Appendix 14.2

Archaeology Architecture & Cultural Heritage - Excavations

14.2 ARCHAEOLOGY ARCHITECTURE AND CULTURAL HERITAGE - Excavations

The following list includes a summary account of archaeological excavations undertaken in the site and the study area from excavations.ie Database of Irish Excavation Reports 1970 to 2013.

The townland in which the excavation was undertaken is on the left hand side with the excavations.ie number beside it. The authors name is included underneath. All entries are edited by Isabel Bennett.

Spacing: 8.5pt before, 8.5pt after, line spacing exactly 13pt.

14.2.1. BARNAHELY 1996:038

Edmond O'Donovan

Monitoring and trial excavation took place on the site of the Merfin factory at Barnahely, Ringaskiddy, to fulfil conditions of the planning permission for the scheme. Mechanical excavation took place in early April 1996, with ground clearance monitoring carried out later in the month. The archaeological excavation was carried out prior to the commencement of topsoil-stripping or development works. The site was landscaped at the turn of the century to facilitate the construction of a military barracks and its associated facilities.

Forty test-trenches were mechanically excavated to natural subsoil to establish the presence of any archaeological soils or features on the site. One trench revealed an area of burning which consisted of a circular, shallow, fire-reddened pit, 0.75m in diameter, filled with charcoal and ash. The area around this feature was later monitored.

During the site assessment, a millstone and two incomplete fragments of millstones were discovered with other stones against the field boundary. They may have been placed in this location during field clearance prior to the construction of the barracks. No associated archaeological structures were revealed in connection with the millstones during trenching and monitoring. The work fulfilled the archaeological requirements for the development.

14.2.2. CASTLE WARREN, BARNAHELY 1999:079

Mary O'Donnell

The site at Castle Warren consists of a complex of medieval and post-medieval buildings around a courtyard and includes a tower-house and bawn of probable late 16th-century date and Castle Warren House, which dates to the 18th century. It is currently owned by the Industrial Development Authority, who wished to secure the site by erecting a chain-link fence with an access gate around the tower-house and bawn, at a distance of 10m from the boundary walls.

Five trenches were excavated by machine just inside the line of the fence before the digging of the foundation pits for the fence. No archaeological features relating to the later medieval occupation at the site were uncovered during

excavation of the test-trenches or monitoring of the excavation of the foundation pits.

14.2.3. CASTLE WARREN, BARNAHELY 2004:0204

Ken Hanley

Cork County Council proposes to construct a dual carriageway from Cork to Ringaskiddy, which is an area of expanding industrial development supported by a deepwater shipping berth. As part of the route selection process the National Roads Office in Cork considered several route corridor options. The alignment of one such option passed close to Castle Warren (otherwise known as Barnahely Castle) and to the nearby Barnahely graveyard (SMR 87:51).

Test-trenching was undertaken, from late July to mid-August 2004, in the general area surrounding Castle Warren. This was part of a series of site investigation methods intended to assess the archaeological potential of lands adjacent to Castle Warren. Other methods included a geophysical survey (04R065), a topographical survey and a building survey.

Testing typically involved the insertion of 2mwide centre-line trenches with regular offshoots averaging every 10m on alternate sides. A total of 63 trenches (T1-T63) were inserted across six discrete study areas, Areas A-F.

Overall, testing revealed the surrounding area to be largely devoid of archaeological remains. Areas A and C revealed no evidence of archaeological activity. Area B encompassed the greater part of a partially extant early 19th-century walled garden located to the west of Castle Warren. Overall, some isolated features were identified which appeared to relate to the use of the garden. No earlier features of archaeological significance were identified.

In Area D, the only feature of potential consisted of an isolated stake-hole and shallow pit of suspected prehistoric date, identified in the southern end of Trench 1. The upper sloping ground to the southwest of the castle contained 0.4-1m of modern fill, including plastic and other debris. The crest of the hill to the west of the castle complex had exposed surface bedrock. Modern concrete shed foundations were noted, but there was no evidence of a 19th-century O'Sullivan house.

