

ARCHAEOLOGICAL IMPACT ASSESSMENT OF A PROPOSED CD&E FACILITY AT WALLINGSTOWN, LITTLE ISLAND, CORK

DATE: MARCH 2008

AUTHOR: ANNETTE QUINN, MA, MIAI
MIRIAM CARROLL, MA, MIAI

PLANNING REF. NO: N/A

EXCAVATION LICENCE: N/A

CLIENT: **GOLDER ASSOCIATES IRELAND**
TOWN CENTRE
DUBLIN ROAD
NAAS
CO. KILDARE

*For inspection purposes only.
Consent of copyright owner required for any other use.*



TOBAR
archaeological services

Saleen, Midleton, Co. Cork
Tel: 021-4652305
Fax: 021-4651791
Mob: 087-4188992 or 087-4188994

CULTURAL HERITAGE / ARCHAEOLOGY

TABLE OF CONTENTS

1 Introduction

- 1.1 Statement of Authority
- 1.2 Objectives
- 1.3 Consultations
- 1.4 Statutory Context

2 Methodology

- 2.1 Desktop Assessment
 - 2.1.1 Cartographic Sources
 - 2.1.2 Documentary Sources
- 2.2 Field Assessment
 - 2.2.1 Field Walking

3. Existing Environment

- 3.1 Topography and Land Use
- 3.2 Placename Evidence
- 3.3 Archaeological Heritage within survey area
- 3.4 Archaeological Heritage within 1km of Survey Area

4. Assessment of Impacts

- 4.1 Impact on archaeological sites within survey area (including existing and previously unrecorded)
- 4.2 Impact on archaeological sites within 1km of survey area
- 4.3 Mitigation Measures

5. Conclusion

6. References

APPENDICES I-III

For information purposes only.
Copyright owner required for any other use.

1. INTRODUCTION

1.1 STATEMENT OF AUTHORITY

This archaeological and cultural heritage report was prepared by Miriam Carroll and Annette Quinn of Tobar Archaeological Services. It presents the results of an archaeological impact assessment for a proposed CD&E waste recovery facility at a ca. 2.2 ha site in Wallingstown, Little Island, Co. Cork ('the Application Site').

The Application Site is located in the northwestern corner of a ca. 29 ha brownfield site comprising waste lagoons ('the Thornbush Site'). Its development in the 1970s was undertaken by Mitsui Denman and involved the excavation of large artificial lagoons to facilitate waste material from an adjacent industrial plant. It was subsequently bought by Thornbush Holdings, who are obliged to restore the site under the existing planning permission (Planning Ref: 1466/73) and the IPPC licence (No. 389). The proposed CD&E waste recovery facility will facilitate the restoration of the Thornbush Site.

Miriam Carroll and Annette Quinn are the directors of Tobar Archaeological Services and both graduated from University College Cork in 1998 with a Masters degree in Methods and Techniques in Irish Archaeology. Both directors are licensed by the Department of the Environment, Heritage and Local Government to carry out excavations and are members of the Institute of Archaeologists of Ireland (IAI). Annette Quinn and Miriam Carroll have been working in the field of archaeology since 1994 and have undertaken numerous projects for both the private and public sectors including excavations, site assessments (EIS/EIA) and surveys.

1.2 OBJECTIVES

The aim of this report is to assess the overall impact of the proposed development on the cultural heritage landscape of the Application Site itself and the surrounding area. The report amalgamates desk-based research and the results of field walking to identify areas of archaeological significance or

archaeological potential, likely to be impacted by the proposed development. The visual impact of the proposed development on newly discovered monuments as well as known recorded monuments is also assessed. A number of mitigating measures are recommended in order to minimise any such impacts.

1.3 CONSULTATIONS

The following sources were consulted for the cultural heritage and archaeological section of the EIS report:

- The Sites and Monuments Record (SMR)
- The Record of Monuments and Places (RMP)
- The Topographical Files of the National Museum of Ireland
- The *Archaeological Inventory of County Cork Vol. II – East and South Cork* (Power *et al.* 1994)
- The Excavations Database (www.excavations.ie)
- The *Cork County Development Plan 2003* (Cork County Council)
- Cartographic Sources:
 - First edition Ordnance Survey map (1841)
 - Second edition Ordnance Survey map (1898)
- Documentary sources to include all relevant publications, journals, local histories, etc.

