

CHAPTER 12

CULTURAL HERITAGE

Lagan Materials Ltd.

Aghamore Near, Aghamore Far and Carrownamaddoo townlands, County Sligo

EIAR – Recommencement and Deepening of Existing Quarry and Associated Processing Area

May 2021



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INTRODUCTION

Background

12.1 This Chapter of the Environmental Impact Assessment Report (EIAR), commissioned by SLR Consulting Ireland on behalf of Lagan Materials Ltd., addresses the impacts on the archaeological, architectural and cultural heritage of the application site and the surrounding area of a proposal for the recommencement / deepening of the existing quarry and recommencement of aggregate processing activities at Aghamore Near, Aghamore Far and Carrownamaddoo townlands, County Sligo. The site location and study area are indicated in **Figure 12-1**.

Scope of Work / Methodology

- 12.2 This study, which complies with the requirements of Directive EIA 2014/52/EU, is an assessment of the known or potential cultural heritage resource within a specified area and includes the information that may reasonably be required for reaching a reasoned conclusion on the significant effects of the project on the environment, taking into account current knowledge and methods of assessment. It consists of a collation of existing written and graphic information in order to identify the likely context, character, significance and sensitivity of the known or potential cultural heritage, archaeological and structural resource using an appropriate methodology (EPA 2002 and 2003).
- 12.3 The study involved detailed investigation of the archaeological and historical background of the development site, the landholding and the surrounding area extending from the development boundary (**Fig. 12-1**). This area was examined using information from the Record of Monuments and Places of County Sligo, the Sligo County Development Plan, lists of previous excavations and cartographic and documentary sources. Field inspections were carried out on the 1st of May 2018 and the 25th of November 2020 in an attempt to identify and assess any known archaeological sites and previously unrecorded features and portable finds within the area of landholding.
- 12.4 An impact assessment and mitigation strategy have been prepared. An impact assessment is undertaken to outline potential adverse impacts that the proposed development may have on the cultural resource, while a mitigation strategy is designed to avoid, reduce or offset such adverse impacts.
- 12.5 The application site is located in the Townlands of Carrownamaddoo, Aghamore Near and Aghamore Far, Co. Sligo, on OS Six Inch sheet No. 20, 1.3km to the west of the N4 Dublin to Sligo road, and directly to the east and west of the L3603. The proposed development involves the recommencement of the existing operational and processing area and deepening of the existing quarry area within an application area of c. 22.5 Ha.
- 12.6 Extracts from the Record of Monuments and Places for County Sligo are presented on a map of the local area around the site in Figure 12-1. RMP sites included on the Records of Monuments and Places statutory mapping are identified by black circles. The application area is indicated by the red line.

Contributors / Author(s)

12.7 The assessment was prepared by Dr. Charles Mount who is a member of the Institute of Archaeologists of Ireland and a member of the Discovery Programme and has more than thirty

years of cultural heritage assessment experience. He holds M.A. and Ph.D. degrees in archaeology as well as a professional diploma in EIA and SEA Management.

Limitations / Difficulties Encountered

- 12.8 No difficulties were encountered during the desktop study, field survey or in the preparation of this report.

REGULATORY BACKGROUND

- 12.9 The following paragraphs set out the regulatory background with regard to cultural impact assessments in Ireland in general and the site-specific planning background relevant to this cultural impact assessment, in particular.

Legislation

- 12.10 No specific Irish legislation exists governing cultural heritage assessments.

Planning Policy and Development Control

- 12.11 The Sligo County Development Plan 2017-2023 (CDP) is the statutory plan detailing the development objectives/policies of the local authority. The plan includes objectives and policies, relevant to this assessment, i.e. with regard to cultural heritage.

Cultural Heritage

- 12.12 Chapter 7 of the County Development Plan sets out the policies on cultural heritage within the county. The Council recognises the importance of identifying, valuing and safeguarding the archaeological and architectural heritage of Sligo.

- 12.13 The Council's aim is to: protect and enhance archaeological sites, monuments, their setting, appreciation and amenity within the Plan area, including those that are listed in the Record of Monuments and Places (RMP) or newly discovered archaeological sites and/or sub-surface archaeological remains. The Plan contains a number of policies aimed at the protection of archaeological heritage in the county.

P-AH-1 Protect and enhance archaeological sites, monuments, their setting, appreciation and amenity within the Plan area, including those that are listed in the Record of Monuments and Places (RMP) or newly discovered archaeological sites and/or sub-surface archaeological remains.

P-AH-2 Require archaeological impact assessment, surveys, test excavation and/or monitoring for planning applications in areas of archaeological importance, if a development proposal is likely to impact upon in-situ archaeological monuments, their setting and archaeological deposits.

P-AH-3 Require the preservation of the context, amenity, visual integrity and connection of archaeological monuments to their setting. Views to and from archaeological monuments shall not be obscured by inappropriate development. Where appropriate, archaeological visual impact assessments will be required to demonstrate the continued preservation of an archaeological monument's siting and context.

P-AH-4 Secure the preservation *in-situ* or by record of:

- the archaeological monuments included in the Record of Monuments and Places as established under section 12 of the National Monuments (Amendment) Act, 1994;
- any sites and features of historical and archaeological interest;
- any subsurface archaeological features that may be discovered during the course of infrastructural/development works in the operational area of the Plan. Preservation relates to archaeological sites or objects and their settings. Preservation *in-situ* is most effectively achieved by the refurbishment of existing buildings, in situations where it is possible to retain the greater part of existing structures without the need for new foundations.

P-AH-5 Protect historic burial grounds that are recorded monuments and encourage their maintenance in accordance with best conservation principles. Development may be restricted or conditions requiring substantial excavation may be imposed in and adjacent to former burial grounds.