Area E revealed clusters of recent parallel furrows criss-crossing the study area. A wide ditch cut was identified in trenches T29 and T33. The ditch ran in a west-south-west/east-north-east direction along the base of a slight valley between the higher ground to the north and south. It contained high concentrations of unworked stone towards its base and was interpreted as a field drain. It produced no finds and is assumed to be post-medieval/early modern in date, although an earlier date cannot be ruled out. Virtually all of the features identified in Area E are considered to be agricultural in nature. Testing did not reveal any evidence of domestic/settlement activity.

In general, Area F revealed a similar pattern of agricultural land use. However, some parallel ditches (possibly garden plots) were identified to the east of the castle, a finding supported by geophysical results. Testing failed to produce any dating evidence for the ditches. The only other sign of archaeological activity from Area F was in the form of a single charcoal-flecked pit in T38 and a stray find of medieval green-glazed pottery from the topsoil.

14.2.4. BARNAHELY 2004:0202

Rose Cleary

Test-trenching was undertaken in advance of the construction of a road network and ancillary trenching on a land bank at Barnahely, Ringaskiddy. The closest monuments are Castle Warren and an enclosure. The excavation did not uncover any archaeological feature or find.

14.2.5. BARNAHELY 2004:0203

Tony Cummins

Twelve test-trenches were excavated in the vicinity of a ringfort as part of a pre-development assessment of a potential factory site. The trenches were opened across a number of potential archaeological features identified during a geophysical investigation of the site. Two previously unrecorded archaeological sites were identified during the course of this testing. These appeared to be the remains of a keyhole-shaped kiln, located c. 10m to the west of the ringfort, and a levelled fulacht fiadh, located c. 20m to the north-west of the ringfort. Both of these sites were recorded and left in situ. A full excavation of these sites was recommended prior to commencement of any construction project in the area to the west of the ringfort.

14.2.6. RINGASKIDDY PORT, BARNAHELY 2012:095

Niall Brady

Intertidal and marine inspection of proposed development area at Ringaskiddy, Co. Cork, focused on Ballybricken Point, where reclamation is proposed, in the East Basin, and the area behind the Dolphin Ramps. No material of archaeological significance was observed exposed on the seabed or on the foreshore.

14.2.7. BARNAHELY 2012:096

Tony Cummins

Three 2m-wide trenches were manually excavated at a ringfort in Barnahely townland as part of a preliminary site assessment in order to inform a potential research project. A metal detector (12R0040) was used during the excavation in order to aid in artefact recovery and a programme of on-site sieving was also employed. The bank along the west and south-west sides survives to height of 1m above existing internal ground level. The U-shaped ditch is partially open in these areas and measures up to 1.5m deep and 5.6m wide at top. The bank survives to the north and east as a denuded, low feature and the ditch is completely infilled in these areas. A gap in the bank in the north-west quadrant may mark the location of an entrance feature. The excavation project was preceded by geophysical and topographical surveys of the entire ringfort. The geophysical survey (Target Archaeological Geophysics: 11R0115) identified internal anomalies interpreted as the remains of probable hearth/kiln features and pits.

14.2.1.7.1 Trench 1

This trench extended southwards from outside the north end of the ringfort ditch and continued across a denuded section of the bank. It then extended for 15m into the west half of the enclosure and the south end was expanded to investigate a 5m² area containing a cluster of geophysical anomalies. The infilled ditch measured 2m deep by 5m wide at top and the sides gradually tapered to the 2.1m-wide rounded base. The six ditch fills were composed of silty clays containing occasional charcoal fragments, small stones and gravel deposits. The partially collapsed ringfort bank survived as an 8m wide by 1.4m high earthen feature disturbed by frequent animal burrows and gorse roots. The extent of disturbance was demonstrated by the presence of modern inclusions within the centre of the bank. The three main deposits in the north end of the bank were composed of sterile re-deposited subsoil and appeared to represent the core of the bank. Two linear U-shaped cuts were uncovered in the subsoil under the bank and both extended under the east and west baulks. The southern example measured 0.8m wide by 0.8m deep and contained four sterile sandy silt deposits while the northern example measured 0.6m wide by 0.4m deep and contained one sterile fill.

