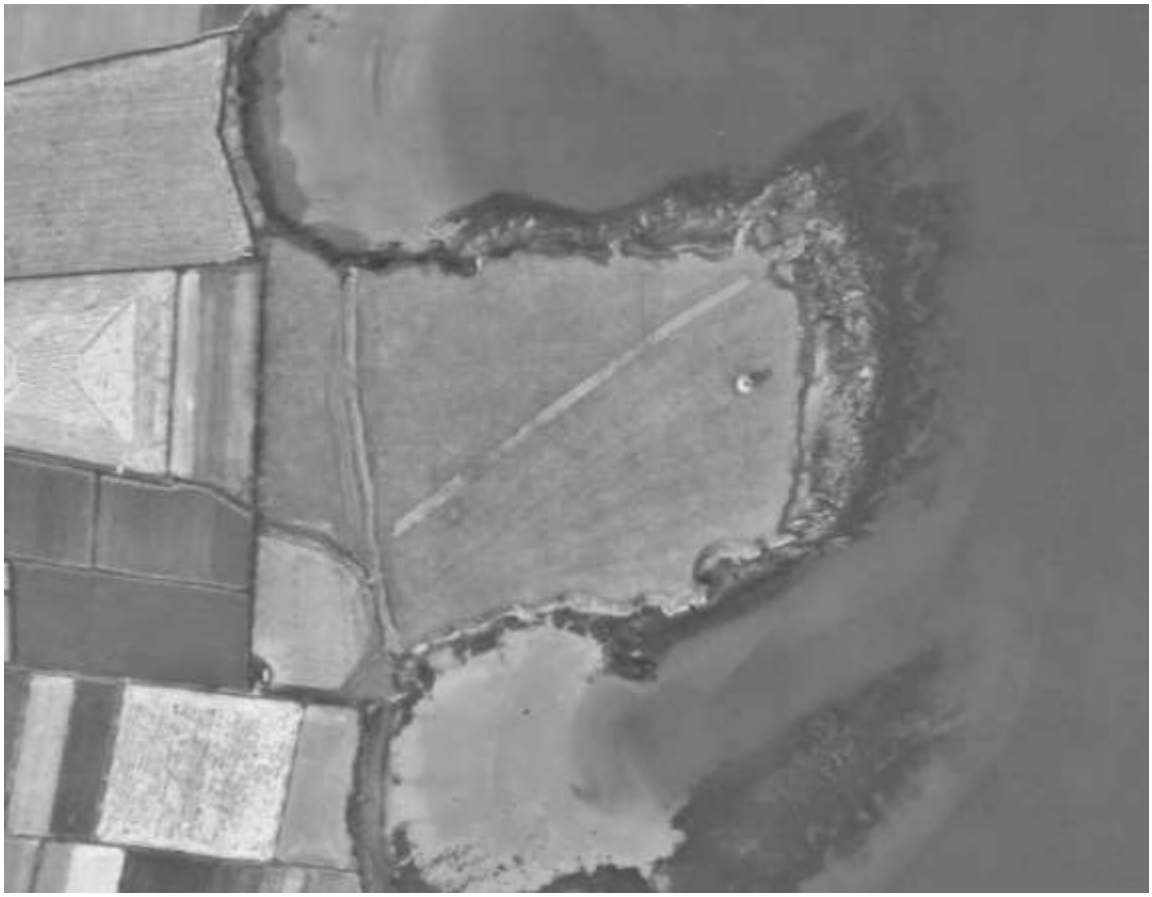


Plate 13: Ploughing, October 1977, Fingal County Council Archive

4 Archaeological Excavation

In order to consolidate the results from the 2022 season, an area of grass cutting took place immediately east of that in Season III in February 2023. Both areas were subject to geophysical survey (Bonsall 2023). There was a contrast between the geophysical results and the topography-where the ground is relatively flat there is a relatively high proportion of geophysical activity evident and where structure F100 was identified as a very noticeable sunken area, there are limited geophysical survey results. Given the disparity between the topographical features and the geophysical survey results the objective of the 2023 excavation was to establish the veracity of the geophysical survey results and examine the topography in relation to the survey results.

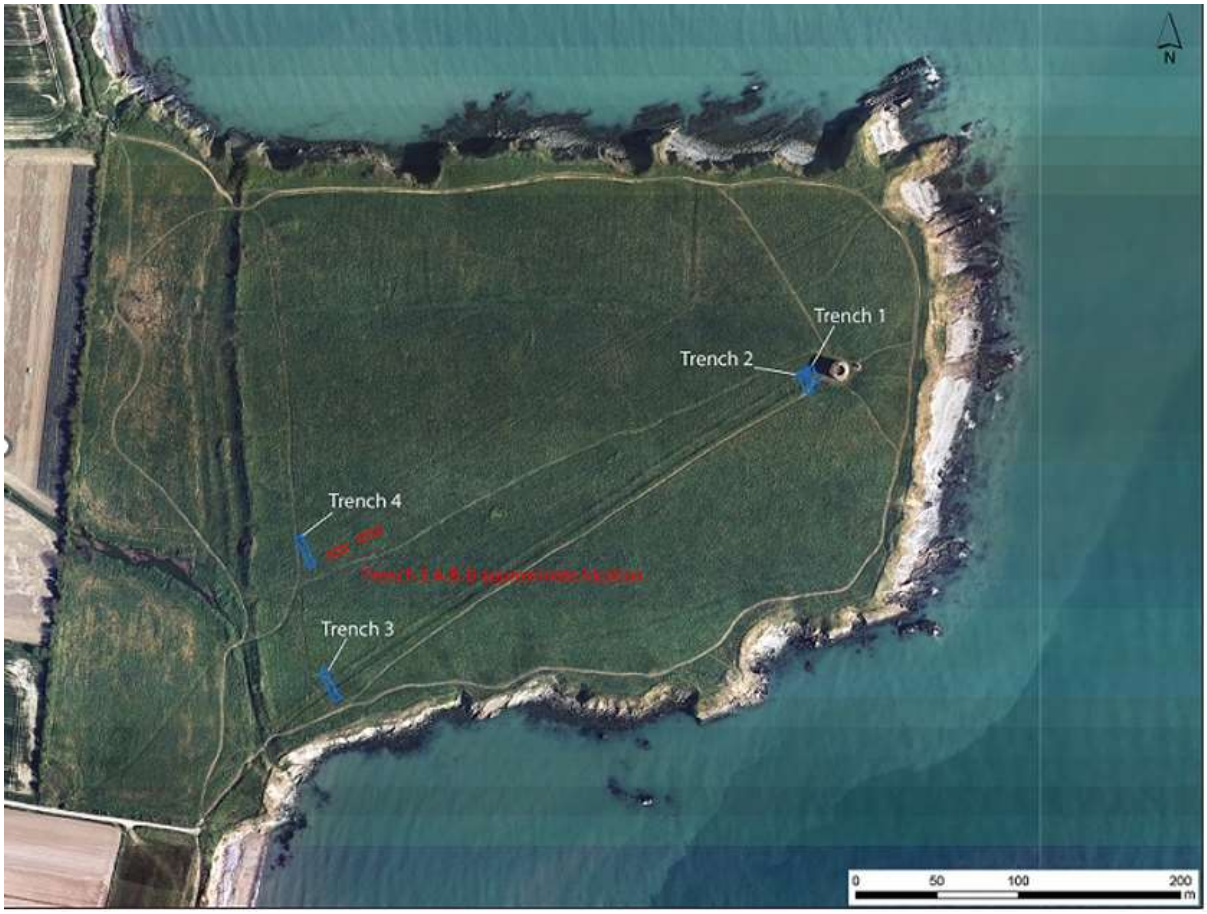


Plate 14: Location of Trenches 5A and 5B in relation to Trench 4, Season III; Trench 3, Season II and Trenches 1 and 2, Season I

An excavation trench, divided into Trenches 5A and 5B, was opened 9m apart on the same alignment in order to investigate the contrast between the geophysical survey results and the topography. Trench 5A measured 15m EW x 4m in width and was located to investigate the geophysical results which included a possible kiln and series

of pits. The topography in this area also rose distinctly but gradually. On the same alignment 9m west Trench 5B measured 7m EW x 4m in width and although there were limited survey results in this area, there was a distinct hollow reminiscent of that in Trench 4 which on excavation transpired to be structure. The ground surface also rises from south to north across this area of the promontory.

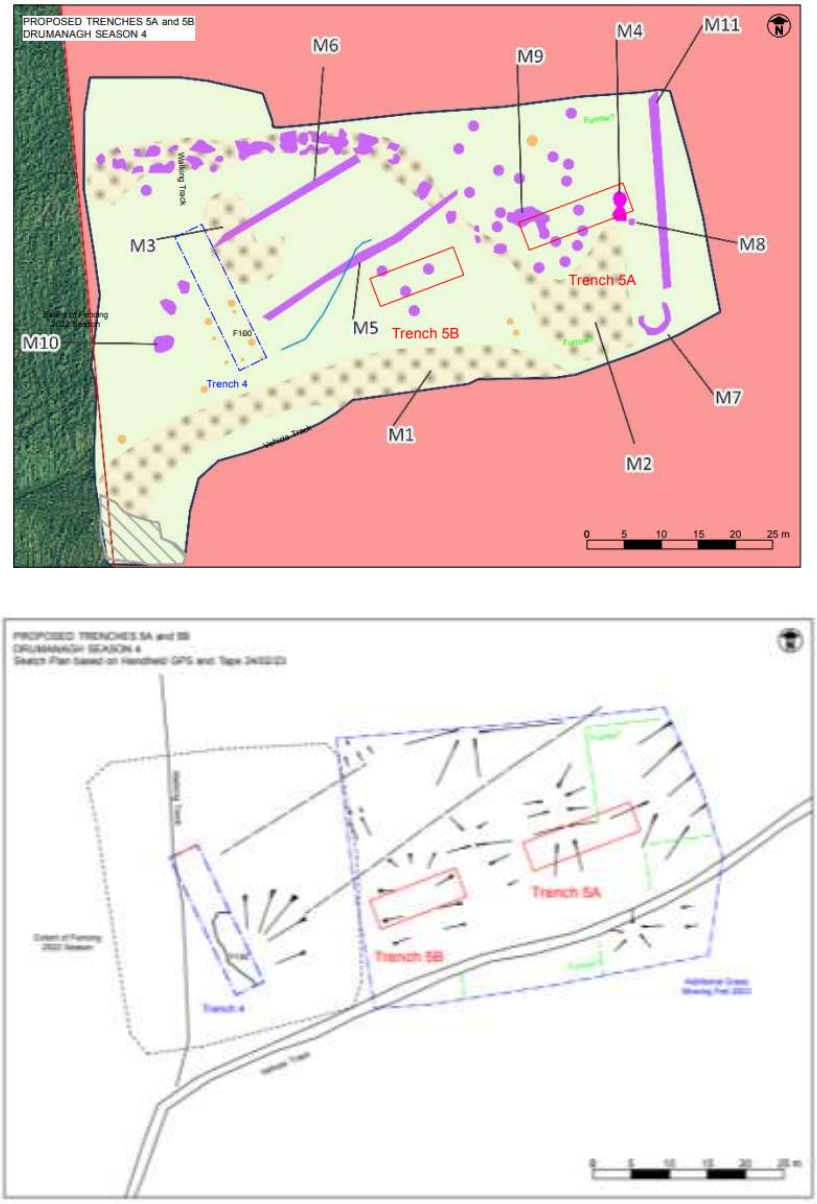


Fig. 18: Proposed Trench5 A & B location relative to geophysical survey and topographical anomalies

4.1 Excavation Stratigraphy

The overall stratigraphy consisted of light yellowish, orange, brown sandy silt subsoil overlain by occupation layers and truncated by the insertion of pits, postholes and a structure, some of which in Trench 5A were traversed by agricultural activity in the

form of furrows. Topsoil comprised a medium brown friable silt clay with occasional stone and roots.