1.4 STATUTORY CONTEXT

Archaeological monuments are safeguarded through national and international policy, which is designed to secure the protection of the cultural heritage resource. This is undertaken in accordance with the provisions of the European Convention on the Protection of the Archaeological Heritage (Valletta Convention). This was ratified by Ireland in 1997.

Both the National Monuments Acts 1930 to 2004 and relevant provisions of the Cultural Institutions Act 1997 are the primary means of ensuring protection of archaeological monuments, the latter of which includes all man-made structures of whatever form or date. There are a number of provisions under the National

Monuments Acts which ensure protection of the archaeological resource. These include the Register of Historic Monuments (1997 Act) which means that any interference to a monument is illegal under that Act. All registered monuments are included on the Record of Monuments and Places (RMP).

The Record of Monuments and Places (RMP) was established under Section 12 (1) of the National Monuments (Amendment) Act 1994 and consists of a list of known archaeological monuments and accompanying maps. The Record of Monuments and Places affords some protection to the monuments entered therein. Section 12 (3) of the 1994 Amendment Act states that any person proposing to carry out work at or in relation to a recorded monument must give notice in writing to the Minister (Environment, Heritage and Local Government) and shall not commence the work for a period of two months after having given the notice. All proposed works, therefore, within or around any archaeological monument are subject to statutory protection and legislation (National Monuments Acts 1930-2004).

2. METHODOLOGY

The assessment of the archaeology and cultural heritage of the Thornbush Site included desk based research as well as field walking. A desk-based study of the Thornbush Site and environs was undertaken in order to assess the archaeological potential of the area and to identify areas of archaeological significance within or near to the Application Site.

Field walking of the Thornbush Site was undertaken to determine if previously unrecorded monuments were located within the site and to assess any potential impacts on known or previously unrecorded monuments and areas or buildings of historical, archaeological or cultural heritage significance. The potential impact of the proposed development on Protected Structures or proposed Protected Structures on or within the vicinity of the site was also assessed.

2.1 DESKTOP ASSESSMENT

2.1.1 CARTOGRAPHIC SOURCES

A primary cartographic source and base-line data for the assessment was the consultation of the Record of Monuments and Places (RMP). The cartographic elements of this resource consist of 6 inch Ordnance Survey (OS) maps on which the locations of recorded monuments are annotated by hand. In conjunction with this record the mapping information which accompanies the database of all known recorded archaeological monuments in Ireland was also consulted (www.archaeology.ie). The 1st (1841) and 2nd (1898) edition OS maps for the area were also consulted.

2.1.2 DOCUMENTARY SOURCES

2.1.2.a Record of Monuments and Places (RMP)

In conjunction with the consultation of the SMR and RMP records, files relating to all recorded monuments within or in the vicinity of the study area were also examined. The files contain information pertaining to each recorded monument – both descriptive and photographic - and also provide details of newly discovered monuments which may not appear on the SMR and RMP maps or lists.

2.1.2.b Topographical Files – National Museum of Ireland

Details relating to finds of archaeological material and monuments in numerous townlands in the country are contained in the topographical files held in the National Museum of Ireland. In order to establish if any new or previously unrecorded finds had been recovered from the study area these files were consulted for every townland within the Thornbush Site and the surrounding area.

2.1.2.c Archaeological Inventory of County Cork

Further information on archaeological sites may be obtained in the published County Archaeological Inventory series prepared by the Department of the Environment, Heritage and Local Government. The archaeological inventories present summarised information on sites listed in the SMR/RMP and include detail such as the size and location of particular monuments as well as any associated folklore or local information pertaining to each site. The inventories, however, do not account for sites which are as yet undiscovered. The *Archaeological Inventory of County Cork Vol. II – East and South Cork* was published in 1994 and therefore

does not represent a full or final record of archaeological monuments. Any archaeological sites discovered after 1994 would have been added to the Record of Monuments and Places but would not be listed in the inventory.

2.1.2.d Cork County Development Plan

The Cork County Development Plan (2003) was consulted for the Record of Protected Structures (RPS) and items of cultural, historical or archaeological interest which may be affected by the proposed development. The Record of Protected Structures lists all buildings in the county which have Protected Structure status, however, this list may be added to by the Cork County Conservation officer or County Archaeologist after the publication of the list in the Development Plan.