P-AH-6 Where possible, facilitate and enhance public access to and understanding of the archaeological heritage and disseminate archaeological information and advice to prospective developers and the general public.

P-AH-7 Require that all development proposals for industrial buildings and sites of industrial archaeological importance be accompanied by an industrial archaeology assessment of the surrounding environment. New development should be designed in sympathy with existing features and structures. Protect and preserve the archaeological value of underwater archaeological sites and associated features. In assessing proposals for development, the Council will take account of the potential underwater archaeology of rivers, lakes, intertidal and subtidal environments.

Cuil Irra Peninsula – Carrowmore, Knocknarea and Carns Hill

P-AH-9 Refer to the National Monuments Section, DAHG all development proposals within the archaeological and historic landscape of the Cuil Irra Peninsula (which includes the core areas of Knocknarea, Carrowmore and Carns Hill) as identified in Fig. 7.A (see Co. Development Plan).

P-AH-10 Ensure that Archaeological Impact Assessments are requested at pre-planning and planning application stage for all development proposals within the archaeological and historic landscape of the Cuil Irra Peninsula (which includes the core areas of Knocknarea, Carrowmore and Carns Hill).

Protected Structures

12.14 The Council's aim is to: Preserve, protect and enhance the architectural heritage of County Sligo for future generations. The area's architectural heritage is of national and regional importance and is central to Sligo's ability to promote itself as a centre for cultural tourism. The Plan contains a number of policies aimed at the protection of architectural heritage in the county.

P-ARH-1 Preserve, protect and enhance the architectural heritage of County Sligo for future generations. The area's architectural heritage is of national and regional importance and is central to Sligo's ability to promote itself as a centre for cultural tourism.

P-ARH-2 Ensure that any development, modifications, alterations, or extensions affecting a protected structure, an adjoining structure or a structure within an ACA is sited and designed appropriately and is not detrimental to the character of the structure, to its setting or the general character of the ACA.

P-ARH-3 Exempt a development proposal from the normal requirement for the payment of a development contribution if the proposal involves restoration/refurbishment of a protected structure to a high architectural standard.

P-ARH-4 Facilitate enabling development to be carried out in conjunction with works to protected structures where consistent with the parameters outlined in subsection 7.3.5 Enabling Development.

P-ARH-5 Protect important non-habitable structures such as historic bridges, harbours, railways or non-structural elements such as roadside features (e.g. historic milestones, cast-iron pumps and post-boxes), street furniture, historic gardens, stone walls, landscapes, demesnes and curtilage features, in cases where these are not already included in the Record of Protected Structures.

P-ARH-6 Promote the retention and re-use of the vernacular built heritage through increasing public awareness of its potential for re-use and its adaptability to change.

P-ARH-7 When considering proposals to adapt vernacular buildings to meet contemporary living standards and needs, require applicants to apply the conservation principles and guidelines set out in the ICOMOS Charter on the Built Vernacular Heritage (Mexico 1999) – refer to Appendix H of this Plan.

Architectural Conservation Areas (ACA)

12.15 An Architectural Conservation Area (ACA) is a place, area, group of structures or townscape that is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or contributes to the appreciation of Protected Structures.

12.16 There are a number of policy objectives outlined in Section 12.4.3 of the SDP in respect of architectural conservation which state:

P-ACA-1 Conserve and enhance the special character of the Architectural Conservation Areas in this plan. The special character of an area includes its traditional building stock and material finishes, spaces, streetscapes, shop fronts, landscape and setting.

P-ACA-2 Protect all buildings, structures, groups of structures, sites, landscapes and all features considered to be intrinsic elements to the special character of the ACA from demolition and non sympathetic alterations.

P-ACA-3 Promote appropriate and sensitive reuse and rehabilitation of buildings and sites within ACAs.

P-ACA-4 Require the retention of original windows, doors, renders, roof coverings, chimneys, rainwater goods and other significant features of structures of architectural heritage merit, whether protected or not.

P-ACA-5 Seek the repair and reuse of traditional shopfronts and where appropriate, encourage new shopfronts of a high quality architectural design.

P-ACA-6 Ensure that new development within or adjacent to an ACA respects the established character of the area and contributes positively in terms of design, scale, setting and material finishes to the ACA.

P-ACA-7 Promote high quality architectural design within ACAs, including redevelopment in the traditional or historicist manner, where appropriate.

P-ACA-8 Ensure that all new signage, lighting, advertising and utilities on buildings within an ACA are designed, constructed, and located in such a manner that they do not detract from the character of the ACA.

P-ACA-9 Protect and enhance the quality of open spaces within ACAs and ensure the protection and where necessary reuse of street furniture and use of appropriate materials during the course of public infrastructure schemes within ACAs.

Guidelines

- 12.17 The report format and some of the descriptions of effects are based on the **Guidelines on the Information to be contained in Environmental Impact Assessment Reports** (Draft), published by the Environmental Protection Agency (EPA) in May 2017.

Significant Risks

- 12.18 There are no known significant risks to human health or environmental effects, which may occur in relation to this cultural heritage assessment.

RECEIVING ENVIRONMENT

Study Area

- 12.19 The overall study area extends 1km from the application area in all directions and is shown in **Figure 12-1**.

Baseline Study Methodology

- 12.20 Research has been undertaken in two phases. The first phase comprised a paper survey of all available archaeological, historical and cartographic sources. The second phase involved a field inspection and archaeological assessment of the proposed development area.