Trench 5A

Trench 5A measured 15m EW x 4m NS . Subsoil was between 0.38m and 0.50m below present ground level, depending on the slope. The western 10m of the trench was characterised by a series of shallow pits (F120, F121, F123, F124, F125, F130, F132, F135), posthole (F126) and depressions (F112, F117) cut into subsoil and overlain by an occupation layer (F105) and large stone deposit F119. These were overlain at the highest point of the surrounding topography by a stone dump (F104). The eastern 5m of the trench which coincided with a drop in ground level was dominated gravelly layers (F111, F115) cut by two large bell-shaped pits cut (F108; F142) and a recut waste pit (F122). Layer F111, F115 Evidence for later agricultural activity comprised a series of NNE/SSW aligned furrows (F103, F106, F107,). Topsoil averaged 0.22m across Trench 5A.

Plate 15: Trench 5A post-excavation

Trench 5A-Subsoil

Feature F118

The natural interface layer that extended across Trench 5A consisted of soft mottled yellow-orange-brown sandy silt with moderate unsorted stone. Sterile.

Trench 5A- Early Features:

The majority of these features were pits located in the western 10m of Trench 5A and are characterised by being cut into natural subsoil and stratigraphically under cultural layer F105, F127 and stone deposit F119.

Shallow Pits

A total of eight shallow pits were located on the higher ground within the trench under cultural layers F105 and F127.

Plate 16: Area of shallow pits, Trench 5A, facing north

Feature 117

Originally thought to be a pit this irregular area 1.3m NS and 0.55m EW was located in the north-west corner of trench 5A. It had a maximum depth of 0.21m but no defined cut. The fill was a light yellow brown mottled silty clay which resembled the glacial subsoil but was much looser. There was no cultural material and appears to have formed by pooling. This feature was overlain by layer F105.

Feature 125

Part of a shallow pit area in the south-west corner of Trench 5A, this feature was cut into mottled orange-brown subsoil F118 and was itself cut to the south by pit F123. Uneven it measured 0.93m EW and 0.5m NS with a maximum depth of 0.26m. The fill comprised a dark grey silty clay with a large stone inclusions and small fragments of animal bone. This feature was overlain by layer F105.

Feature 123

F123 appears to have cut though a similar shallow pit (F125) into the mottled orange-brown material F118. The cut which was gentle sloping and uneven, with an uneven base sloping into the corner measured 1m EW x 0.56m NS and 0.16m in depth. The basal fill consisted of a reddish brown silt with few inclusions. The upper fill (F123:1) comprised dark greyish brown silt with angular stones and some bone. A tracked stone (123:1); copper alloy flakes (123: 2, 3), flint debitage (123:4) and a bone tool (123:5) were recovered from this feature. This feature was overlain by layer F105.

Feature 124

Located 0.1m north of the southern baulk this was a sub-circular pit 0.7m x0.6m NS with a maximum depth of 0.12m. Cut into the mottled orange-brown subsoil F118, the break of slope was gentle with a relatively flat base. The fill was a mid-grey, brown clayey silt with occasional small stone inclusions. An unfinished bone spindle whorl (124:1) was recovered from the fill. This feature was overlain by layer F105.

Feature 135

Cut into mottled orange-brown interface material (F118) this sub-rectilinear shallow pit was located 0.26m south of the northern baulk. It measured 0.92m EW by 0.56m NS and was irregular in plan with an uneven base. The fill was a mid-grey clayey silt, 0.16m in depth with occasional angular and sub-angular stone inclusions. Animal bone was recovered from this pit. This feature was overlain by layer F105.

Feature 120

Cut into mottled orange-brown soft interface material F118, this feature was one of four shallow pits under the layer F127 and directly under the area defined by the stone deposit F119. The sub-circular pit measured 0.84m EW x 0.66m NS and had a depth of 0.1-0.16m. The cut comprised a gentle break of slope and a relatively even base. The fill consisted of dark brown silty clay with occasional stone and animal bone inclusions. A fragment of copper alloy was retrieved from this fill.

Feature 121

Located c.0.75m east of F120, this pit was in stratigraphically the same position i.e. cut into mottled orange-brown interface material F118, overlain by layer F127 and directly under the area defined by the stone deposit F119. Ovoid in plan, F121 measured 1.1m NS x 1m EW and had a maximum depth of 0.18m. he cut comprised a gentle breaks of slope and a relatively even base. The fill consisted of dark brown silty clay with occasional stone and moderate animal bone inclusions.

Feature 130

This was a circular pit located 0.4m north of pit F121 and stratigraphically the same position i.e. cut into mottled orange-brown interface material F118, overlain by layer F127 and directly under the area defined by the stone deposit F119. Pit F130 measured 0.7m in diameter and had a gentle break of slope and a slightly concave base. The base appeared heat affected and the fill consisted of relatively dark greyish brown silty, 0.16m in maximum depth, with small stone inclusions and animal bones.

Feature 132

Pit F132 was located along the northern baulk and was exposed for 0.8m EW and 0.6m NS. Cut into mottled orange subsoil F118, it was under stone deposit F119. The cut sloped gently down from the south over 0.2m with some red heat affected clay along sides and base. The basal cut had straight sides and a flat base. The fill consisted of a dark brown clayey silt with occasional small stone inclusions. A struck flake was recovered from the fill.

Heat affected deposits

Two areas of heat affected deposits that may represent the remnants of hearths or the clearance of heat affected soil from nearby pits were identified within the area capped by stone deposit F119.

Feature 131

Located 0.3m west of pit F130, and 0.28m south of pit F131 this deposit of heat affected material measured 0.46m NS x 0.4m EW and 0.03m in depth. It was irregular in plan with occasional stone inclusions. A copper alloy fragment was recovered from this deposit.

Feature 129

Located downslope from the high point of the area defined by the stone deposit this was a roughly oval area of in situ burning. Ill-defined by the depressions created by the large stones of F119 removed from above, this area of reddish brown clayey silt measured 0.78m NS x 0.28m EW and 0.095m in depth. Three small samples of unburnt bone were recovered from this deposit.

Posthole

Feature 126

This posthole and postpipe were located at southern baulk of Trench 5A where ground slopes down from west to east and south of stone area F119. The posthole was exposed for 1.15m EW and measured 0.55m NS and was excavated to a depth of 0.30m. The diameter of the postpipe which was located to the west was 0.54m. The feature wasn't bottomed due to the presence of large packing stones (0.4m diam.) in the baulk and an

inability to reach further down in a confined space. Smaller flat packing stones were noted at the western edge of the feature which was steep sided. The base was not ascertained but a probe with a ranging rod infers at least 0.35m more in depth. The cut to the east was gradually sloping. The fill consisted of dark grey-brown clayey silt with occasional charcoal inclusions , which was sampled from near the base (#41). A struck flint (126:3) and three copper alloy fragments (126:1, 2, 4) and moderately large fragments of animal bones were recovered from the fill.

Pits/depressions

Feature 112

Located at the base of slope this feature originally presented as a possible ditch terminus extending for 3m from the northern baulk. Removal of the fill revealed a series of cuts and uneven bases interpreted as intercutting pits and depressions. To the north was a shallow sub-circular pit cut into the sloping subsoil that that measured 1.4m EW x 1m NS and had a maximum depth of 0.15m. This intercut with a truncated depression 0.9m EW x 0.75m NS that was 01.12m in depth. The southern limit of this features was circular in plan and measured 0.7m in diameter and 0.12m in depth. The fill of all these depressions consisted of a dark grey-brown silty clay with large stone inclusions where tumble from F119 and F104 had gathered at the base of the slope. A relatively large amount of animal bone including articulated bones, bird bones and microfauna were recovered from this fill. Finds include a bone object (112:9); copper alloy (112:1, 4, 8); Iron nail (112: 5), an amphora sherd (112: 2), and possible Romano-British pot (112: 3, 6, 7).

Bell-shaped Pits

Identified on the geophysical survey and interpreted kilns, Trench 5A was located to investigate these anomalies. Two large bell pits were partially excavated and found to be recut by a waste pit and truncated by a furrow.

Feature 108

A large bell shaped storage pit storage pit 2.1m min. NNE/SSW and 2.1m WNW/ESE, containing at least six fills, largely representing its later use as a waste pit was the northern of two pits. The profile of the pit sides of F108 are funnel shaped or bell-shaped, widening from a current diameter of 1.5m to an absolute minimum of 2.1m at c.0.75m below the narrowest point. This suggests a closed storage pit. The overhanging morphology caused considerable difficulty during excavation where a combination of an overlying furrow (F103) and mixed transition layer (F141) meant the overhang appeared to represent redeposited fill or a slump of natural subsoil. As a result the western half of the feature, excavated first, was unintentionally overcut, while remaining fully within the footprint of the pit at a lower level. The overhanging slope was almost 45 degrees and concave and showed no sign of shallowing out at 0.7-0.8m

below the upper lip, suggesting that the pit may be considerably deeper and wider than exposed. The base of the pit was not identified at any point, although the lowest identified fill (F108:6) was soft redeposited natural containing bone.

Plate 17: Bell-shaped pits pre and mid excavation

The south-east quadrant of the pit was excavated to 0.4m and the fill extending under the overhang only pursued in the north-east. The upper fill (F108:1) measured 0.4m in maximum thickness and consisted of a dark grey to black friable clayey silt with frequent c, 5%, angular and subangular stones (0.03-0.1m diam.) and frequent smaller stones (0.01-0.02m diam.) with frequent animal bone (large fragments). A large number of finds were retrieved from this fill including antler off cuts (108: 9, 40, 54); Bone pin (108:15); Bone scoop (F108:56); Ceramic weight (108:13); Cu alloy 9108:8, 24, 25, 37, 38); Glass ball (108:36); iron objects (108: 11, 32-34); Possible enamel (108:44); Track stone (108:27); Hone stone (108:58); stone (58, 61). In addition many of the finds with general F108 attribution may relate to this upper layer as they relate to the initial excavation of western half of the pit. Fill of F108:1 is very similar to F122:1 suggesting that both pits may have been open to a depth of 0.4-4m at the same time. It overlay F108:2, mid grey clayey silt 0.25m in thickness, with a firm surface characterised by lumps of orange ash and small (<0.1m diam.) flat stones, becoming looser with depth. Occasional fragments of bone and frequent charcoal inclusions. The compression of the upper 0.08m of the surface suggests it may have been exposed for some time before deposition of F108:1 and the smaller amount of bone and concentrations of ash suggest a different origin to the former. Finds retrieved from this fill include copper alloy fragments (108:49, 52) and stone (F108:53). The next fill F108:3 was a yellowish pale

brown loose clayey silt, 0.08m-0.12m in thickness, with several (<5%) rounded stones (0.1m diam.) suggestive of re-deposited subsoil. This fill has a dished upper surface and a concave profile and included frequent animal bone and occasional charcoal. Finds include a possible crucible fragment (F108:43); copper alloy (F108; 57) Iron nail (F108:12). F108:4 was a distinctive charcoal rich black silt 0.04-0.1m in thickness, present beneath the overhanging edge parallel to its slope. It contained large chunks of charcoal, no bone and no finds. Despite physically overlying F108:2-6, stratigraphically F108:4 appears to be earlier, possibly representing the remains of a wooden lining of the pit. Alternatively the fill may represent the infilling of later silts into the void created by the contraction of the lower fills. It appears that 108:4 was present around the full circumference of the pit at a level 0.35-0.4m below its lip and continuing below the limit of excavation. F108:5 was a distinctive mid-grey sticky silt with a greenish tinge and very frequent inclusions of large well-preserved animal bone and frequent small charcoal. the base of this fill sloped down west to east, being at least 0.3m thick against the eastern baulk but only 0.05m thick at the north extent. No finds were recovered but and a large quantity of well-preserved bone was left in situ as this fill was bottomed in its entirety. The lower fill F108:6 was a yellowish light brown layer similar to F108:3 and likely also to represent redeposited natural. It was the lowest layer identified but was soft and seem to contain charcoal and occasional bone. The successive fills 108:2/108:3/108:4/108:5 appear to represent the re use of a storage pit as a waste pit with layers separated by redeposited natural. F108:4 may represent a burnt/decayed wood/wicker lining at the side of the pit. The upper fill F108:1 appears to represent a slightly later infilling of the open pit.