2.1.2.e Excavations Bulletins and Excavations Database

The Excavations bulletin is an annual account of all excavations carried out under license. The database is available on line at www.excavations.ie and includes excavations from 1970 to 2002. Excavations carried out in Ireland after 2002 have not yet been added to the website but can be purchased in hardcopy. This database was consulted as part of the desktop research for this assessment to establish if any archaeological excavations had been carried out within or near to the Thornbush Site.

2.1.2.f National Inventory of Architectural Heritage (NIAH)

The NIAH is a section within the Department of the Environment, Heritage and Local Government. The work of the NIAH involves identifying and recording the architectural heritage of Ireland, from 1700 to the present day. The NIAH has published a number of counties to date and further information may also be accessed at www.buildingsofireland.ie.

2.2 FIELD ASSESSMENT

2.2.1 FIELD WALKING

The Thornbush Site was inspected by Tobar Archaeological Services in early February 2008. The aim of the site inspection was to assess the impact of the development on the known and potential archaeology of the site. Assessing current land use practices, topography and aspect were included in the field walking as well as identifying previously unrecorded archaeological monuments.

Any impacts, including visual, on the known and recorded archaeology of the area within and outside the Thornbush Site was also assessed during field walking. A descriptive and photographic record was made of the Application Site and wider Thornbush Site (Appendix III).

The inspection of the Thornbush Site at Wallingstown was mainly concerned with the identification of potential low visibility archaeological and/or historical features that had not been previously recorded. The field assessment was also concerned with the surveying of known recorded archaeological sites in terms of verifying and clarifying their location and above ground extent if any. The latter is important in the assessment of the potential visual impact a development may have on above ground features.

3. EXISTING ENVIRONMENT

3.1 TOPOGRAPHY

3.1.1 Location

The Thornbush Site is located in Little Island c. 4km east of Cork city. Little Island is bound to the north by the N25 Cork-Waterford road and to the south by the waters of Lough Mahon. While primarily utilised for agriculture in the nineteenth and early twentieth century Little Island is now largely industrialised and contains numerous industrial estates and factories. The Thornbush Site, inclusive of the Application Site, is situated on the south-west side of Little Island in the townlands of Wallingstown and Inchera (Fig.s 1-3).

3.1.2 Topography

The Thornbush Site is now largely occupied by both infilled and water-filled lagoons (Plates 1, 3 and 4). The lagoons were originally excavated up to depths of c. 8m and were subsequently used for the storage of waste material from the industrial process. Consequently, a number of these lagoons – particularly those in the northern half of the site - are now completely infilled. The lagoons located further to the south have been infilled to varying degrees but are largely water-filled. A 'green belt' consisting of a line of trees and bushes bounds the site to the north and effectively divides the Thornbush Site from the former Mitsui Denman

industrial plant to the north. Large earthen berms bound the Thornbush Site to the south and south-west. The shores of Lough Mahon are located immediately to the south-west of the Thornbush Site and an existing public walking route which extends along the water front is also located within the Thornbush Site (Plate 7). A modern roadway which gives access to a number of industrial plants and units bounds the east side of the proposed site.

The Application Site itself consists of a lagoon which is now mainly infilled although a small portion remains water-filled at its western extent (Plate 1). This area is bound to the north by a boundary comprised of trees and scrub outside which is the R623 public roadway (Plate 2). To the south-west a man-made bank separates the Application Site from an adjacent water-filled lagoon on the Thornbush Site.

3.2 Place Name Evidence

Place name evidence can often refer to existing archaeological monuments in the locality or to sites which are no longer visible above ground or whose location has long been forgotten. Townland names may also refer to natural features in the landscape such as mountains and lakes or the terrain of the immediate landscape. The Thornbush Site is located within the townlands of Inchera and Wallingstown. Placenames such as Wallingstown are more likely to refer to an important person or family who lived in the locality and who lended their name to that place. Lewis refers to 'Wallinstown House' which was the principle seat of Little Island in the 19th century. The placename Inchera may be derived from the Irish *inis* which refers to an island or a low meadow along a river (Flanagan and Flanagan 2002, 99-100 and Joyce 1870).