Paper Study

- 12.21 This involves a search of relevant documents. The following sources were examined and a list of sites and areas of archaeological potential compiled:
- Record of Monuments and Places County Sligo
 - The Sites and Monuments Record
 - Available aerial photography
 - Cartographic and written sources relating to the study area
 - Sligo County Development Plan 2017-2023
 - The National Inventory of Architectural Heritage

The Record of Monuments and Places

- 12.22 This was established under section 12 (1) of the 1994 National Monuments (Amendment) Act and provides that the Minister shall establish and maintain a record of monuments and places where the Minister believes there are monuments, such record to be comprised of a list of monuments and relevant places and a map or maps showing each monument and relevant place in respect of each county in the State. The associated files contain information of documentary sources and field inspections where these have taken place. All available information on these sites is provided in Appendix 12.1.

Cartographic Sources

- 12.23 This included seventeenth century mapping as well the 1st and 2nd editions of the Ordnance Survey six-inch maps and Documentary sources provide more general historical and archaeological background.

The County Development Plan

- 12.24 This notes structures listed for preservation.

Field Inspection

- 12.25 Field inspections were carried out to determine the location, extent and ascertain the significance of any archaeological sites and to identify any previously unrecorded or suspected sites and potable finds.

RECEIVING ENVIRONMENT, HISTORICAL AND ARCHAEOLOGICAL LANDSCAPE

The Landscape

- 12.26 The application site is located in the Townlands of Aghamore Near, Aghamore Far and Carrownamaddoo, Co. Sligo, on OS Six Inch sheet No. 20, 1.3km to the west of the N4 Dublin to

Sligo directly to the east and west of the L3603. The application site is situated in undulating countryside.

Historical and Archaeological Background

- 12.27 The following is a brief summation of the main types of sites and monuments that are known from the county along with the historical development of the study area. It is intended as a guide to the types of sites and monuments that might be encountered in the study area.
- 12.28 The site is situated in the townlands of Aghamore Near, Aghamore Far and Carrownamaddoo, in the barony of Carbury, and the civil parish of St. John's.

The Prehistoric Period

- 12.29 To date no prehistoric settlements or artefacts dated to the prehistoric period have been identified from the study area.

The Early Medieval Period

- 12.30 In the Early Medieval period (500 AD-1170 AD) the study area formed part of the Kingdom of Cenel Cairpre which was ruled by the Cairpre Mor and the Cairpre Gabra kings. By the twelfth century the Sligo part of Cenel Cairpre was known as Carbridrumclif (MacCotter 2008, 132-3).
- 12.31 Classically settlement at this period is indicated by the presence of enclosed farmsteads known as ringforts, when enclosed with earthen banks, and cashels when enclosed by stone walls. There are 10 ringforts and cashels known in the study area in Drumaskibbole, Tullynagracken, Carrownamaddoo and Aghamore Near townlands indicating substantial settlement in the study area during the early medieval period.

The Later Medieval Period

- 12.32 In 1235 Richard de Burgo, who had been granted Connacht by King Henry III, carried out the conquest of Connacht and the study area. The Manor of Sligo, containing the study area, was granted to Hugh de Lacy who granted it to Maurice Fitz Gerald (Orpen 1911-20, Vol 2, 193-7). In the fourteenth century the study area came to William de Burgo, Earl of Ulster, but after his death in 1333 control of Leyny was assumed by local lords. Later medieval Anglo-Norman settlement is often indicated by the presence of earth and timber Motte and Bailey castle and Moated sites that were constructed for defence. However, there are no examples of either site type in the study area.

The Post-Medieval Period

- 12.33 In the Down Survey of 1655-6 Aghamore Near was held by the Scottish Nobleman Sir Frederick Hamilton and he retained it in 1670 and Carrownamaddoo was held by Captain John Parker and he retained it in 1670 (<http://downsurvey.tcd.ie>). The Hamilton Estate held Aghamore into the eighteenth century which were leased to Sir Ralph Gore in 1754. In 1765 Aghamore came into the hands of John Cooper (NLI Killadoon Papers MSS 36,010-36,070, 5, 25).

BUILDINGS

Protected Structures

- 12.34 The Sligo County Development Plan 2017-2023 and the Record of Protected Structures was examined as part of the baseline study for this chapter of the EIAR. The review established that there are no Protected Structures situated within the application area. There are no Protected structures listed within the study area.

Non-designated Structures

- 12.35 The National Inventory of Architectural Heritage (NIAH) which is maintained by the Dept. of Culture, Heritage and the Gaeltacht was examined as part of the baseline study for this chapter of the EIAR on the 22nd of September 2020. The review established that there are no additional structures included in the NIAH situated within the application area or the study area.

ARCHAEOLOGY

Archaeological Assessment

Recorded Monuments

- 12.36 Examination of the Record of Monuments and Places (RMP) for Co. Sligo indicated that the site of one Recorded Monument that has been removed, SL020-094--- Aghamore Near Enclosure, is located within the application area (see Fig. 12-1 and Appendix 12.1). This is included in the RMP as:

SL020-094--- Aghamore Near Enclosure

Shown as a hachured enclosure on the 1st edition OS 6-inch map with a road running N-S through it. A NE section of hachured enclosure is shown on the current OS 6-inch map. The site has since been removed by quarrying.

The location of this monument has been quarried down into geological strata completely removing it (see Plate 12-1). An OSI orthophoto taken in 1995 shows that the extraction had already taken place and the monument removed by that date (see Plate 12-2).

- 12.37 The area of notification of one Recorded Monument is slightly within the application area SL020-093--- Ringfort – cashel in Aghamore Near townland. It is described in the RMP as:

Comprises a circular area (int. diam. 20m) enclosed by a bank (Wth 3.50m, H 0.15m) and wide external ditch (Wth 6m). There is no indication of an entrance. The site is heavily overgrown.