Plate 18: F122 at cessation of excavation in Season IV, facing north

Feature 142

F142 was a large storage pit with a similar funnel or bell-shaped profile defined by steeply overhanging sides as F108. F142 was heavily truncated by cutting and re-cutting of pit F122, which removed much of the upper edges and fills. However F142 fills were noted along the eastern edge of the feature. These were not excavated as time did not allow. The maximum diameter of the upper opening was 1.5m, similar to F108 but this was likely narrower, prior to truncation by F122. The minimum diameter of the pit at 0.6m in depth was 1.9m x 1.8m but the sides were still continuing out at this point and likely to be much deeper and wider. It is also possible that the pit intercut F108 to the north. The overhanging edges have an inverted slope of nearly 45 degrees where identified in the section. The fills noted were an upper fill F141:1 that consisted of dark grey black charcoal rich sandy silt, 0.2m in thickness. This overlay F142:2 a yellowish light brown clayey material 0.05m in thickness, sloping inwards on both identified edges. This overlay fill F141:3, dark grey to black layer with frequent small stones and charcoal inclusions measured 0.2m in thickness. The lower fill (F142:4) consisted of a soft yellowish light brown clayey silt with occasional stone and charcoal inclusions, forming the lowest identified level but unlikely to represent the base of the pit. F122 cut into the surface of this layer but did not go through it. Interpreted as redeposited natural. A single find was recovered from F142, a human maxilla dislodged from the east of the pit.

Plate 19: Recut F108 and F122

Feature 122

Feature 122 was a steep-sided circular pit (1.8m EW x 1.6m NS) containing three distinct fills that was cut/recut into an earlier bell-shaped storage pit F142. F122 which measured 0.6m in depth was first sectioned and then fully excavated. The initial identification of the extent of the feature was complicated by the overlying furrow F103 and the interface layer F141, both of which contained a degree of dark grey staining derived from the spread beyond its upper fill. Excavation was further complicated by the underlying pit F142 which had overhanging edges, making identification of the cut difficult in the western half, which resulted in slight overcutting in the north-west quadrant. The layers of the earlier pit were fully exposed in the eastern half and the layer F142:4 probably redeposited natural, formed the base of F122. The pit F122 was steep sided with a concave base and contained four fills. the upper fill F122:1 was friable slightly clayey silt, 0.3m in thickness, dark grey to black with frequent (>3%) unsorted angular and rounded stones (0.05-0.1m diam.) plus smaller pebbles, frequent animal bone and charcoal, sloping slightly from south to north a bone comb (122:1), clay object (F122:2); spindle whorl (122:3); copper alloy object (122:6) and bone pin (F122:7). This overlay F122:2 a mix of yellowish pale brown clayey material and silty grey-brown material , 01m-0.15m in thickness, with <3% small stones. A single large stone (0.35m x 0.2m x 0.1m lay vertically against the cut within this layer. Frequent fragmentary bone was recovered from this fill but no finds. The lower fill (F122:3) was a mid-grey silt, 0.3m in thickness, with >5% small angular stone, frequent fragmentary animal bone and frequent charcoal inclusions.

Trench 5A-Layers & Surfaces

Overlying the natural subsoil and early cut features were layers and surfaces, none of which extended across the length of Trench 5A.

Feature 115

Located in the eastern quadrant of Trench 5A, F115 consisted of a light greyish brown silty clay with occasional pebbles and small angular stone inclusions. It extended for 4m NS and a maximum of 5.6m EW. This layer appears to have acted as a bedding layer for the stony layer above it F111. Cut through by pits F108 and F112, this layer overlies subsoil and may form a similar function to F114 in T5B. An iron object (114:1) and copper alloy flakes (114:2, 3, 4) were recovered from this layer.

Plate 20: Layer F111, pre-excavation facing west

Feature 111

F111 was a rough metalled surface set firm light greyish brown silty clay (F115) and extended NS across the width of Trench 5A and for 5.6m. F111 was 0.04-0.8m in depth. A small amount of animal bone, a small blue glass fragment (111:5) , two iron objects (111:3, 4) and a possible clay mould (111:6) were recovered from this layer.

Feature 127

This layer was exposed on removal of the large stone deposit F119 and stony layer F105. F127 comprised very dark blackish brown stony silt that extend 3.3m EW and measured 0.18m in depth. It contained moderate charcoal and frequent animal bone inclusions. This layer covered shallow pits F120 and F121. Copper alloy fragments (127:1-3), a flint flake (127:4), bone objects (127:5,6) and a rubbing stone (127:7) were recovered from this layer.

Feature 105

This layer dominated the western half of Trench 5A. It extended from the western baulk diagonally under stone deposit F104. F105 measured 4m NS and from 7m EW and averaged 0.15m in depth. The layer consisted of a mid-dark brown clayey silt with frequent angular and subangular small stone inclusions. This layer contained frequent animal bone and a range of artefacts including copper alloy flakes, amphorae (105:3) and Romano British pot sherds (105:4, 7); a clay ball (105:15); iron (105:6, 13, 14, 18), bone handles (105:8, 23); a bone pin (105:11); worked bone (105:19); flint (105:16; 22) and stone (105:21). F105 was impact by two furrows (F106, F107).

Feature F141

This feature comprised dark grey-brown stony material with charcoal and bone inclusions. It measured 4m NE/SW by 2m in with and 0.1m depth. On removal of topsoil from the eastern end of Trench 5A, an area of darker soil was visible, roughly corresponding with the geophysical anomalies identified at this location. This was seen to represent, at least partially, the broad furrow F103 which contained dark fill and a number of artefacts including a horseshoe, horseshoe nail and black slip pottery. On excavation of F103, the darker material was still present and ill-defined. This was initially given the number F108, however removal of the stony layer F111 revealed that the spread was likely the interface with the two underlying pits F108 and F122, the upper fill of both being dark grey-brown, black with charcoal that was disturbed. As a result F108 was reassigned to the northernmost pit. F141 is thus interpreted as an interface between overlying material F103 and underlying pit features F108, F122 and F142 where cultural material has been disturbed and mixed with overlying soil.

Stone deposits

Located at the highest point of Trench 5A a large stone deposit overlain by a smaller stone dump was identified just below sod.

Plate 21: Stone layer F119, facing north

Feature 119

Feature 119 was a concentration of large stones (max. 0.5m diam.) that were centrally located within Trench 5, directly under stone dump F104. F119 measured 5.4m EW and 3.38m NS and from 0.16m to 0.24m in thickness, sloping down slightly to the south and markedly to the east. The ground surface was stepped to the east and there was

tumble of larger stones at the base which was contiguous with possible ditch F112. Set into dark stony material F105 and surrounded with topsoil material and smaller stones of F104, amphorae sherds (F119; 3, 4); copper alloy flakes (119; 1, 6), an iron object (119:5), a rubbing stone (119; 2) and possible human remains (119:7) were retrieved from amongst the stones.

Plate 22: Stone deposit F104, pre-excavation, facing east

Feature 104

Located mid-way along Trench 5A this deliberate deposit of stone became visible upon removal of topsoil and was contiguous with the highest point of the immediate topography. Along the northern baulk of the trench the deposit was visible at 0.1-0.15m below present ground level extending to 0.2m below present ground level reflecting the sloping topography to the east. The deposit extended across the extent of the 4m wide trench NS and measured a maximum of 6.6m east-west. The stone deposit consisted of angular and sub-angular stones 0.1m to 0.6m in diameter surrounded by soddy, rooty topsoil material. There was a concentration of larger stones to the east of the feature where the ground sloped distinctly and a thinning out in the concentration of stones towards the southern baulk. This may signify the edge of the deposit or later interference due to the proximity to ground level. The western limit of the stone deposit was impacted by a later plough furrow F107. Animal bone including fish, small bird/mammal, large bones and disarticulated neonate calf bones were identified from this deposit. As was a range of artefacts including a glass bead (104:2); possible glass waste; amphora sherd (104:5, 12, 13, 18), Samian ware (104:4);

iron nails (104:3, 9, 16); copper alloy pin fragment (104:8); copper alloy flakes and objects; worked bone (104:15) and struck flint were recovered from this stone deposit.

Trench 5A-Furrows

A series of furrows extend across site Stratigraphically they are in the same position north and south of the stone deposit F70 that they appear to traverse. The topography slopes down from north to south at c.10m north of Trench 4, which also coincides with the location of the structure and occupational layers. The result is a higher degree of disturbance in the southern 10m of Trench 4 by this agricultural activity and better definition of the furrow in the north half of the trench. Furrows are 0.5-0.7m apart suggesting relatively intensive ploughing.

Plate 23: Trench 5A, furrows mid -excavation, facing north-east

Feature 103

Cut through the interface layer (F141) with pits F108 and F122, this furrow was aligned NNE/SSW and traversed the width of the trench. It measured 1.1m in width and 0.15m in depth. The fill comprised a mid-grey-brown firm clayey soddy silt with occasional angular stone inclusions. Part of a horseshoe (103:3), an iron hob nail (103:1), flint debitage and a sherd of imported Gaulish/Roman pot was recovered from. This furrow was the easternmost of a series of furrows that traversed Trench 5A.

Feature 106

Aligned NNE/SSW this was the westernmost furrow of a series of similarly aligned furrows that traverse Trench 5. F106 measured 4.2m in length, 0.8m in width and 0.17m in depth. The flat based linear cut was filled with filled with loose mid brown clayey silt, similar to topsoil, with occasional large angular stone inclusions. Some large fragment of animal bone, a copper alloy object (F106:1) and iron object (F106:2) were recovered from this feature.

Feature 107

Located approximately 1.5m east of similarly NNE/SSW aligned furrow F106, furrow F107 was cut into stony layer F105 and measured 0.6-0.75m in width. The cut was less well defined than that of F106, and shallower averaging 0.4m in width and 0.18m in depth. The fill consisted of loose mid brown clayey silt, similar to topsoil, with occasional large angular stone inclusions. A total of four samples of animal bone, a flint flake (F106:1) rubbing stone (F106:2) and copper alloy fragment (F106:3) were recovered from this feature.

Trench 5A-Topsoil

Feature 1

Topsoil within Trench 5A consisted of medium brown silty clay of friable compaction and small stone inclusions with root intrusion. It measured from 0.15m to 0.22m in depth, depending on slope, and contained frequent animal bone. A total of 47 artefacts were retrieved from the topsoil including Romano-British pottery, amphorae; prehistoric pottery; glass fragments, Romano-British glass, and a hone stone.

Trench 5B

Trench 5b measured 7m EW x 4m NS . Subsoil was between 0.38m and 0.40m below present ground level, depending on the slope. The eastern end of the trench characterised by a structure comprised of a shallow cut (F139), basal metalled surface (F137), cultural layers (F136, F140, F110) topped with large stone flags (F109). and large stone deposit F119. Towards the western baulk of the trench was the western end of a large rectilinear pit (F116). Between these was a stony surface (F113). In contrast to all the trenches thus far excavated at Drumanagh, including Trench 5A there was no evidence of later agricultural furrow activity. Topsoil averaged 0.12m-0.20m across Trench 5B.

Plate 24: Trench 5B, post-excavation

Trench 5B-Subsoil

The natural subsoil in Trench 5B consisted of mottled yellow-orange-brown sandy silt with moderate unsorted stone. Sterile.

Trench 5B-Structure

There was a distinct concentration of activity located in the eastern 3m of Trench 5B which corresponded with the eastern limit of a distinct hollow. Interpreted as a structure this activity was characterised by rectilinear cut (F139) with basal metalled surface (137), large stone flags (F109) and a series of internal occupation deposits (F136, F140, F110).