3.3 Archaeological Heritage within the study area

The site of one recorded archaeological monument (RMP CO075-052 Horizontal Wheeled Mill site) is located within the Thornbush Site (Fig. 1), but outside of the Application Site. It is situated at the north-east side of the site in the area of now infilled lagoons, c. 369m to the east of the Application Site. This portion of the site is proposed for future infilling and restoration.

Horizontal Wheeled Mill Site – RMP C0075-052

The site of a horizontal and vertical water mill (RMP C0075-052) is located within the Thornbush Site in the vicinity of an infilled lagoon (Fig. 1) (Plate 3) (NGR – 17426/07198). The monument consists of the site of two seventh century watermills which were uncovered during ground works in the late 1970s. Elements of the two wooden mills were uncovered on the site in c. 1978-9 during the excavation of large storage lagoons for Mitsui-Denman Ireland.

The subsequent rescue excavation of the mills showed that two types of watermill, horizontal and vertical, were present on the site. Timbers from the mills were dated by dendrochronology to the year 630 A.D and represent the earliest known close association of each type of watermill (Rynne 1993, 25 and 28). The siting of the mills is also significant and suggests that they essentially were tidal mills harnessing the ebb and flow of the tide. The area in which the mills were found now consists of reclaimed land, however, it would have been significantly closer to the shoreline in the 7th century A.D. At this time Little Island would have been a true island with extensive areas of tidal marsh around its shoreline (*ibid.*, 29). The foundations of the mills were covered by up to 1.5m of estuarine gravel and mud which indicates that the tidal waters of Lough Mahon extended inland as far as the mill sites in the seventh century (*ibid.*). Excavation showed that the mill foundations were also built on riverine mud which further suggests that they were constructed on what was then a tidal marsh. Cartographic evidence shows that an area of estuarine mud located to the west and south-west of the mill sites was reclaimed sometime in the mid-late nineteenth century.

The discovery of these mills is significant as they provide hitherto undiscovered evidence for the use of both horizontal and vertical watermills in 7th century Ireland and also suggest that large-scale harvesting of crops was being undertaken in the Little Island region at this time. The area in which the mills were found underwent extensive groundworks in order to construct the 8m deep lagoons. Consequently, the water mills were fully archaeologically excavated and removed. The lagoons in this area are now largely infilled with waste material and it is proposed that the site will be further infilled with material from the CD&E facility to a height of 2m.

The description of the watermills as published in the *Archaeological Inventory of County Cork Vol. II – East and South Cork* (Power et al., 1994) is presented in Appendix I.

A programme of field walking of the Thornbush Site was also undertaken in order to detect the presence of previously unrecorded monuments, however, no such monuments were noted.

'Grotto'

An interesting structure is located at the west side of the Thornbush Site, but outside of the Application Site, on the northern shore of Lough Mahon (Fig.s 1-2). It is situated approximately 100m to the south-west of the Application Site and is separated from the latter by a water-filled lagoon and an earthen berm. While it has been referred to as a 'grotto' its precise function is unclear. The structure would appear to consist of a rectangular building which has been surmounted with an arch of random rubble stone. It is this arch which gives the appearance of a modern-day grotto, however, it is unclear if it ever functioned as such. The stone arch now acts as a roof to a rectangular structure which is largely built of red brick. The south-west facing elevation of this structure, however, is faced with large, dressed limestone blocks and also displays three blocked door openings and an oculus (Plates 5-6). A low ogee-headed doorway is located centrally in this elevation and is flanked on either side by a pointed-arched doorway. The central door opening is surmounted by a blocked oculus. The general appearance of this elevation is a decorative one due to columns carved in relief on either side of each door opening and leaf ornamentation beneath the oculus.

The interior of the structure may be accessed from the north through a small stone and red brick built annex which has two pointed arched windows and a blocked doorway. This portion of the building is not covered by the stone arch and is more likely to be associated with the main rectangular structure. A narrow passageway leads from the annex into the single room which comprises the interior of the rectangular structure. Access would not originally have been gained from here as a portion of the wall dividing the annex from the main structure has been breached. The walls in the room of the main structure are constructed of red brick and are partially plastered. A number of blind arched recesses are also visible in the north, east and west elevations. The ceiling of this room is now formed by the stone arch.