This monument is situated c.30m north-east of the application area and will not be directly impacted (see Plate 12-3). The setting of the monument is impacted by the existing extraction. It has an unscreened view of the existing quarry to the west (see Plate 12-4). To the north-west the view of the extraction is screened by the rising ground and existing field bank and hedgerow (see Plate 12-5).

- 12.38 The next closest RMP site SL020-086---- a ringfort in Carrownamaddoo townland is situated c.95m to the north-west of the application area. This and the remaining Recorded Monuments in the study area are considered too far distant to be directly or indirectly impacted by the current proposal.

Undesignated Monuments

- 12.39 Examination of the Sites and Monuments Record (SMR) which is maintained by the Dept. of Culture, Heritage and the Gaeltacht on 22 September 2020 indicated that there are no undesignated monument included within the application area or the study area.

Cartographic Sources

- 12.40 The Ordnance Survey 1st and 3rd edition six-inch maps and the first edition 25-inch maps of the area were examined. The analysis did not indicate any previously unrecorded archaeological sites in the application area or vicinity.

Place Name Evidence

- 12.41 The place names were extracted from the cartography in order to facilitate the search for structures and monuments and small finds, to help identify any unrecorded monuments or structures, to search for any published papers and documents related to the study area and to assist in the study of the historical development of the area. The English translations of the townland names of the study presented above below are based on Logainm.ie. The placenames mainly refer to natural and topographic features. Carns refers to a group of monuments outside the study area on Carns Hill (RMP SL014-231 – 231004)
- 12.42 Aghamore Near and Far: great big field
 Carns: pile of rocks
 Carrickhenry henry's rock
 Carrownamaddoo: quarter of the dogs
 Cuilbeg: small wood
 Drumaskibbole: ridge of the barn
 Tonafortes arable field
 Tullynagracken South: hill of the skins

Previous archaeological investigations in the study area

- 12.43 The existing quarry development was the subject of an EIS carried out in 1996 by Frank L Benson & Partners (Reg No. 96172) that included an archaeological and cultural heritage assessment.
- 12.44 The existing quarry was the subject of licensed monitoring carried out by Mary Henry Archaeological Services in 2000 and 2002 the reports from Excavation.ie are presented below.

Aghamore Near No archaeological significance 00E0757

Monitoring was undertaken of ground disturbance at Aghamore Near, Co. Sligo. The owners of the site had obtained planning permission to extend an existing quarry into a greenfield area. One of the conditions of planning required that all groundworks be monitored. A number of archaeological sites, as recorded in the RMP for County Sligo, are close to the site of the development. However, there was no recorded monument within the confines of the part of the site being extended in late 2000.

Aghamore Near No archaeological significance 00E0757 extension

Monitoring of topsoil-stripping on a greenfield site was carried out as part of an extension to a quarry site. No archaeological remains were uncovered during the monitoring.

- 12.45 There has been one licensed monitoring project carried out within the study area that uncovered no archaeological material (see below).

Aghamore Near and Carns No archaeological significance 11E0084

Monitoring of the groundworks at Aghamore Near took place in May 2011. The works involved the replacement of existing pipes in the vicinity of sites SL020-093, 094 095 and SL10-238, classified as a ringfort, two enclosures and a ritual site (holy well) respectively. The trench was excavated using a JCB JC1320 machine with a 12in. toothed bucket. The excavated trench measured 0.4m (approx.) in width and was 0.8m in depth. The stratigraphy encountered during the excavation of the trench was generally uniform. A (0.1m) layer of humus was underpinned by a (0.5m) layer of gravel and deposited fill associated with the laying of the original pipe. A (0.2m) layer of natural grey clay was visible under this material. Nothing of archaeological significance was encountered during the groundworks.

- 12.46 There has been one geophysical survey carried out within the study area carried out by Target Archaeological geophysics (see below).

Aghamore Near, Co. Sligo 06R0161

Geophysical survey was undertaken over approximately 0.4ha of a single pasture field located in Aghamore Near townland, Co. Sligo. The survey was carried out for Readymix Plc. & The Irish Concrete Federation and has been requested as part of an Environmental Impact Assessment for a proposed quarry extension. The survey was undertaken in the location of ringfort site SL020:093. The aim of the geophysical survey was to gain detailed locational information on the nature form and extent of buried archaeological features within and at the perimeter of RMP SL020:093. No definitive archaeological type responses were identified from survey. It is expected that where buried archaeological remains are present within the investigation area they are likely to remain beyond detection due to the levels of natural variation recorded.

County Development Plan

- 12.47 No sites of archaeological importance, National Monuments, or protected structures listed in the Sligo Development Plan 2017-23 are located within the proposed development area.

Aerial Photographs

- 12.48 Examination of the Ordnance Survey 1995, 2000 and 2005 imagery as well as Google earth imagery from 2006, 2009, 2014, 2018, 2019 and 2020 and Bing imagery from 2016 did not indicate any additional cultural heritage sites in the application area.

Field Assessment

12.49 Field inspections were carried out on the 1st of May 2018 and the 25th of November 2020 in an attempt to identify any previously unknown archaeological or cultural heritage sites.

12.50 Area 1

This is the existing area of extraction with an entrance road from the L3603. that has already been assessed under Planning Application Reg. No. 02/271 (see Plate 12-6 and 12-7 and Fig. 12-1). There is no indication of any cultural heritage material.

Area 2

This is a quadrilateral-shaped area in the northern part of the application area. The entire area has been stripped of topsoil and subsoil down to the bedrock and the soil is stored in the northern part of the area (See Plate 12-8). There is no indication of any cultural heritage material.