Plate 25: Iron Age Structure, pre-excavation, facing south

Feature 139

F139 comprises the western extent of a sub-rectangular cut which creates a slightly dished broadly level, terraced surface. Measuring a maximum of 4.5m NNE/SSW by 2.8m ESE/WNW this cut was sub-rectilinear with a narrow extension at north-east and was at its deepest to the north-east and its shallowest to the south-west which corresponds to the slope into which it is cut. As the overlying metalled surface F137 was not removed during excavation the visible extent of slope was 0.07m-0.10 in depth. The cut constricts to 0.8m in width at the north-east suggestive of an entrance feature from higher ground to the north. F139 cuts through layer F114, except in the south-east corner of trench 5B where only underlying subsoil is visible.

Plate 26; Metalled surface F137

Feature 137

F137 comprised a metalled surface, located within cut F139. This surface was exposed for 4.5m NNE/SSW by 1.6-2.7m WNW/ESE but not removed. F137 consisted of a consistent layer of small angular and round stones ranging from 0.01-0.02m in diameter to 0.03-0.04m diameter with some larger flat stone inclusions. These stones serve as a compact metalled surface at the base of activity, similar to F96 in Trench 4. It overlay natural subsoil and falls for a total of 8cm across 4.5m from north-east to south-west and 6cm over the 2m exposed east-west, suggesting a level but gently sloping surface. The surface was noticeably higher in the south-east, creating a gently dished profile within the cut itself.

Feature 136

Located in the south-east corner of Trench 5B, this friable layer while pressed in and around underlying metalled surface F137 but was not noticeably compact. It extended for 3.7m NE/SW and 1.4, NW/SE and measured 0.01-0.03m in depth. F136 consisted of a mid-greyish brown silt, characterised by a high concentration (40%) of seashell of multiple species including periwinkles, limpets and whelks. A moderate amount of large fragment animal bone was recovered from this layer and a piece of worked antler. The layer included roughly 5% small, unsorted stones and concentration of shell across the extent of the layer and only occasional charcoal. Sampling was conducted on a rough grid in order to identify variations in the deposition and make-up. It is not clear whether this layer represents shell-related activity on metalled

surface F137 or the deposition or spreading of a shell midden from nearby. Layer F136 is however very distinct from the loose overlying fill F110, and it clearly represents a primary phase of deposition over metalled surface F137. A perforated stone (136:1) and worked antler (136:2) were retrieved from this layer.

Plate 27: Iron Age Structure, mid-excavation, facing east

Feature 140

This was a thin (0.01-0.02m depth) silty layer measuring 1.6m NS by 1m EW, directly overlying metalled surface F137, representing activity on the surface, prior to the deposition of F110. F140 consisted of soft almost pure silt with <3% small, rounded stones and occasional flat stone (0.05-0.20m diam.) inclusions. The mid-brown silt was soft but well integrated with the stones of metalled layer F137 and very distinct from overlying layer F110. A moderate amount of animal bone was recovered, very little charcoal and no seashells. This layer was identified during the removal of shelly layer F136 but was distinct from it. It appears roughly contemporary with F136, representing activity on the metalled surface F137, prior to the deposition of F110. A copper alloy pin (F140:1) and amphora sherd (F140:2) were recovered from this layer.

Feature 110

F110 consisted of a mid-grey-brown stony fill of loose silty material containing c.15% rounded and sub-angular cobbles (0.06m-0.1m in diam.). Larger stones measured 0.25-0.3m in diameter with a thickness of 0.05-0.08m. This layer was visible extending in and around the large stones of F109 and extending beyond them to the west, where

this layer was contiguous with the cut F139. F110 had maximum dimensions of 4.4m NNE/SSW x 3m WNW/ESE and a maximum depth of 0.2m. It contained frequent large fragmentary animal bone including intact mandibles and occasional charcoal. F110 was distinctly loose and friable with no indication of compaction where it sat directly onto the underlying surface F137. This suggests that it was not in situ domestic material but had been redeposited from elsewhere infilling cut F139 after surface F137 had gone out of use. Bone objects, a bone bead (110:7); glass bead (110:4); Roman pot (110:20); copper alloy pin (110:3) and possible stone counters (110:2, 6, 27) were recovered from this deposit. On removal of F109 a patch of darker material apparently containing a concentration of burnt bone was identified at the east of the layer directly under the F109 stones. The disc pin (110:3), glass bead (110:4) as well as possible gaming counter (110:6) were recovered.

Feature 109

F109 was characterised as a large stone deposit, located at the east end of trench. Exposed as a roughly level surface, tilting downwards very slight to the east and west by a few centimetres, this was created from c.40 flat stones measuring 0.3-0.7m in diameter and from 0.1m to 0.3m in thickness. The significant majority of these stones were sub-square in plan with dimensions of 0.4m x0.4m 0.2m, which suggests deliberate selection of stones with these characteristics, as the geology varied from fragmented shale to smooth limestone. The surface created while roughly level is markedly uneven and there is no indication of packing in between stones or use of soil in general to create a surface-the stones sit directly underneath a noticeably soft stone free topsoil (F1). The stone deposit was exposed for 2m north south, narrowing to 0.8m NNW/SSE to the north. In places F109 was represented by a layer of thinner stone (0.1m diam.) and it was particularly difficult to distinguish this layer from that beneath (F110) in the south-east corner of trench 5B.

Plate 28: F116 pit, western baulk, Trench 5A, post-excavation

Pit

A single rectangular pit was partially exposed in the western baulk of Trench 5B.

Feature 116

F116 was a steep sided flat bottomed pit located towards the western bauk of trench 5B. Only two partial sides were visible and were suggestive of a rectangular pit with rounded corners. It measured 2.8m NNE/SSW and 0.7m WNW/ESE with a depth of 0.5m. The fill consisted of a slightly clayey silt with some coarse sand, <5% small, unsorted stones, c.5% orange ash (?), frequent charcoal, occasional shell, occasional medium stones (0.02m-0.1m diam.) and moderately large fragmentary stones. The stony layer F113 overlay and partially infilled the pit to a depth of 0.2m. The ashy material was concentrated in soft crumbly lumps, rather than layers, and the fill was homogenous and quite loose and friable. A small wedge of dark grittier fill was located at the north end of the pit between the base and a long rectangular slab of decaying mudstone. the slab sat directly on the base of the pit. Some additional stones were noted lying along the near vertical eastern cut of the pit but did not appear structural or in situ. Two flints (116: 1,5); Bone object (116: 4, 6, 7); Iron object (116:3) an ovoid ceramic object (116:2) were recovered from this pit.

Layers-Trench 5B

Feature 114

F114 was a soft stone-free layer directly above natural subsoil in Trench 5B. It extended for 7m EW and 4m NS and measured 0.1m in thickness. Characterised as a noticeably stone-free layer of light greyish brown layer of silty clay it contained <30% small, rounded stone and very occasional larger stones (0.4m diam.). Cut by pit F116 to the west and structure F139 to the east it is suggested that F114 represents a topsoil/sod or softer subsoil that was deliberately covered by stoney layer F113 to create dry ground. The few finds, a fragment blue glass (114:1) and two flakes of copper alloy (114:2, 3) and small amount of animal bone were retrieved from the interface with overlying layer F113.

Plate 29: Layer F113, pre-excavation

Feature 113

F113 was a very stony layer, with as a high as 80% poorly sorted rounded, sharp-edged and unsorted stones (.05-0.1m diam.) and c.3% larger stones up to 0.3m diam. The noticeably compact layer was pale greyish brown and extended for 6m EW, 4m NS and was 0.1-0.15m in thickness. The layer dipped into and infilled the probably natural hollow in the surface of F114 and the upper fill of pit F116. It contained frequent large well preserved fragmentary animal bone and iron objects (113:1, 2, 6, 14, 18, 19, 22, 23); nails (113: 4, 5, 7) copper alloy (113:8-12, 15) and antler cut offs (113:13) were recovered.

Topsoil

Feature 1

Topsoil within Trench 5B consisted of medium brown silty clay of friable compaction and small stone inclusions with root intrusion. It measured from 0.15m to 0.22m in depth, depending on slope, and contained frequent animal bone. A total of 37 artefacts were retrieved from the Trench 5B topsoil including Romano-British pottery, amphorae; prehistoric pottery; struck flint, glass fragments, iron objects and a trumpet brooch.

4.2. Samples & Finds

As there was no running water at Drumanagh animal bone washing and artefact processing took place during a Drumanagh Post-Ex week (14-17 August 2023) in Swords Castle.

Plate 30: Drumanagh Post Excavation week, Swords Castle

Soil Samples

A total of twenty-three soil samples were retrieved and all were sent for environmental analysis. These samples, maximum of 20 litres in volume were taken from stratigraphically early features or rich cultural layers. Seventeen samples were taken from Trench 5A including from pits (#23, #25, #26, #29, #30, #32, #41) postholes (#36), burnt clay (#42), bell-pits (#39, #40, #43) recuts (#27, #28) and associated layers (#22, #31, #44). Another (#20) from layer F98 The shelly layer in Trench 5B was sampled in quadrants (#33, #34, #35, #37, #38) and fill from the pit (#24). These samples will undergo analysis for archaeobotanical remains.

Bone Samples

The sampling methodology for bone was to hand-retrieve all bone from all features and layers. Additional retrieval was from dry sieving of the layers. A total of 145

samples were registered from layers and features including a substantial amount of cattle bone and small mammal bones.

Plate 31: Soil sampling in Trench 5A

Artefacts

Artefacts were hand-retrieved during excavation, identified with a detection device which was used to scan the spoil heaps, and retrieved through extensive sieving. A total of 334 artefacts were registered. This can be divided into antler (10), bone (40), pottery (53), metal (152), flint (31), glass (11) and stone (34) artefacts.

Plate 32: Brian with a sherd of amphora

Pottery:

A total of 53 sherds of mainly imported pottery were recovered during the excavation. A number were substantial sherds of amphorae., comparable to fragments Dressel 20 amphora recovered during Seasons I -III. Dressel 20 amphorae were used for the transportation of olive oil and were produced between the late 1st-3rd centuries AD in the Roman province of Baetica, Southern Spain (Williams & Peacock 1983). Five sherds, including two rimsherds, have been preliminarily identified as Samian ware (Terra sigillata), a red-gloss pottery that was mass produced from the 1st-3rd centuries AD, first in northern Italy, then Gaul and Colchester in Roman Britain. Two sherds of the same vessel of possible Gaulish ware were retrieved and there at least two tiny fragments of prehistoric, potentially Bronze Age pottery were identified.

Plate 33: Bone comb. Photo: John Sunderland

Antler and Bone:

A total of 10 antler and 40 bone artefacts were registered. The majority of the antler finds were offcuts or worked antler but the artefacts included an antler handle and an elongated antler die (F108:54). The majority of the bone finds consisted of modified animal bones that have been cut at an oblique angle, smoothed and shaped to form bone points, tools or tips. Analysis of comparable tools from Iron Age sites of south-west Britain have been defined variously as gouges, awls, and weaving shuttles (Rathgaber 2010). At Danebury hillfort, the majority of these tools classified as gouges were made from sheep longbones and although interpreted as 'all-purpose' tools were further interpreted by wear pattern as possible pin-beaters in the weaving process or having been used in hide dressing (Sellwood 1984, 387). Two unfinished animal bone spindle whorls have also been recovered indicating their manufacture on site. A long handle bone comb retrieved from F122, indicating textile processing and manufacture in this area.

Plate 34: Warren with stone spindle whorl

Stone:

A total of 34 stone objects were registered as potential objects, although quite a number appear to be the result of natural processes. A fragment of a possible stone bracelet was recovered from topsoil in Trench 5A. A stone spindle whorl (F122:3) and potential polishing stones were indicative of craft and textile manufacture, as were stones with perforations which may have acted as weights.

Flint

A total of 31 samples of flint were recovered mixed throughout the layers and features, including struck flint, flakes and debitage. Some appeared to be field flint common along this coastline; other examples were of struck flints evident of processing.