The top of the stone arch may be accessed by a set of stone steps built into the south-east side of the arch. The summit of the arch consists of a flat circular platform constructed of red brick. This area affords extensive views of Lough Mahon to the south, east and west (Plate 7).

This building, while located within the overall site boundary, will not be directly impacted by the current development proposals and is situated c. 100m to the south-west of the Application Site. The structure is not a recorded monument and is not listed in the Record of Protected Structures of the County Development Plan. In this regard the building has no formal legislative protection but should be retained *in situ* in the interest of the continued preservation of the architectural heritage of the area.

3.4 Archaeological Heritage within 1km of the Thornbush Site

Seven recorded monuments are located within a 1km of the Thornbush Site and are listed below in Table 3.4.1. A full description of each monument from the *Archaeological Inventory of County Cork Vol II – East and South Cork* (Power *et al.* 1994) or the Archaeological Survey files/excavations database as appropriate is presented in Appendix II while a general discussion of the monument types represented in the area is outlined below.

Table 3.4.1

Monument No.	Nat. Grid Ref.	Townland	Classification
CO075-020/01	17447/07196	Wallingstown	Graveyard
CO075-020/02	17445/07194	Wallingstown	Church
CO075-021	17454/07194	Wallingstown	Tower House
CO075-082	17500/07240	Castleview	Fulacht Fiadh
CO075-084	17517/07239	Castleview	Corn Drying Kiln
CO075-085	17510/07237	Castleview	Miscellaneous
CO075-086	17504/07239	Castleview	Miscellaneous

A number of monument types are represented within 1km of the Thornbush Site and consist of the following: Church and graveyard, tower house, *fulacht fiadh*, corn-drying kiln and miscellaneous excavated features.

The monument types represented range in date from the prehistoric period to the medieval period.

The medieval period is represented by the ruins of a church and associated graveyard located in Wallingstown townland in an area of unused or waste ground at the entrance to an industrial estate (Plate 8). The monuments are located c. 300m to the north of the Thornbush Site and to the north-east of the Application Site (Fig. 1). The church (RMP CO075-020/02) consists of a rectangular structure measuring 13.35m (E/W) by 8.5m (N/S) and forms the north-west corner of the graveyard. The west gable of the church and the north wall stand to full height but much of the east and south walls are now only 1.1m in height and have been extensively repaired (Power *et al.* 1994, 254). The church would appear to be the remains of a late medieval church which was much repaired in later centuries. It is likely to have been the parish church of Little Island which was under repair in 1615 and 1639 (*ibid.*). In 1700 it was described as being in good repair and built of stones and lime. At this time it contained a pulpit, desks and a tomb belonging to the Courthy family (*ibid.*). The interior of the church is used for burials and the eastern half of the structure is divided between two nineteenth century grave plots. The ruinous remains of a gabled structure containing a nineteenth railed burial plot are built against the exterior of the west gable of the church.

An L-shaped graveyard (RMP CO075-020/01) is located to the east and south of the church at Wallingstown. It is enclosed by a low stone wall and contains six rows of inscribed headstones as well as many rows of low, uninscribed gravemarkers (*ibid.*, 272). Many of the inscribed headstones date to the eighteenth century and the earliest noted inscription dates to 1715 (*ibid.*).

A small tower house (CO075-021) also dating to the medieval period is located west of the aforementioned church and graveyard in the townland of Wallingstown (Plate 9). It consists of a rectangular tower which now stands to four storeys in height. A number of original doors and windows survive in the tower, although the ground floor door has been reconstructed. Modern repairs were also undertaken at the top of the tower where the east, west and south walls were reduced to form gables for a more recent roof which is now gone (*ibid.*, 232). The tower house is known as Wallingstown Castle although no direct link is known between the structure and the Wallyns family. It was held by the Fitzgeralds for a time during the sixteenth century (*ibid.*).

Both the church and graveyard and the nearby tower house were located within the demesne of Little Island House (now demolished).

Further to the north-west in the townland of Castlevew are four recorded monuments (CO075-082, CO075-084, CO075-085, CO075-086), the majority of which would appear to date to the prehistoric period (Fig. 4). All four sites were discovered during monitoring of topsoil removal associated with the development of the East Gate Business Park and were fully archaeologically excavated at that time.