The depth of topsoil within the enclosure increased from 0.2m inside the bank to 0.8m at the south terminal of the trench. It contained moderate inclusions of post-medieval and early modern pottery, some of which were present at the base of the topsoil. Five east-to-west-orientated shallow linear features, a pit and two stone-lined cut features were uncovered in the subsoil. The linear features were uncovered under the shallow topsoil in the north half of the trench. They averaged 0.5m wide and survived as 0.05m deep, rounded cuts. The fills were sterile and no traces of associated post/stake-holes were noted. According to local information, the interior of the ringfort was under cultivation in recent decades and these features appeared to have originated from this activity. They were not identified in the geophysical survey, perhaps due to the shallow nature of the cuts in the subsoil. The absence of identified structural features in this area may be due to the presence of the nearby possible entrance to the north-west. A pit was partially exposed in the south end of the 2m-wide section of the trench. It extended for 1.2m from the west baulk and measured 0.47m deep by 0.8m wide. The presence of charcoal inclusions in the two fills and ephemeral traces of burnt subsoil along its sides and base were indicative of a kiln/hearth function.

An east-west orientated, stone-lined linear cut feature was partially revealed in the 5m² trench expansion. The east terminal was exposed within the trench while the opposite end extended under the west baulk. The visible extent of the feature measured 2.65m long and it ranged from 0.4m wide at east to 0.88m at the west baulk. Following consultation with the National Monuments Service, it was agreed to excavate a section through the backfill while leaving the stone lining in situ. The backfill was composed of three soil deposits with occasional inclusions of charcoal fragments. The subsoil at the base sloped gradually down from the east terminal and then extended as a flat surface towards the west baulk where the cut measured 0.94m in depth. The dry stone lining on both sides was composed of sub-angular field stones, with a possible quern stone noted in the south side. There were no traces of in situ or collapsed stone roof lintels identified. A similar stone-lined cut feature was partially exposed against the baulk in the north-west corner of the 5m² excavation area. This was orientated north to south and extended for 0.6m from the west baulk. A 1m by 0.6m sondage was excavated to

a depth of 0.64m when the subsoil at the base of the cut was encountered. The dry stone lining on the east side was composed of six rough courses of field stones and three courses of stone lining were also noted in the north baulk. All of the exposed stone lining was left in situ. The cut contained two soil deposits, with moderate charcoal inclusions, and a rotary quern stone was recovered from the basal fill. The intersection between this feature and the similar east-west feature to the south extended under the baulk and it was not possible to ascertain their stratigraphic relationship. They are interpreted as the possible remains of at least one souterrain but this remains tentative as they were not identified in the geophysical survey and their full extent remains to be determined. The presence of two quern stones may also indicate a kiln function.

14.2.2.7.1 Trench 2

This 15m long trench commenced in the plough zone outside the south end of the ringfort and extended northwards across the infilled ditch, through the projected line of the bank and then continued for 4m inside the ringfort interior. The geophysical survey encountered massive magnetic interference in this area and this appears to have been caused by metal inclusions in spreads of modern dumped material in this area. The topsoil in the interior measured up to 0.8m deep and contained occasional modern inclusions. The truncated basal remains of the ringfort bank were revealed under the topsoil and it was faced by a possible internal stone revetment. The ringfort ditch measured 4.5m wide at top and the steep sides tapered slightly inwards before they turned to a 2.4m wide, flat base. The sterile ditch fills contained occasional large stones and were prone to flooding with groundwater during the excavation.

14.2.3.7.1 Trench 3

This 14m long trench extended in a north-west/south-east line through the north-east quadrant of the ringfort interior in order to intersect at a right-angle with a north-east/south-west linear geophysical anomaly. The topsoil was 0.8m in maximum depth and overlay a number of features cut into the subsoil. These comprised three post-holes, one stake-hole, four linear features and one possible north-east/south-west field drain. While the layout of the post- and stake-holes did not indicate the plan of a possible building, their presence nonetheless demonstrated the presence of structure(s) in the north-east quadrant. There were no traces of post/stake-holes noted in any of the linear features and their shared orientation and sterile fills were indicative of cultivation features. The potential that a number of the partially exposed linear features within this trench (and in Trench 1 to the west) may be archaeological in origin is not discounted.

14.2.8. CURRAGHBINNY 2011:098

Avril Purcell

Monitoring was carried out on two sections of foreshore at Lough Beg, Curraghbinny, during the construction of coastal protection works adjacent to the GlaxoSmithKline Beecham Cork plant. No features or finds of archaeological significance were revealed.