Plate 35: Fragment of blue and white glass bead retrieved from sieving by Rosaleen

Glass:

A total of 11 prehistoric glass artefacts were registered. Four were clear glass fragments, while three were droplets of cobalt blue glass which may indicate glass manufacture, or at the least glass finishing on site. The glass beads are distinct and include a blue glass bead (F110:4) a fragment of blue and white glass bead (F104:2) and a glass ball (F108:36), all of which have parallels in the Roman world.

Metal finds:

A total of 152 metal objects were recorded. Of that a total of 92 objects were of copper alloy, the majority of which were flakes or lumps of indistinct copper alloy. Also included were several fragments of pins and a trumpet fibula (F1:647) which was recovered from topsoil. The majority of iron finds were classified as objects, their typology or function not being readily identifiable. There were a total of 13 nails present. Just over half were associated with the later features in Trench 5A-topsoil, stone dump and furrows. Likewise four iron nails were recovered from the layer

immediately beneath topsoil in Trench 5B. However iron nails were associated with the recuts of each bell pit in trench 5A.

5 Discussion

The focus of the 2023 season of excavation at Drumanagh promontory fort was to investigate the anomalies identified topographically and on the geophysical survey. A structure, stone deposits, and bell-shaped pits were identified and the stratigraphy in this area ascertained.

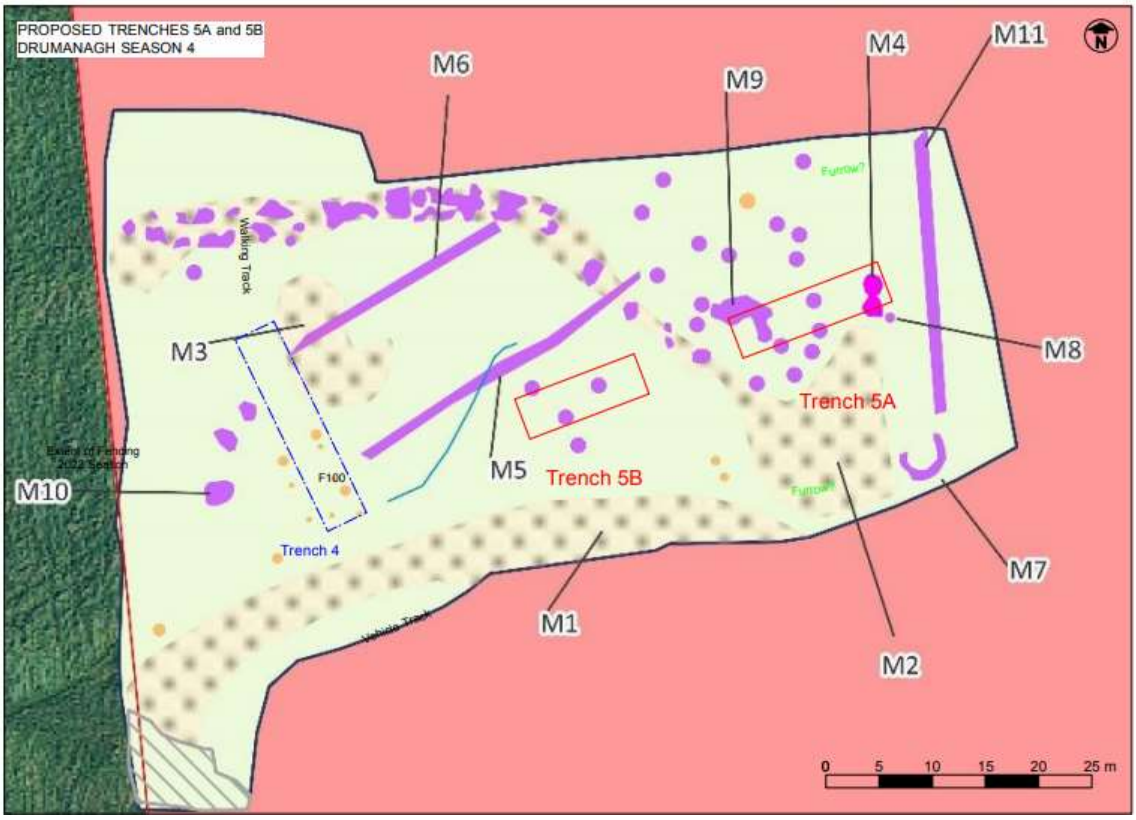
Plate 36: Trench 5A mid-excavation

Efficacy of Geophysical Survey

The geophysical survey of the site recommended, comprised high-resolution magnetic gradiometry (spatial resolution of 0.1m accuracy) and an Electromagnetic Induction Survey (EMI). The latter collects electrical conductivity data (quadrature) where a high conductivity anomaly, such as that caused by a ditch, will produce a comparable low resistance anomaly. It also collects In-phase data which responds to the magnetic content of the underlying soil, and as such in-phase data is similar to magnetic susceptibility data. A number of potential archaeological features were identified across the six EMI datasets and the magnetometry (Bonsall, 2023). Interestingly there were no indications in any of the data sets of the rectilinear structure (F100) that had been partially exposed (c.10m N–S x 2m E–W) in the Season III excavation.

By cross-referencing the anomalies identified across the different datasets, five anomalies provided 'increased confidence' in the interpretation as they appeared consistently across multiple datasets and had different measurable properties.

Anomaly M4/MSa5 (Magnetometry/EMI) from the data corresponded to strong magnetic susceptibility and was interpretated as a possible kiln feature. On excavation this anomaly transpired to the be the recut bell-shaped pits. Anomaly M9/MSa2 which corresponded to an area interpreted as burning is partially within Trench 5A and does not correspond to burning or any defined features within Trench 5A. Anomaly M5/MSa1 although outside the scope of this year's excavation corresponds with what presents as a trackway, but transpired to be contiguous with 1970s ploughing, while a pit, anomaly M8/MSa3 was located outside Trench 5A. Anomaly M11/MSa7 interpreted as a potential ditch or boundary corresponds to the topography of the ground where there is a distinct linear feature.



The caveat is of course that those anomalies that appear only in one data set should not be discounted as archaeological features, as they simply represent features that have only one measurable property. To that end there are a number of potential archaeological pit type anomalies on the magnetometry data within Trench 5A. One of these along the southern baulk proved to be posthole pit F126.

Trench 5B was located specifically to investigate the contrast of the geophysical survey and topographical results and was placed across the hollow that was similar to that identified in Season III. The Season III hollow had transpired upon excavation to be the rectilinear structure F100 was not picked up on any of the datasets. Likewise the

hollow and rectilinear structure remains (F139) excavated in Season IV were not identified in the geophysical datasets. Neither was the large pit F116. A potential archaeological pit type anomaly on the magnetometry data did not correspond to any features within Trench 5B.

Overall the application the two geophysical methodologies high-resolution magnetic gradiometry and an Electromagnetic Induction Survey (EMI) proved limited in identifying the features excavated. Although the presence of large stone deposits in the trenches of Season III and Season IV may be better identified through other earth resistance surveys, it was the topographical anomalies that aligned best with the excavation results.

Agricultural activity

Aerial photos, satellite image and LiDar data all show relict field boundaries across the Drumanagh headland. Dating to the eighteenth and nineteenth centuries there was significant land management taking place on the site. The Season II excavations uncovered evidence for cultivation in the form of linear furrows aligned NNE/SSW that pre-dated the construction of the Martello road. Likewise the agricultural activity uncovered in Season III, also consisted of linear furrows aligned NNE/SSW. In the current season of excavation similar agricultural furrows, also aligned NNE/SSW were also identified in Trench 5A. However no furrows were identified in Trench 5B.

Plate 37: Relict field boundaries in winter light https://www.facebook.com/isitbizitpicz/about

Earlier Activity

Prehistoric activity and artefacts dominate Trench 5A and 5B. On the higher ground to the east shallow pit activity is capped with a layer of large stones and topped with a stone deposit. In the lower lying hollow to the west the remains of a structure, capped by large stones, comparable to two others identified in previous seasons of excavation. Large pits have been identified close to both concentrations of activity, separated by surfaces probably constructed to create dry ground.

Plate 38: Structure, Trench 5B

There was a distinct concentration of activity located towards the eastern baulk of Trench 5B which corresponded with a north-south aligned rectilinear hollow, identified on the ground. Interpreted as a structure this activity was characterised by rectilinear cut (F139) with basal metalled surface (F137), cultural deposits (F136, F140, F110) and large stone flags (F109). Material of probable Iron Age date and artefacts of Romano-British origin were present in these deposits.

The rectilinear hollow measured c. 15m NS x c.8m EW and is located approximately 10m east of the 10m N x c.7m EW hollow identified in Season III and excavated as a structure (F100). Excavation of the western limit of the rectilinear structure indicates a shallow sub-rectilinear cut with basal metalled surface that sloped down into the occupational space. A potential entrance way is evident to the north of the structure.

The large stones within are contained within the cut and have been interpreted as a stone capping for the structure. Internally were animal bone and a shell rich deposits.

Plate 39: Trench 4 Structure 2

Plate 40 Trench 3 Structure 1

The closest comparison for this structural activity was excavated in Trench 4 in 2022 and in Trench 3 in 2019. Interpreted as a structure this activity in Trench 4 was defined

as a hollow c.10m NS x 7mEW. Excavation of the western limit of the hollow was characterised by rectilinear cut (F100) with basal metalled surface (F96/F97), packed soil (F99, F102), posthole (F93), large stone flags (F79) and a series of internal occupation deposits (F88, F95, F78) and stone disturbance (F70, F77). Similar activity in Trench 3 had been truncated by the insertion of the Martello Road so was not defined as being within a hollow. The activity was interpreted as a working platform the activity in Trench 3 was characterised by a metalled surface (F46), posthole (F67), large stone flags (F26) and a series of animal bone and artefact rich deposits (F45, F38).

A specific typology of structure appears to be emerging. In three distinct areas of the promontory an identical morphology is matched by a similar layout and stratigraphy in Trenches 3, 4 and 5B. All are cut/overlying natural subsoil and the elements -basal metalled surface, possible entrance to the north with attendant posthole, sloping internally, large flags, Romano-British artefacts from internal layers-are notably similar. But what was their function?

All three structures contained notably animal bone rich deposits. In F45 of Structure 1 (Trench 3, Season II, 2019) cattle, sheep/goat and pig were identified in relatively large numbers. Also present were horse, dog and cat and wild species such as fox, hare, wild boar, red deer as well as birds (cormorant and possible Brent goose) (Carden, 2023). Similarly in F88 of Structure 2 (Trench 4, Season III, 2022) cattle, sheep/goat and pig were identified in relatively large numbers. Also present were horse, dog and cat and wild species such as hare and deer. Birds present include goose, black-backed gull, crane, buzzard, raptor, raven and a songbird (Duffy, 2023).

In both Trenches 3 and 4 there was evidence for the consumption of meat. Boiling was probably the most common method for cooking meat with the fracturing pattern of some of the long bones indicating the break-up of these bones to aid in the removal of marrow during boiling. There was also some evidence that roasting was at least occasionally employed. In particular, scorching evidence on tooth crowns suggests the roasting of entire carcasses over an open flame, while localised scorching on limb-bones may reflect the roasting of whole or partial carcasses. Roasting requires a higher input both in terms of labour and time and is unlikely to have been a normal daily cooking procedure. In the Trench 4 assemblage, evidence of roasting was more often recorded for pigs, while the small number of deer bones also exhibited evidence of roasting. Pork is considered to have been a major feasting food during the Iron Age and Early Medieval periods (McCormick & Murray 2007, 32; Kelly 1997, 358), while the hunting of deer had associations with status (Kelly 1997, 273-274) and it is not implausible that consumption of venison would be also status related. The presence of younger animals in the assemblage, including some very young individuals, may also indicate occasional feasting episodes: the slaughter of animals before their prime

would have an economic consequence in terms of food production (Crabtree 2004, 65), although some at least may relate to an autumn slaughter pattern, in order to optimise the scarcer winter resources for feeding livestock (McCormick & Murray 2007, 30).