Area 3

This is a hexagonal-shaped area of south-sloping pasture, enclosed by hedgerow, in the south-east part of the application area (See Plate 12-9). There is no indication of any cultural heritage material.

Area 4

This is a triangular-shaped overgrown area north of the entrance road (See Plate 12-10). There is no indication of any cultural heritage material.

Area 5

This is a polygonal-shaped north-sloping overgrown area south of the entrance road (See Plate 12-11). There is no indication of any cultural heritage material.

Area 6

This is the existing quarry processing area with access roads that is situated east of the extraction area and east of the L3603 (See Plate 12-12). There is no indication of any cultural heritage material.

ASSESSMENT OF POTENTIAL IMPACTS

Direct Impacts

12.51 There will be no direct impacts on any known items of archaeology, cultural heritage or buildings of heritage interest in the application area.

12.52 The existing extraction has some impact on the setting of RMP SLO20-093--- Ringfort – cashel.

Indirect Impacts

12.53 There will be no indirect impacts on any known items of archaeology, cultural heritage or buildings of heritage interest in the application area or the vicinity.

Interactions with Other Impacts

12.54 No interaction with other impacts has been identified.

Do Nothing Impacts

- 12.55 If the proposed development were not to proceed there would be no negative impact on the cultural heritage.

Worst Case Impact

- 12.56 In the worst case scenario, the development might disturb previously unknown deposits or artefacts without preservation by record taking place in the unextracted green field area 3.

RECOMMENDATIONS / PROPOSED MITIGATION MEASURES

Direct Impacts

- 12.57 Due to the possibility of the survival of previously unknown subsurface archaeological deposits or finds within the unstripped part of the green field area 3 topsoil-stripping in this area should be archaeologically monitored.
- 12.58 The impact on the setting of RMP SL020-093--- Ringfort – cashel should be mitigated by the construction of a landscaped screening berm on the east side of the quarry where it faces the monument, and the retention of the field bank and hedgerow to the north.

Indirect Impacts

- 12.59 No indirect impacts warranting specific mitigation were identified during the course of the cultural heritage assessment.

BIBLIOGRAPHY

- DAHGI 1995. Recorded Monuments Protected under Section 12 of the National Monuments (Amendment) Act, 1994. County Sligo
- Eogan, G. 1965. Catalogue of Irish Bronze Swords. Dublin.
- Eogan, G. 1983. Hoards of the Irish Later Bronze Age. Dublin.
- Eogan, G. 2000. The Socketed Bronze Axes in Ireland. *Prähistorische Bronzefunde, abteilung IX, band 22.*
- EPA 2002. Guidelines on the information to be contained in Environmental Impact Statements.
- EPA 2003. Advice Notes on Current Practice (in the preparation of Environmental Impact Statements)
- Harbison, P. 1969. The axes of the Early Bronze Age in Ireland. *Prähistorische Bronzefunde, abteilung IX, band 1.*
- Heritage Council 1999. The role of the Heritage Council in the Planning Process. Kilkenny.
- Kavanagh, R.M. 1991. "A reconsideration of razors in the Irish earlier Bronze Age". *Journal of the Royal Society of Antiquaries* 121, 77-104.
- MacCotter, P. 2008. *Medieval Ireland*. Dublin.
- O'Flaherty, R. 1995. "An analysis of Irish Early Bronze Hoards containing copper or bronze objects." *Journal of the Royal Society of Antiquaries* 125, 10-45.

- O’Riordain, B and Waddell J. 1993. The Funerary Bowls and vases of the Irish Bronze Age. Galway.
- O’Rorke, T. 1878. History, antiquities, and present state of the parishes of Ballysadare and Kilvarnet, in the county of Sligo; with notices of the O’Haras, the Coopers, the Percevals, and other local families. Ireland under the Normans. 4 Vols. Oxford.
- Otway-Ruthven, A.J. 1980. A History of Medieval Ireland. London.
- Raftery, B. 1984. La Tène in Ireland. Marburg.
- Simpson, D.D.A. 1990. “The Stone Battle Axes of Ireland.” Journal of the Royal Society of Antiquaries 120, 5-40.
- Sligo County Council 2017. County Development Plan 2017-23.
- Waddell, J. 1990. The Bronze Age burials of Ireland. Galway
- Waddell, J. 1998. The Prehistoric Archaeology of Ireland. Galway.

PLATES



Plate 12-1

View of the location of RMP SL020-094--- Aghamore Near Enclosure and the existing application site access road. The area has been extracted down to geological levels completely removing the monument.

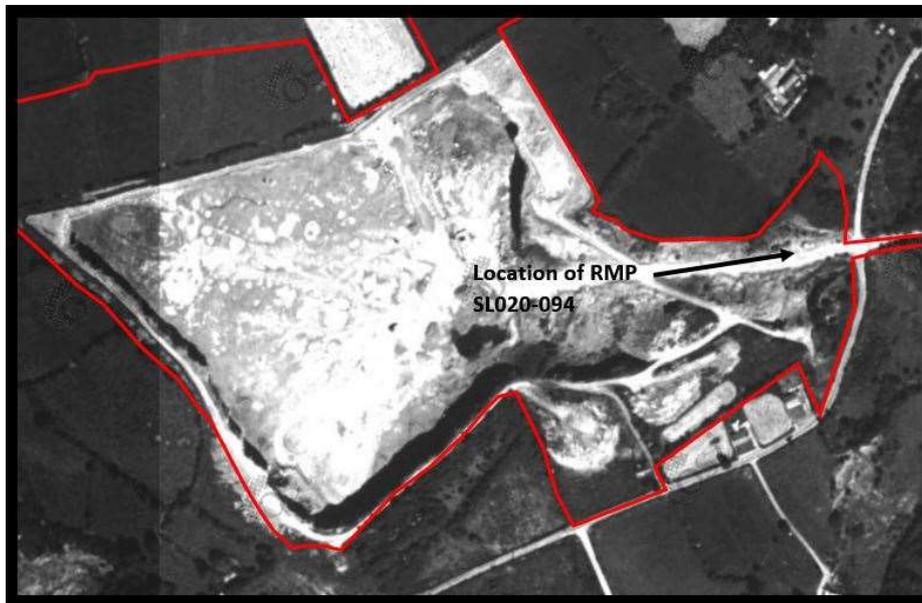


Plate 12-2

OSI 1995 Air Photo that indicates that the location of RMP SL020-094--- Aghamore Near Enclosure had already been extracted by 1995



Plate 12-3
View of RMP SL020-093--- Ringfort – cashel looking north-east.