14.2.9. RINGASKIDDY 2001:230

Sheila Lane

Following an assessment of this site in advance of a proposed industrial development, an area of potential archaeological interest was identified. The feature comprised an elongated grass-covered mound, 36m east–west by 9m and 1m high. It was at the top of a steep escarpment, overlooking a quarried area. A test-trench was excavated across the mound using a mechanical digger. The mound was found to be of recent origin and of no archaeological importance.

14.2.10. RINGASKIDDY 2003:336

Caitriona Gleeson

Monitoring was undertaken of an offshore area at Ringaskiddy, Co. Cork. Planning permission has been granted for the construction of a jetty and pontoon in connection with the proposed National Maritime College Development. As well as excavation, the work was undertaken in accordance with the terms of a licence to use a detection device (03R105).

Ringaskiddy is located on the west bank of the River Lee estuary, approximately ten miles from Cork city. The area of proposed development was located north of mainland Ringaskiddy and south of Haulbowline Island.

There are three known monuments within the area surrounding the proposed development site: SMR 87:105 (a magazine fort), 87:53 (a Martello tower) and 87:59 (a military barracks, Martello tower and star-shaped fort on Haulbowline Island). There are also a number of listed shipwrecks in this area.

Dredging was carried out from a sea-going pontoon, Braveheart, using a 70-ton crane complete with digging/rehandling grab. Initially, an archaeologist was present on the pontoon throughout the course of all works. The dredging material was deposited on land. Two archaeologists were present on the shore to monitor the deposition of this material. Subsequent to deposition, the archaeologists walked over the deposited material with a metal detector. This strategy was employed for four weeks and, with the exception of three fragments of timber, nothing of archaeological significance was recovered. In response to this, the Underwater Archaeological Unit of the Heritage Service recommended that the programme of monitoring be scaled down.

The area of the proposed jetty was excavated to an overall depth of ±4.183m, with a deeper area of 90m2 (plunge pool) excavated to ±6.1m. The excavated sediment was a dark-grey silt, which became sandier in composition at its lower levels.

Three non-archaeological timber fragments were recovered during the course of sieving. The largest was of beech and comprised the tapering end of a modern stake. The remaining pieces were identified as oak and may have been fragments of driftwood. Two relatively modern glass bottles and a number of non-archaeological metal artefacts were also recovered. No archaeological features or artefacts were identified within the area of proposed development.

14.2.11. RINGASKIDDY 2006:383

Rex Bangerter

Non-disturbance underwater archaeological assessment of 33 seabed anomalies identified by a side-scan sonar survey was undertaken in November 2005. The proposed development is on the south side of Cork Harbour at Ringaskiddy and comprises the construction of a multi-purpose berth and storage facility at the ADM jetty and a container terminal with RO–RO berth at Oysterbank. While the underwater assessment was focused on the side-scan target locations, a sizeable buffer zone was incorporated into the dive survey, with circular searches that extended the survey up to 30m around each target location. Particular attention was paid to recording seabed topography and bottom composition at each dive location. The assessment was comprehensive and identified all but two of the 33 side-scan targets. All material encountered was either of natural composition or of modern origin. The visual seabed inspection and side-scan sonar survey has revealed a low potential for surface archaeological remains located within the ADM and Oysterbank sites.

14.2.12. RINGASKIDDY 2006:384

Rex Bangerter

Non-disturbance visual inspection was employed to assess the archaeological potential of the seabed along two cable-lay routes (Routes 1 and 4) identified for the proposed Aghada to Cuskinny Cable Lay Project. In addition, a number of side-scan sonar and magnetometer anomalies, located within the vicinity of each cable route, were investigated. The shallow inshore sections of the survey were undertaken as a snorkel survey. The underwater survey area constituted a 3.2km by 10m search area for Cable Route 1 and a 1.04km by 10m search area for Cable Route 4. The survey was conducted in a series of stages, with a 600m length of seabed being surveyed in each stage. The shoreline at each location was inspected to ascertain its archaeological potential and a 200m section (east–west) of foreshore was field-walked at Cuskinny Bay and a 50m (east–west) section at Aghada.