The main domestic herd animals of cattle, sheep, goats, and pigs formed the bulk of the assemblage from both Trench 3 and Trench 4. Their presence at the site was probably primarily as food sources, but there is evidence that they had other uses, both in life (traction, milk, wool) and in death (hides, horns, and bones). Sheep were probably kept for wool, as well as meat; certainly, the recovery of bone spindle whorls at the site suggests that wool was being processed and spun into yarn at Drumanagh (Duffy, 2023).

Despite the proximity to sea and seashsore there was , prior to the current season of excavation, a noticeable paucity of evidence for seashell. Within Structure 3 (Trench 5B, 2023) there was a layer (F139) characterised by a high concentration (40%) of seashell of multiple species including periwinkles, limpets and whelks. It is not clear whether this layer represents shell-related activity on metalled surface or the deposition or spreading of a shell midden from nearby. Likewise could the animal bone rich layers represent a 'tidying' of activity after specific or seasonal events and the deliberate capping with stone to signify the end of the event or mark the area for future use?

The use of large stones and smaller stone deposits to cap or delineate and area of activity also extended into Trench 5A. In contrast to the hollows relating to at least two of the three structures described previously, the stone area in Trench 5A was a relative high point within the surrounding topography. While the underlying activity-cultural layers and shallow pits-extended beyond the area defined by the stones. So while there were a number of closely set shallow pits immediately under the area defined by stone there was also shallow pits of similar morphology to the east west of the area. To the east of the area downslope were another series of intercutting shallow pits which appear to limit this shallow pit activity giving way to a surface that may as in Trench 5B have been constructed to create dry ground.

Little modern ploughing has been undertaken at Drumanagh, farmers having complained of stony ground and broken ploughs. Given the presence of a number of stone deposits and areas of large stone, thus far uncovered through excavation, this is perhaps unsurprising. The large stones with varied geology have similar dimensions across all areas which suggests deliberate selection. The movement of large stones in what may be extrapolated as large numbers from the shoreline would have involved deliberate effort whether to construct footings for structures or capping areas of former activity.

Pits

Appearing as the most consistent anomalies on the geophysical survey, two large bell-shaped pits were uncovered in Trench 5A while in Trench 5B the eastern end of what appeared to be a large rectangular pit was excavated. In Iron Age Britain rectangular pits are comparatively rare, three of which were fitted into early Iron Age houses at Danebury Ring Hillfort and suggested that they may have been storage cellars. While the limited nature of the excavation in this area is noted there was nothing in the vicinity of pit F116 to suggest a house. The rectangular pit in both Danebury and Drumanagh are vertical-sided which as Cunliffe noted 'would have made them unsuitable for the long-term storage of grain because they would have been difficult to seal, but other commodities could more easily have been stored in them' (2013).

The bell-shaped or beehive-shaped pits in Trench 5A are narrower at the top and broadening out lower down reflecting those found in Iron Age Britain where the two main types of grain storage were four-post structures and storage pits. Despite misgivings as to how efficient storage of grain in the damp Irish landscape would be, experimental archaeology has shown (*e.g.*, at Butser Ancient Farm) that storage pits are efficient if sealed correctly. They would be filled to the top with grain and then plugged and capped to make them airtight; hence why they are narrower at the top near the opening, to make this easier to do. Once sealed inside, the grain nearest the edges would be in contact with the small amount of air and moisture also trapped in the pit, and so begin to rot. The bacteria, fungi and moulds causing the rotting would remove most of the oxygen in the pit through aerobic respiration, replacing it with carbon dioxide. Eventually, so much oxygen would be removed and so much carbon dioxide will have accumulated, that it would kill off the very organisms causing the rotting, the internal atmosphere becomes self-sterilising (Reynolds 1979; Cunliffe 1992). The presence of animal bones in what were assumed to be grain pits was also not unusual with at least 40% of such pits at Danebury containing 'deliberate deposits soon after their use as storage silos had ceased (Cunliffe 1992, 70).

Although the pits at Drumanagh were clearly re-used as waste pit the presence of large storage pits, presumably for grain is significant, and not only in terms of surplus production and distribution. The archaeobotanical evidence from Season's II and III indicate that spelt wheat which is not a common cereal at any time in Ireland's past, but it is strongly associated with farming strategies in Roman Britain is present at Drumanagh (McClatchie 2023). Combined with the mortaria recovered from the site and now the bell-shaped storage pits, it indicates that growing, processing, storage and consumption of grain is being undertaken more in line with Roman Britain than that of the Irish Iron Age.

6 Conclusions

The fourth season of excavation at Drumanagh promontory fort has built on the evidence recovered in Season III, identifying an emerging structure type. The work has also raised more questions around the nature of the settlement on site and its occupants. What is clear is that evidence of the Iron Age is just centimetres below the surface. Further post-excavation analysis and radiocarbon dating will allow for the development of a definitive chronology for that activity and will inform the future investigation and management of the site.

Plate 41: Some of Team Drumanagh 2023

The *Digging Drumanagh* project was designed as a Fingal community archaeology project and is an objective of the *Drumanagh Conservation Study & Management Plan*. It is an important aim to engage the wider public with the National Monument in their locality. This year saw the participation of 76 volunteers including local people and those who have taken part in previous Fingal community archaeology projects.

An over-arching final report encompassing specialist contributions and an analysis of the excavation results in conjunction with the historical and architectural evidence will be produced in due course for submission to the Department of Housing, Local Government and Heritage and the National Museum of Ireland.

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November 2023

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It was with great sadness that we learnt that we had lost Eileen Keelan in October 2023. We will remember her cycling over to join in the dig, taking photos and posting about her dig days on her social media. We'll miss the chat and the laughs and all her hard work.

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7 Post-Excavation Programme

All animal bone samples were processed during the Drumanagh Post-Ex week at Swords Castle between 14-17 August 2023. Specialist analysis is ongoing (see below). Dating material will be forwarded for AMS dating once selected in conjunction with the recommendations of the appropriate specialist.

Task	Specialist	Status
Archaeobotanical analysis	Dr Meriel McClatchie	Ongoing
Animal Bone analysis	TBP	TBP
Pottery	TBP	TBP
Small Finds (metal, bone, stone)	TBP	TBP
X-Ray & Conservation	Susannah Kelly	Ongoing
C14 Dating-macrofossil plant remains; human bone; charcoal	Chrono Lab, QUB	Selection of datable material to be undertaken

7.1 Archiving

All digital photographs are indexed. A total of twenty-two plans and section drawings have been scanned. Both have been saved to the Heritage file on the Fingal County Council mainframe. The paper archive is currently with the director and will be scanned and copied for deposition in the both the Fingal Local Studies Archive, Swords and the Collections Resource Centre.

7.2 Dissemination

A summary account will be submitted to Excavations.ie. The results of the excavation will be published in several accessible forms and disseminated through talks and appropriate media.

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Feature Register

Feature	Trench	Description	Dimensions	Over	Under	Artefacts
103	T5A	Cut through pits F108 and F122, this furrow was aligned NNE/SSW and traversed the width of the trench. It measured 1.1m (check?) in width and 0.15m in depth. The fill comprised a mid-grey-brown firm clayey soddy silt with occasional angular stone inclusions. This furrow was the easternmost of a series of furrows that traversed trench 5A.	4m x 1.1m; 0.15m in depth	F108	F1	horseshoe 103:3, iron hob nail (103:1),flint debitage x2 and a sherd of imported Gaulish/Roman pot
104	T5A	Stone deposit. Located mid-way along Trench 5A this deliberate deposit of stone became visible upon removal of topsoil and was contiguous with the highest point of the immediate topography. Along the northern baulk of the trench the deposit was visible at 0.1-0.15m below present ground level extending to 0.2m below present ground level reflecting the sloping topography to the east. The deposit extended across the extent of the 4m wide trench NS and measured a maximum of 6.6m east-west. The stone deposit consisted of angular and sub-angular stones 0.1m to 0.6m in diameter surrounded by soddy, rooty topsoil material. There was a concentration of larger stones to the east of the feature where the ground sloped distinctly and a thinning out in the concentration of stones towards the southern baulk. This may signify the edge of the deposit or later interference due to the proximity to ground level. The western limit of the stone deposit was impacted by a later plough furrow F107.	6.6m EW x 4mNS	F119, F105	F1, F107	Glass bead (104:2); possible glass waste; amphora sherd (104:5, 12, 13, 18), Samian ware (104:4); Iron Nails (104:3, 9, 16); Cu Alloy pin fragment (104:8); Cu alloy flakes and objects; worked bone (104:15) and struck flint.

105	T5A	Stony layer west end of trench. This layer dominated the western half of trench 5A. It extended form the western baulk diagonally under stone deposit F104. F105 measured 4m NS and from? To ?m EW and averaged 0.15m in depth. The layer consisted of a mid-dark brown clayey silt with frequent angular and subangular small stone inclusions.	4m NS x 4m? EW; 0.15m in depth	Pits F117; F120, F123, F124	F1; F104; Cut by F107, F106	Copper alloy flakes (105: 1, 2, 5, 12, 17), amphorae (105:3) and Romano British pot sherds (105:4, 7); a clay ball (105:15); iron (105:6, 13, 14, 18), bone handles (105:8, 230; a bone pin (105:11); worked bone (105:19);Flint (105:16; 22) and stone (105:21)
106	T5A	Furrow west end of trench. Aligned NNE/SSW this was the westernmost furrow of a series of similarly aligned furrows that traverse trench 5. F106 measured 4.2m in length, 0.8m in width and 0.17m in depth. The flat based linear cut was filled with filled with loose mid brown clayey silt, similar to topsoil, with occasional large angular stone inclusions. Some large fragment of animal bone, a copper alloy object (F106:1) and iron object (F106:2) were recovered from this feature.	4.2m NNE/SSW; 0.8m in width; 0.17m in depth	Cut into F105	F1	copper alloy object (F106:1) and iron object (F106:2)

107	T5A	Furrow. Located approximately 1.5m east of similarly NNE/SSW aligned furrow F106, furrow F107 was cut into stony layer F105 and measured 0.6-0.75m in width. The cut was less well defined than that of F106, and shallower averaging 0.4m in width and 0.18m in depth. The fill consisted of loose mid brown clayey silt, similar to topsoil, with occasional large angular stone inclusions.	4.2m NNE/SSW; 0.6-0.75m in width; 0.18m in depth	Cut into F105	F1	flint flake (F106:1) rubbing stone (F106:2) and copper alloy fragment (F106:3)

108	T5A	Large bell shaped storage pit. A large storage pit 2.1m min. NNE/SSW and 2.1m WNW/ESE, containing at least six fills, largely representing its later use as a waste pit. The profile of the pit sides are funnel shaped or bell-shaped, widening form a current diameter of 1.5m to an absolute minimum of 2.1m at c.0.75m below the narrowest point. This suggests a closed storage pit. The overhanging morphology caused considerable difficulty during excavation where a combination of an overlying furrow (F1030 and mixed transition layer (F141), the overhand appeared to represent redeposited fill or a slump of natural subsoil. As a result the western half of the feature excavated first, was unintentionally overcut, while remaining fully within the footprint of the pit at a lower level. The overhanging slope was almost 45 degrees and concave and showed no sign of shallowing out at 0.7-0.8m below the upper lip, suggesting that the pit may be considerably deeper and wider than exposed. The base of the pit was not identified at any point, although the lowest identified fill (F108:6) was soft redeposited natural containing bone. The SE quadrant was excavated to 0.4m and the fill extending under the overhang only pursued in the north-east. slope.	2.1m diam.; 0.8m depth	F118/Natural	F141, F103	antler off cuts (108: 9, 40, 54); Bone pin (108:15); Bone scoop (F108:56); Ceramic weight (108:130; Cu alloy 9108:8, 24, 25, 37, 38); Glass ball (108:36); iron objects (108: 11, 32-34); Possible enamel (108:44); Track stone (108:27); Hone stone (108:58); stone (58, 61); possible crucible fragment (F108:43); copper alloy (F108; 57) Iron nail (F108:12); Bone pins (108:55, 59); Bone objects (108:16, 48); bone spindle whorl (108:60); RB pot (108:18); Cu alloy (108: 6, 10, 17, 19, 23, 29, 30, 41); Flint (108: 28, 31, 21); Iron (108: 7, 22, 26, 42, 45-47); stone 108:14, 20).