Plate 12-4
View from RMP SL020-093--- Ringfort – cashel looking south-west to the quarry.



Plate 12-5
View from RMP SL020-093--- Ringfort – cashel looking north-west.



Plate 12-6
2020 Google earth Aerial image showing the application area (red line) with the fieldwork areas numbered.



Plate 12-7
Area 1 Panoramic view of the existing extraction area looking west.



Plate 12-8
Panoramic view of area 2 looking north-west.



Plate 12-9
View of area 3 looking south-west.



Plate 12-10
View of area 4 looking south-west.



Plate 12-11
View of area 5 looking east.



Plate 12-12
Panoramic view of area 6 looking south.

FIGURES

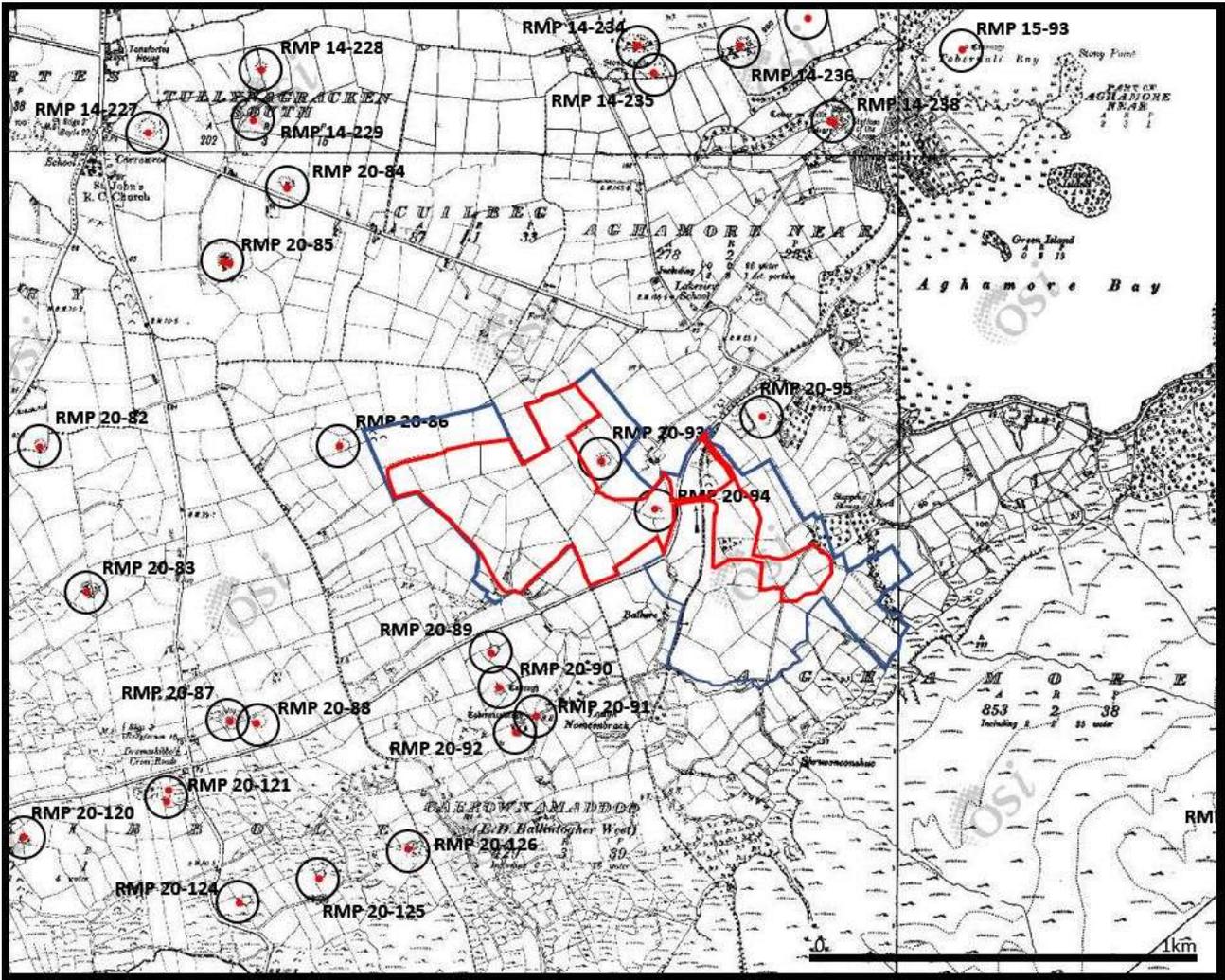


Figure 12-1

The study area. RMP sites are indicated with black circles. The application area is indicated with a red line and the landholding with a blue line.