The assessment was comprehensive and extended beyond the immediate impact zone for each of the cable routes. The placement of coastal protection measures along Cuskinny Bay and the land reclamation at Aghada has limited the archaeological potential at both foreshore locations. No material/deposits of archaeological significance were observed exposed on the seabed as part of the survey. The seabed was largely clear of man-made surface debris, with only occasional fragments of metal being encountered (jetsam from fishing vessels). However, the potential for archaeological debris to lie within the buried levels remains, as attested to by the magnetometer anomalies identified in the pre-dive survey, the diver survey confirming that these remain buried.

14.2.13. ROCKY ISLAND 2006:385

Avril Purcell

Disarticulated human remains were identified during the redevelopment of the magazine as a crematorium. The remains were found in a large bund or mound of stone which flanks the outer wall of the magazine. A new access point was

being constructed at the north-western corner of the bund when the bone was revealed. Hand excavation was undertaken in the area and a small concentration of animal bone, human bone and musket balls were recovered. No stratigraphic sequencing was apparent within the bund, with the exception of the recent disturbance to facilitate construction of the new access point, during which the bone was identified. It seems likely that the remains were deposited in the bund during the construction of the magazine, which was built between 1808 and 1818. A report is pending on the human remains.

14.2.14. ROCKY ISLAND 2006:386

Avril Purcell

An intertidal and metal-detector survey were carried out on the north-western foreshore area of Rocky Island in Cork Harbour in advance of the proposed construction of an outfall pipe associated with the redevelopment of the magazine as a crematorium. No features or finds of archaeological significance were revealed.

14.2.15. RINGASKIDDY 2007:315

Declan Moore

A programme of testing was carried out at Ringaskiddy, Co. Cork, in July 2007. The proposed development entails the construction of a monoclonal antibody (MAB) facility for the manufacture of a cell culture drug substance. The site is located adjacent to the current Pfizer Inc. Ringaskiddy API facility and constitutes a portion of the former ADM Ringaskiddy facility. The ADM facility will be demolished prior to construction and the proposed MAB site will be located on the car parking/roads/landscaped areas of the former ADM site and will not include the footprint of any former buildings or tank farms. The proposed development is c. 10 acres in area. The development is close to CO087–061 and CO087–106.

An inspection of the site was carried out as part of an overall EIS in March 2007. No archaeological features were noted at this time. Further investigation of aerial images indicated a circular cropmark at the western extent of the site. Testing was carried out in order to examine the nature and extent of this feature. Two test-trenches were excavated. Nothing of archaeological significance was noted during the course of testing. It is the author's opinion that the aerial anomaly is a geological feature.

Although nothing of archaeological significance was noted during the course of testing, given the extent of the proposed development it was recommended that, during the course of construction, topsoil-stripping be monitored. Monitoring took place on 2–3 October 2007. No archaeological features were discovered during topsoil removal within the footprint of the proposed development (c. 2 acres).

14.2.16. CORK HARBOUR BETWEEN CORKBEG ISLAND AND ROCKY ISLAND 2009:134

Rex Bangerter

Underwater assessment took place of a series of marine geophysical anomalies located along the proposed route of a 220kV submarine cable between Corkbeg Island and Ringaskiddy, Cork Harbour. The assessment included the visual inspection of side-scan sonar anomaly ss5 and two magnetometer targets, mg4 and mg11, located within the cable wayleave. A number of other geophysical targets (ss12 and mg 34) located in close proximity to the proposed route were also assessed. Underwater inspection of shipwreck anomaly ss7/mg8, c. 1km north of the proposed cable route, was undertaken to ascertain its archaeological significance.

Systematic visual inspection of the seabed surrounding each of the geophysical targets was undertaken. No archaeologically significant features were encountered as part of the archaeological assessment of those targets located within/close to the cable wayleave. A potential positive identification of the geophysical targets was achieved for ss5, ss12, and mg34. No targets were identified for anomalies mg4 and mg11, which are considered to be buried or represent mobile objects that have moved to a different seabed location subsequent to the initial geophysical survey.

Shipwreck anomaly ss7/mg8 is located within the vicinity of the documented location of the 17thcentury wreck of the Bredah (Shipwreck Inventory, DoEHLG). Dive inspection suggests the wreckage is from a composite vessel of later date that probably dates to the late 19th century.

The composite wreckage forming anomaly ss7 will remain unaffected by the proposed development and no further archaeological mitigation measures are required for this site. The position of this wreck has been listed in the Shipwreck Inventory and is afforded statutory protection under the National Monuments Acts 1987–2004.