109	T5B	Large stone deposit-east end of trench. Exposed as a roughly level surface, tilting downwards very slight to the east and west by a few centimetres, this was created from c.40 flat stones measuring 0.3-0.7m in diameter and from 0.1m to 0.3m in thickness. The significant majority of these stones were sub-square in plan with dimensions of 0.4m x0.4m 0.2m, which suggests deliberate selection of stones with these characteristics, as the geology varied from fragmented shale to smooth limestone. The surface created while roughly level is markedly uneven and there is no indication of packing in between stones or use of soil in general to create a surface-the stones sit directly underneath a noticeably soft stone free topsoil (F1). The stone deposit was exposed for 2m north south, narrowing to 0.8m NNW/SSE to the north. In places F109 was represented by a layer of thinner stone (0.1m diam.) and it was particularly difficult to distinguish this layer from that beneath (F110) in the south-east corner of trench 5B.	4m NNE/SSW x 2m WNW-ESE; 0.1-0.3m in thickness	F110	F1	

110	T5B	Dark stony material in and around F109. F110 consisted of a mid-grey-brown stony fill of loose silty material containing c.15% rounded and sub-angular cobbles (0.06m-0.1m in diam.). Larger stones measured 0.25-0.3m in diameter with a thickness of 0.05-0.08m. This layer was visible extending in and around the large stones of F109 and extending beyond them to the west, where this layer was contiguous with the cut F139. F110 had maximum dimensions of 4.4m NNE/SSW x 3m WNW/ESE and a maximum depth of 0.2m. It contained frequent large fragmentary animal bone including intact mandibles and occasional charcoal. F110 was distinctly loose and friable with no indication of compaction where it sat directly onto the underlying surface F137. This suggests that it was not in situ domestic material but had been redeposited from elsewhere infilling cut F139 after surface F137 had gone out of use. Bone objects, a bone bead (110:7); glass bead (110:4); Roman pot (110:20); copper alloy pin (110:3) and possible stone counters (110:2, 6, 27). On removal of F109 a patch of darker material apparently containing a concentration of burnt bone was identified at the east of the layer directly under the F109 stones. The disc pin (110:3), glass bead (110:40 as well as possible gaming counter (110:6) were recovered from this area which measured 0.15m x 0.2m diameter and was c.0.02m thick. The deposits was fully samples and should be examined as a possible token cremation.	4.4m NNE/SSW x 3m WNW/ESE; 0.2m in depth	F137, F139	F109	Bone objects (110:9, 23-26), a bone bead (110:7); glass bead (110:4); Roman pot (110:20); copper alloy pin (110:3); Iron objects (110:8, 13) and possible stone counters (110:2, 6, 27); piddock stones (110:17-19), perforated stone (110:10); rubbing stone (110:11)
111	T5A	Gravelly layer-east end of trench. F111 was a rough metalled surface set firm light brown silty clay? It overlay the interface with the natural subsoil. It extended for 5.6m EW to the east of the posthole/ditch which were located downslope form the highest point in the trench and across the NS extent of trench 5A. It was 0.04-0.8m in depth.	5.6m EW x 4m NS; 0.04m-0.08m in depth	F115	F1	small blue glass fragment (111:5) , iron objects (111:3, 4) and a possible clay mould (111:6) ; pot sherd? (111:2)

112	T5A	Located at the base of slope this feature originally presented as a possible ditch terminus extending for 3m from the northern baulk. Removal of the fill revealed a series of cuts and uneven bases interpreted as intercutting pits and depressions. To the north was a shallow sub-circular pit cut into the sloping subsoil that that measured 1.4m EW x 1m NS and had a maximum depth of 0.15m. This intercut with a truncated depression 0.9m EW x 0.75m NS that was 01.12m in depth. The southern limit of this features was circular in plan and measured 0.7m in diameter and 0.12m in depth. The fill of all these depressions consisted of a dark grey-brown silty clay with large stone inclusions where tumble from F119 and F104 had gathered at the base of the slope. A relatively large amount of animal bone including articulated bones, bird bones and microfauna were recovered from this fill		F129/F118	F104	Bone object (112:9); Copper alloy (112:1, 4, 8); Iron nail (112: 5); Amphora (112: 2); RB pot (112: 3, 6, 7)
113	T5B	Stony material directly under F1 in western two thirds of trench. F113 was a very stony layer, as a high as 80% poorly sorted rounded, sharp-edged and unsorted stones (.05-0.1m diam.) withc.3% larger stones up to 0.3m diam. The noticeably compact layer was pale brownish grey and extended for 6m EW, 4m NS and was 0.1-0.15m in thickness. The layer dipped into and infilled the probably natural hollow in the surface of F114 and the upper fill of pit F116.	6m EW x 4m NS; 0.1-0.5m in thickness	F110 F116 F113	F1	iron objects (113:1, 2, 6, 14, 18, 19, 22, 23); nails (113: 4, 5, 7) copper alloy (113:8-12, 15); bone objects (113:16, 17) antler cut off (113:13)

114	T5B	Soft mid brown material under F113; F114 was a soft stone-free layer directly above natural subsoil in Trench 5b. It extended for 7m EW and 4m NS and measured 0.1m in thickness. Characterised as a noticeably stone-free layer of light greyish brown layer of silty clay it contained <30% small, rounded stone and very occasional larger stones (0.4m diam.). Cut by pit F116 to the west and structure F139 to the east it is suggested that F114 represents a topsoil/sod or softer subsoil that was deliberately covered by stoney layer F113 to create dry ground. The few finds fragment blue glass (114:1) and two flakes of Copper alloy (114:2, 3) and small amount of animal bone were retrieved from the interface with overlying layer F113.	7m EW x 4mNS	Natural	F113 F116 F139	fragment blue glass (114:1); Copper alloy (114:2, 3)
115	T5A	Light greyish brown silty clay with occasional pebbles and small angular stone inclusions. This layer appears to have acted as a bedding layer for the stony layer above it F111. Cut through by pits F108 and F112, this layer overlies natural and may form a similar function to F114 in T5B. A single iron object was retrieved for this layer.	4m NS x 5.6m EW; 0.03-0.06m in depth	F118	F111	iron object (114:1); copper alloy (114:2, 3, 4).

116	T5B	Large pit in west baulk; F116 is a steep sided flat bottomed pit located towards the western bauk of trench 5B. Only two partial sides were visible and were suggestive of a rectangular pit with rounded corners. It measured 2.8m NNE/SSW and 0.7m WNW/ESE with a depth of 0.5m. The fill consisted of a slightly clayey silt with some coarse sand, <5% small, unsorted stones, c.5% orange ash (?), frequent charcoal, occasional shell, occasional medium stones (0.02m-0.1m diam.) and moderately large fragmentary stones. The stony layer F113 overlay and partially infilled the pit to a depth of 0.2m. The ashy material was concentrated in soft crumbly lumps, rather than layers, and the fill was homogenous and quite loose and friable. A small wedge of dark grittier fill was located at the north end of the pit between the base and a long rectangular slab of decaying mudstone. the slab sat directly on the base of the pit. Some additional stones were noted lying along the near vertical eastern cut of the pit but did not appear structural or in situ.	2.8m NNE/SSW x 0.7m WNW/ESE; 0.5m in depth	F114; Cut into natural	F113	Two flints (116: 1,5); Bone object (116: 4, 6, 7); Iron object (116:3)an ovoid ceramic object (116:2).
117	T5A	Bioturbation NW corner of trench; Originally thought to be a pit this irregular area 1.3m NS and 0.55m EW was located in the north-west corner of trench 5A. It had a maximum depth of 0.21m but no defined cut. The fill was a light yellow brown mottled silty clay which resembled the glacial subsoil but was much looser. There was no cultural material and appears to have formed by pooling.	1.3m x0.55m; 0.21m depth	Natural	F105	
118	T5A	Subsoil/natural interface; mottled orange, brown soft interface material. Extends over trench 5A, not excavated.		Natural	F115	

119	T5A	Lower layer of stone. Concentration of large stones (max. 0.5m Diam.) that were centrally located within trench 5, directly under stone dump F104. F119 measured 5.4m EW and 3.38m NS and from 0.16m to 0.24m in thickness, sloping down to the south and east. The ground surface was stepped to the east and there was tumble of larger stones at the base which was contiguous with possible ditch F112. Set into dark stony material F105 and surrounded with topsoil material and smaller stones of F104, pottery amphorae sherds (F119; 3, 4); copper alloy (119; 1, 6); iron object (119:5); rubbing stone (119; 2) and possible human remains (119:7) were retrieved from amongst the stones.	5.4m EW x 3.4m NS; 0.16-0.24m	F105, F127	F104	amphorae sherds (F119; 3, 4); copper alloy (119; 1, 6); iron object (119:5); rubbing stone (119; 2) and possible human remains (119:7)
120	T5A	Shallow pit under F119; Cut into mottled orange, brown soft interface material F118, F120 was one of a series of shallow pits under the stone dump, deposit (F104/F119). The sub-circular pit measured 0.84m EW x 0.66m NS and had a depth of 0.1-0.16m. The cut comprised a gentle breaks of slope and a relatively even base. The fill consisted of dark brown silty clay with occasional stone and animal bone inclusions. A fragment of copper alloy was retrieved from this fill.	0.84m EW x 0.66m NS and had a depth of 0.1-0.16m	F118/Natural	F119	copper alloy flake (120:1)
121	T5A	Shallow pit to east of F120. Cut into mottled orange interface material F118. Ovoid in plan, F121 measured 1.1m NS x 1m EW and had a maximum depth of 0.18m. he cut comprised a gentle breaks of slope and a relatively even base. The fill consisted of dark brown silty clay with occasional stone and moderate animal bone inclusions.	1m NS x 1.1m EW	F118/Natural	F119	

122	T5A	Large pit to south of F108. Waste pit cut into earlier bell pit F142. A steep-sided circular pit (1.8m EW x 1.6m NS) containing three distinct fills was cut/recut into an earlier storage pit F142. F122 which measured 0.6m in depth was first sectioned and then fully excavated. The initial identification of the extent of the feature was complicated by the overlying furrow F103 and the interface layer F141, both of which contained a degree of dark grey staining derived from the spread beyond its upper fill. Excavation was further complicated by the underlying pit F142 which had overhanging edges, making identification of the cut difficult in the western half, which resulted in slight overcutting in the north-west quadrant. The layers of the earlier pit were fully exposed in the eastern half and the layer F142:4 probably redeposited natural, formed the base of F122. The pit F122 was steep sided with a concave base and contained four fills. the upper fill F122:1 was friable slightly clayey silt, 0.3m in thickness, dark grey to black with frequent (>3%) unsorted angular and rounded stones (0.05-0.1m diam.) plus smaller pebbles, frequent animal bone and charcoal, sloping slightly from south to north a bone comb (122:1), clay object (F122:2); spindle whorl (122:3); copper alloy object (122:6) and bone pin (F122:7). This overlay F122:2 a mix of yellowish pale brown clayey material and silty grey, brown material , 01m-0.15m in thickness, with <3% small stones. A single large stone (0.35m x 0.2m x 0.1m lay vertically against the cut within this layer. Frequent fragmentary bone was recovered from this fill but no finds. The lower fill (F122:3) was a mid-grey silt, 0.3m in thickness, with >5% small angular stone, frequent fragmentary animal bone and frequent charcoal inclusions.	1.8m x 1.6m; 0.6m	F142	F141, F103	bone comb (122:1), clay object (F122:2); spindle whorl (122:3); copper alloy object (122:6) and bone pins (F122:7, 9); Cu alloy fragment (F122:5); Cupper alloy object (F122:8); antler cut off (F122:10-130; tracked stone (F122:14); Iron nail (F122:15); human tooth (F122:17); Bone objects (F122:18, 21, 24); iron objects (122:19, 22); possible pebble counter (F122:23)