APPENDICES

Appendix 12-1 Sites in the Record of Monuments and Places

SL014-227--- Tullynagracken South Ringfort – rath

In undulating pasture to the SE of the Sligo-Dublin road. An oval area (25m N-S; 32m E-W) is enclosed to the N and NE by an earth and stone bank (int. H 0.2m; ext. H 0.94m; Wth 1.6m) and from NE to SW by a scarp (H 1.27m). There is no fosse. The entrance (Wth 3.6m) is located to the N.

SL014-227--- Tullynagracken South Enclosure

No information in file.

SL014-229--- Tullynagracken South Earthwork

No information in file.

SL014-234001- Carns Ringfort - cashel

In undulating pasture on high ground, with rising ground to N. The cashel and possible souterrain are mentioned by Wood-Martin and Milligan, but the extant remains are poorly preserved. An oval area (21m NE-SW) is enclosed by a bank (int. H 0.25m; ext. H 0.38m; Wth 1.6m) from NW to SE and by a scarp (H 0.88m) elsewhere. There is no fosse. There is a possible entrance (Wth 1.6m) in the SE.

SL014-234002- Carns Souterrain

A possible souterrain is located to the E of Carns cashel (SL014-234001-), in an area of heavy undergrowth. The site consists of a rectangular cut in bedrock (L 4.1m; Wth 1.43m; D 1.1m), orientated E-W. The cut is three sided (N, E and S) and its possible terminus to the W could not be examined because of dense vegetation. There is no trace of cap stones and the site has been recently used to burn refuse.

SL014-235001- Carns Souterrain

A souterrain recorded within a cashel (SL014-225001-) by Wood-Martin and Milligan was no longer recognisable in 1994 (SMR (1989) file). The cashel has become very overgrown with scrub in the intervening period and no traces of this potential monument was identified.

SL014-235002- Carns South Ringfort - cashel

On S slope in a field in pasture. A field report dating to 1994 recorded 'an oval raised area (int. dims. 30m N-S; 40m E-W), which has been nearly reduced to surrounding ground level in places. No indication of a wall, but large stones have been incorporated into nearby field walls.' (SMR (1989) file). However the site has become very overgrown in the intervening period and there are no remains now visible at ground level.

SL014-236--- Carns South Ringfort - cashel

In dense hazel scrub, on S downslope at edge of a field of pasture. A cashel is mentioned by Wood-Martin and Milligan but because of the dense overgrowth it did not prove possible to locate it precisely.

SL014-237--- Carns South Enclosure

On a S-facing slope in undulating pasture. An enclosure was identified on an aerial photograph (GSI G 32-3, Roll 169, Print 20). It is not marked on any edition of the OS 6-inch map and there are no remains visible remains at ground level.

SL014-238---- Aghamore near Ritual site - holy well

In a wooded area, beside a N-S flowing stream, on the S side of a steep wooded hill. This holy well is called 'Tobernalt'. It is enclosed within a circular setting (diam. 2.15) defined by a stone wall (H 2.27m; wall T 0.5m),

which has an entrance to the SE (Wth 0.63m). The surrounding area has been landscaped. There is what is known locally as a 'Mass Rock' or altar (SL014-238002-) 5.5m to the SE of the well. Among plaques of modern date, affixed to the internal walls of the holy well, is a sandstone cross (H 0.43m; W 0.19m; T 0.06m), with a circular head. The site also contains statues and stations of the cross of modern date. A holly tree hung with votive offerings and rags stands on high ground to the NW of the holy well. Locally it is said that the mass rock was used to say mass in penal times and there has been a revival in recent years, with an annual mass being said by the Bishop of Elphin at 6am on Garland Sunday (last Sunday in July). Though no cures were recorded, it is locally believed that the waters of the stream cure blindness. The holy well is very well attended at all times.

SL014-238001- Aghamore near Cross

This sandstone ringed cross is set in the wall above the holy well named 'Toberan Aillt' on the OS 6-inch map together with plaques of modern date. It measures 0.43m h, 0.19m W and is 0.06m T. with a circular head. The cross is probably not older than the 20th century in date.

SL014-238002- Aghamore near Mass-rock

In a wooded area c.5.5m SE of 'Tobernalt' holy well. Almost square, flat-topped structure (dims. 1.3m N-S; 1.16m E-W; H 0.95m) constructed of unworked stones of various sizes. Concrete has been applied to the sides and top in relatively modern times. This is known locally as a Mass Rock or Penal Altar.

SL015-093---- Lough Gill Crannog

No information in file.

SL020-082---- Carrickhenry Enclosure

Located in undulating pasture planted with trees. Comprises an oval raised area (int. diams. 16m by 16.50m, H 2.50m) conical in section and enclosed by a low and broad bank (Wth 2m, H 2m) with an entrance gap (Wth 4m) but no indication of a ditch.

SL020-083--- Drumaskibbole Ringfort – rath

Located on a rise in undulating ground in pasture. Comprises an oval raised area (int. diam. 33m E-W by 20m N-S) enclosed by a low and broad bank of earth and stone (Wth 2m, H 0.50m). The entrance is on the W (Wth 2m) where a stretch of bank sweeps down off the site onto the level of the field. No indication of a ditch.

SL020-084001- Tullynagracken South Ringfort – rath

Located on a gentle S facing slope in flat to undulating ground in rough pasture. It overlooks the Ox Mountains and Knocknarea. Comprises a roughly circular raised area (int. diam. 22m). This is enclosed by a stone wall with an entrance on the S defined by a pair of upright stones. There is a hut in the interior (SL020-084002-OPW file).

SL020-084002- Tullynagracken Hut site

Located on a gentle S-facing slope in flat to undulating ground in rough pasture. Comprises a rectangular hut (int. dims. 5m by 4m) defined by a wall footing of upright stones with an entrance on the E situated within a cashel (SL020-084001-).

SL020-085001- Tullynagracken South Ringfort – rath

Located just off the summit of a ridge in undulating pasture with views onto the Ox Mountains and Knocknarea. Comprises a circular raised area (int. diam. 21m) enclosed by a bank (Wth 2.70m, H 0.60m) which has been removed in the N. There is an annex (int. diam. 7m) on the E enclosed by a badly preserved stone wall. No indication of a ditch or entrance.

SL020-085002- Tullynagracken South Enclosure

Located just off the summit of a ridge in undulating pasture with views onto the Ox Mountains and Knocknarea. There is an annex (int. diam. 7m) on the E of a cashel (SL020-085001-) which is enclosed by a badly preserved stone wall. No indication of a ditch or entrance.

SL020-086--- Carrownamaddoo Ringfort – rath

In pasture, on gently elevated ground, in undulating terrain. Raised, roughly circular area (26m E–W; 23.5m N–S) defined by a scarp (ext. H 1.2m at W; ext. H 1.6m at E). At SE–SW the scarp is incorporated into a field fence/property boundary which respects the curve of the rath. At W the scarp is topped with a low stony rim (Wth 1m), possibly wall footings. Elsewhere along the top of the scarp, a few stones are visible, barely protruding above the sod. Stones also protrude randomly in parts on the external slope of the scarp. The SW quadrant of the interior is slightly raised above the rest of the interior. In the E half of the interior, there is a slight slope down to E mirroring the contours of the low rise on which the rath is sited. There is a low stony rise (max. dim. c. 1.3m) slightly NE of centre in the interior.

SL020-087--- Drumaskibbole Ringfort – rath

Roughly circular area (int. diam. 24m) enclosed by a broad bank, external ditch and outer bank. There is an entrance in the SE part of the inner bank with a corresponding causeway through the ditch.

SL020-088--- Drumaskibbole Ringfort – rath

Circular raised area (int. diam. 26m) enclosed by a low, broad bank and an external ditch. On the E side the site has been partly embanked. There is an entrance gap in the SE.

SL020-089--- Carrownamaddoo Ringfort – rath

Oval raised area, heavily overgrown, and enclosed by a bank and external ditch. There is an entrance gap in the NE.

SL020-090--- Carrownamaddoo Children's burial ground

Identified as 'Caltragh' on the Current OS 6-inch map. Comprises a rectangular platform (int. dims. 25m by 25m, H 2.35-3m) composed of earth and stone and internally sloping. This is defined by a rectangular stone and earth field boundary at ground level.

SL020-091--- Carrownamaddoo Ritual site - holy well

Identified as 'Tobernacaltragh' on the 1st edition OS 6-inch map. Located along the course of a stream bed. There are no visible surface remains.

SL020-092--- Carrownamaddoo Ringfort – rath

Indicated as a roughly circular hachured area on the current OS 6-inch map. Comprises a circular, heavily overgrown area, enclosed by a bank. There are no indications of a ditch.

SL020-093--- Aghamore Near Ringfort – rath

Comprises a circular area (int. diam. 20m) enclosed by a bank (Wth 3.50m, H 0.15m) and wide external ditch (Wth 6m). There is no indication of an entrance. The site is heavily overgrown.

SL020-094--- Aghamore Near Enclosure

Shown as a hachured enclosure on the 1st edition OS 6-inch map with a road running N-S through it. A NE section of hachured enclosure is shown on the current OS 6-inch map. The site has since been removed by a quarrying.

SL020-095--- Aghamore Far Enclosure

The monument is not represented on the OS 6-inch 1st edition (1837). It is depicted on the OS 25-inch plan (1909) as a raised (potentially circular) area represented on the east by an arc of hachures; this appears to

indicate a possible enclosure. Houses have been built on the site which predate 1995 as they are shown on the OSI photo for that year.

SL020-120--- Drumaskibbole Enclosure

Located on a rise overlooking a stream in undulating pasture. Comprises a rectangular area (int. diam 20m) enclosed by a low wall of boulders. There is an entrance gap in the N. No indication of a ditch. Probably an animal pen.

SL020-121001- Drumaskibbole Enclosure

Situated on a S-facing slope in pasture. Identified on an aerial photograph (ACP V 203/111 -2; Roll 177, pr. 19) as an irregularly shaped enclosure with associated field system (SL020-121002-). There are no surface remains.

SL020-121002- Drumaskibbole Field boundary

A field system of small irregular-shaped fields extending to N and NE of a possible enclosure (SL020-121001-) was identified on an aerial photograph (ACP V203/111-2). There are no visible surface remains.

SL020-124--- Drumaskibbole Ringfort – rath

Located at the end of a ridge in undulating pasture with views onto Ballysadare Bay and Knocknarea. Comprises an oval raised area (int. diam. 24.60m E-W, 18.30m N-S.). It is enclosed by a mostly degraded bank (Wth 2.20m, H 0.20m). The entrance may be located in the SE. No indication of a ditch.

SL020-125--- Drumaskibbole Ringfort – cashel

Located on the top of an elongated steep-sided ridge in pasture. Comprises a circular area (int. diam. 20m) enclosed by a wall which survives as a foundation course of large boulders (Wth 2.80m, H 0.40m) with a more modern field wall built along it. The entrance is in the SW. Field boundaries run off the site on the N and SE.

SL020-126--- Drumaskibbole Ringfort – cashel

Located on an E-W running ridge with steep sides in pasture. Comprises an oval raised area (int. diam 19.50m) enclosed by a mostly ruined stone wall of which the inner and outer facing of the foundation course survives (Wth 2m, H 0.65m). The entrance is in the NE (Wth 2.60m) and a section of field wall is attached to the cashel wall on the N.