123	T5A	Shallow pit SW corner of trench; F123 appears to have been cut though a similar shallow pit into the mottled orange, brown material F118. The cut, which was gentle sloping and uneven, with an uneven base sloping into the corner measured 1m EW x 0.56m NS and 0.16m in depth. the basal fill consisted of a reddish brown silt with few inclusions. The upper fill (F123:1) comprised dark greyish brown silt with angular stones and some bone. A tracked stone (123:1); copper alloy flakes ((123: 2, 3), flint debitage (123:40 and a bone tool (123:5) were recovered from this feature.	1m EW x 0.56m NS and 0.16m in depth	F125 F118/Natural	F105	tracked stone (123:1); copper alloy flakes ((123: 2, 3), flint debitage (123:40 and a bone tool (123:5)
124	T5A	Pit at southern baulk. Located 0.1m north of the southern baulk this was a sub-circular pit 0.7m x0.6m NS with a maximum depth of 0.12m. Cut into the mottled orange, brown subsoil F118, the break of slope was gentle with a relatively flat base. The fill was a mid-grey, brown clayey silt with occasional small stone inclusions. An unfinished bone spindle whorl (124:1) was recovered from the fill.	0.7m EW x 0.6m NS; 0.12m maximum depth	F118/Natural	F105	bone spindle whorl (124:1)
125	T5A	Small pit to north of F123; Part of a shallow pit area in the south-west corner of trench 5A., this feature was cut into mottled orange, brown subsoil F118 and was itself cut to the south by pit F123. Uneven it measured 0.93m EW and 0.5m NS with a maximum depth of 0.26m. The fill comprised a dark grey silty clay with a large stone inclusions and small fragments of animal bone.	0.93m EW x 0.5m NS; 0.26m depth	F118/Natural	F123	

126	T5A	Large posthole along S baulk, south of F112; posthole and postpipe located at southern baulk where ground slopes down from west to east and south of stone area F119. The posthole was exposed for 1.15m EW and measured 0.55m NS max and 0.30m minimum. The diameter of the postpipe which was located to the west was 0.54m and at least 0.75m in depth. The feature wasn't bottomed due to the presence of large packing stones (0.4m diam.) in the baulk and an inability to reach further down in a confined space. Smaller flat packing stones were noted at the western edge of the feature which was steep sided. The base was not ascertained but a probe with a ranging rod infers at least 0.35m more in depth. The cut to the east was gradually sloping. The fill consisted of dark grey, brown clayey silt with occasional charcoal inclusions , which was sampled from near the base (#41). A struck flint (126:3) and three copper alloy fragments (126:1, 2, 4) and moderately large fragments of animal bones were recovered from the fill.	1.15m EW x 0.3-0.6m NS; 0.54m diam. postpipe; 0.75m max depth reached	F118/Natural	F1 F127	struck flint (126:3), copper alloy fragments (126:1, 2, 4)
127	T5A	Layer below F119 and F105.This layer was exposed on removal of the large stone deposit F119 and stony layer F105. F127 comprised very dark blackish brown stony silt that extend 3.3m EW and measured 0.18m in depth. It contained moderate charcoal and frequent animal bone inclusion. This layer covered shallow pits F120 and F121.	3.3m EW x 4m NS; 0.18m in depth.	F120, F121	F105 and F119	copper alloy fragments (127:1-3); flint flake (127:4); bone objects (127:5,6) and a rubbing stone (127:7)
~~128~~	~~T5A~~	~~Void shallow spread same as F126~~	-	-		-
129	T5A	Located downslope from the high point of the area defined by the stone deposit this was a roughly oval area of in situ burning. Ill-defined by the depressions created by the large stones of F119 removed from above, this area of reddish brown clayey silt measured 0.78m NS x 0.28m EW and 0.095m in depth. Three small samples of unburnt bone were recovered from this deposit.		F118/Natural	F112	

130	T5A	Dark pit north of F121- F130 was a circular pit located 0.9m south of the northern baulk of trench 5A. Cut into mottled orange, brown interface layer (F118), this pit measured 0.7m in diameter and had a gentle break of slope and a slightly concave base. The base appeared heat affected and the fill consisted of relatively dark greyish brown silty, 0.16m in maximum depth, with small stone inclusion and animal bones.	0.7m diameter; max depth 0.16m	F118/Natural	F119; F127	struck flint (130:1)
131	T5A	In situ burning; Located 0.3m west of pit F130, this deposit of heat affected material measured 0.46m NS x 0.4m EW and 0.03m in depth.	0.46m NS x 0.4m Ew and 0.03m in depth.	F118/Natural	F119	Copper alloy fragment (131:1)
132	T5A	Possible pit by N baulk; One of a series of pits, F132 was located along the northern baulk and was exposed for 0.8m EW and ??NS. Cut into mottled orange subsoil F118, it was under stone deposit F119. The cut sloped gently down from the south over 0.2m with some red heat affected clay along sides and base. The basal cut had straight sides and a flat base. the fill consisted of a dark brown clayey silt with occasional small stone inclusions.	0.8m Ew NS; 0.15m in depth	F118/Natural	F119	struck flint (132:1)
~~133~~	~~T5A~~	~~Void Stone socket possible stakehole~~	-	-	-	-
~~134~~	~~T5A~~	~~Void possible pit~~	-	-	-	-
135	T5A	Pit south of Northern baulk. Cut into mottle orange brown interface material (F118) this sub-rectilinear shallow pit was located 0.26m south of the northern baulk. It measured 0.92m EW by 0.56m NS and was irregular in plan with an uneven base. The fill was a mid-grey clayey silt, 0.16m in depth with occasional angular and sub-angular stone inclusions.	0.92m EW x 0.56m NS; 0.16m max depth	F118/Natural	F105	

136	T5B	Shelly layer under F110; Located in the south-east corner of trench 5B, this friable layer while pressed in and around underlying metalled surface F137 but was not noticeably compact. It extended for 3.7m NE/SW and 1.4, NW/SE and form 0.01-0.03m in depth. F136 consisted of a mid-greyish brown silt, characterised by a high concentration (40%) of seashell of multiple species including periwinkles, limpets and whelks. A moderate amount of large fragment animal bone was recovered from this layer and a piece of worked antler. The layer included roughly 5% small, unsorted stones and concentration of shell across the extent of the layer and only occasional charcoal. Sampling was conducted on a rough grid in order to identify variations in the deposition and make-up. It is not clear whether this layer represents shell-related activity on metalled surface F137 or the deposition or spreading of a shell midden from nearby. Layer F136 is however very distinct from the loose overlying fill F110, but it clearly represents a primary phase of deposition over metalled surface F137. A perforated stone (136:1) and worked antler (136:2) were retrieved from this layer.	3.7m NE/SW x 1.4m NW/SE; 0.01-0.03m	F137	F110	perforated stone (136:1); worked antler (136:2)
137	T5B	Metalled surface. Located within cut F139, this surface was exposed for 4.5m NNE/SSW by 1.6-2.7m WNW/ESE but not removed. F137 consisted of a consistent layer of small angular and round stones ranging from 0.01-0.02m in diameter to 0.03-0.04m diameter with some larger flat stone inclusions. These stones serve as a compact metalled surface at the base of activity, similar to F96 in Trench 4. It overlay natural subsoil and falls for a total of 8cm across 4.5m from NE to SW and 6cm over the 2m exposed east-west, suggesting a level but gently sloping surface. The surface was noticeably higher in the south-east, creating a gently dished profile within the cut itself.	4.5m NNE/SSW by 1.6-2.7m WNW/ESE; 0.02-0.07m thickness	F139	F136 F140	

~~138~~	~~T5A~~	~~Linear feature at edge. Void.~~				
139	T5B	Cut under F137; F139 comprises the western extent of a sub-rectangular cut which creates a slightly dished broadly level terraced surface. Measuring a maximum of 4.5m NNE/SSW by 2.8m ESE/WNW it was sub-rectilinear with a narrow extension at NE and was at its deepest to the north-east and its shallowest to the south-west which corresponds to the slope into which it is cut. As the overlying metalled surface F137 was not removed during excavation the visible extent of slope was 0.07m-0.10 in depth. the cut constricts to 0.8m in width at the north-east suggestive of an entrance feature from higher ground to the north. F139 cuts through layer F114, except in the SE corner of trench 5B where only underlying subsoil is visible.	4.5m NNE/SSW; 2.8m ESE/WSW; 0.07m-0.3 m in depth	F114/Natural	F137	
140	T5B	Layer directly over F137; This was a thin (0.01-0.02m depth) silty layer measuring 1.6m NS by 1m EW, directly overlying metalled surface F137, representing activity on the surface, prior to the deposition of F110. F140 consisted of soft almost pure silt with <3% small, rounded stones and occasional flat stone (0.05-0.20m diam.) inclusions. The mid-brown silt was soft but well integrated with the stones of metalled layer F137 and very distinct from overlying layer F110. A moderate amount of animal bone was recovered, very little charcoal and no seashells. This layer was identified during the removal of shelly layer F136 but was distinct from it. It appears roughly contemporary with F136, representing activity on the metalled surface F137, prior to the deposition of F100. A copper alloy ping and amphora sherd were recovered from this layer.	1.6m NS x 1m EW; 0.01-0.02m in depth	F137	F110	Cu alloy pin (140:1); amphora sherd (140:2)

141	T5A	F141 was a dark grey, brown stony material with charcoal and bone inclusions. It measured 4m NE/SW by 2m in with and 0.1m depth. On removal of topsoil from the eastern end of Trench 5A, an area of darker soil was visible, roughly corresponding with the geophysical anomalies identified at this location. This was seen to represent, at least partially, the broad furrow F103 which contained dark fill and a number of artefacts including a horseshoe, horseshoe nail and black slip pottery. On excavation of F103, the darker material was still present and ill-defined. This was initially given the number F108, however removal of the stony layer F111 revealed that the spread was likely the interface with the two underlying pits F108 and F122, the upper fill of both being dark grey, brown, black with charcoal that was disturbed. As a result F108 was reassigned to the northernmost pit. F141 is thus interpreted as an interface between overlying material F103 and underlying pit features F108, F122 and F142 where cultural material has been disturbed and mixed with overlying soil.	4m x 2m; 0.1m in depth	F108, F122	F103	RB/Gaulish ware-2 frags (F141:1); Iron objects (141:2-3); Bone object (141:4)

142	T5A	Pit/deposit that F122 is cut into. F142 was a large storage pit with a similar funnel or bell-shaped profile defined by steeply overhanging sides as f108. f142 was heavily truncated by cutting and re-cutting of pit F122, which removed much of the upper edges and fills. However f142 fills were noted along the eastern edge of the feature. These were not excavated as time did not allow. the maximum diameter of the upper opening was 1.5m, similar to F108 but this was likely narrower, prior to truncation by F122. The minimum diameter of the pit at 0.6m in depth was 1.9m x 1.8m but the sides were still continuing out at this point and likely to be much deeper and wider. It is also possible that the pit intercut F108 to the north. The overhanging edges have an inverted slope of nearly 45◦where identified in the section. The fills noted were an upper fill F141:1 that consisted of dark grey black charcoal rich sandy silt, o.2m in thickness. This overlay F142:2 a yellowish light brown clayey material 0.05m in thickness, sloping inwards on both identified edges. This overlay fill F141:3, dark grey to black layer with frequent small stones and charcoal inclusions measured 0.2m in thickness. The lower fill (F142:4) consisted of a soft yellowish light brown clay silt with occasional stone and charcoal inclusions, forming the lowest identified level but unlikely to represent the base of the pit. F122 cut into the surface of this layer but did not go through it. Interpreted as redeposited natural. A single find was recovered from f142, a human maxilla dislodged from the east of the pit.	1.9m min NW/SE; 1.8m; min 0.6m	F118/Natural	F122	F142:1 DHR