Fulachta fiadh are one of the most numerous monuments in the country with thousands in Munster alone. An unusually high density of *fulachta fiadh* has also been noted in North Cork (Power *et al.* 2000, 43). They usually consist of crescent-shaped mounds of burnt soil and stones and represent ancient cooking places. Excavated examples show evidence for a trough which when water-filled is thought to have been used for cooking. The water was boiled by heating stones over a hearth and placing them in the water and in turn cooking the meat. The heated fire-cracked stones were then discarded around the trough, giving the monuments their characteristic horse-shoe shape. These monuments are frequently sited adjacent to or near a water source such as a stream or river or alternatively in lowlying marshy ground. *Fulacht fiadh* generally date to the Bronze Age (2400-500 BC). The *fulacht fiadh* at Castlevew was fully archaeologically excavated in advance of development.

A possible corn-drying kiln was also uncovered at Castlevew as well as two linear stone-lined features with fills consisting of charcoal-enriched deposits and red, oxidised soil resulting from intense burning. All the features uncovered were fully archaeologically excavated.

General Historical Background

In his description of Little Island in the early-mid 19th century Lewis (1837, 336) states that the island was chiefly under tillage and 'in a high state of cultivation'. He also noted that there was no waste land or bog which would indicate that the majority of land reclamation had taken place by this time. Lewis also makes reference to Wallinstone House, later known as Little Island House, which was located to the north-west of the Thornbush Site. The house was the residence of the Bury family and dated to the 18th century. It consisted of a Palladian house

which could be stylistically dated to c. 1780 (Bence-Jones 1978, 189). From its plan it is thought that it was probably a late work of Davis Duckart (*ibid.*). The house itself was comprised of a three storey, seven bay centre block joined to office wings. It had a three bay breakfront on both the entrance and garden fronts and the interior boasted a large hall with a staircase in a separate hall to the left. Three large rooms were also located in the garden front (*ibid.*). It was in ruinous condition in the late 1970s and by the mid- 1980s the house had been reduced to rubble.

Inchera House was located to the north-west of the Thornbush Site in the townland of Inchera. It consisted of a two storey early nineteenth century house which also contained a lower two storey service wing and a large single storey Victorian addition (Bence Jones 1978, 158). It was originally a seat of the Oliver family and was burnt in the 1950s (*ibid.*).

A 'Chemical Works' is indicated on the southern shore of Little Island on a map of the area dated to 1891 and on the 2nd edition (1898) 25 inch Ordnance Survey map. Its indication as a chemical works is somewhat misleading as it would appear to have functioned primarily as a tar factory. The opening of a tar factory on Little Island is documented in 1875 and may have been linked to the expansion of the gasworks in Cork city whose main by-product was tar (Rynne 1999, 247). Tar distillation would appear to have been carried out at the factory in Little Island which led to the manufacture of products such as creosote and pitch (*ibid.*). Few details regarding the operation of the works are known, although cartographic evidence would suggest an expansion of the facility in the very late 19th century/early 20th century. Both a chimney and a pier are indicated in this area on the earlier 1891 map with numerous structures and 'Tanks' shown on the later (1905) OS map. The factory had gone out of use some twenty years later, however, and is indicated as 'disused' on the 3rd edition (1935) OS map (Fig. 1). The site of the tar factory is located over 300m to the south-east of the Thornbush Site.

4. ASSESSMENT OF IMPACTS

4.1 IMPACT ON ARCHAEOLOGICAL MONUMENTS WITHIN THE THORNBUSH SITE

4.1.1 RECORDED ARCHAEOLOGICAL MONUMENTS

One recorded archaeological monument (RMP CO075-052) exists within the Thornbush Site, but outside of the Application Site. It consists of a horizontal wheeled mill site which was fully archaeologically excavated during the 1970s when it was discovered during deep excavation works associated with the construction of lagoons for an industrial plant located further to the north. No impacts on this monument are anticipated (see section 4.1.3 below).

4.1.2 NEWLY DETECTED SITES

No previously unrecorded monuments were detected within the Thornbush Site during field walking.

4.1.3 DIRECT IMPACTS

No direct archaeological impact on the recorded monument located within the Thornbush Site (RMP CO075-052 - horizontal wheeled mill) is anticipated. The watermills were fully archaeologically excavated at the time of their discovery and consequently were removed from the site. Previous development of the site for Mitsui Denman involved the excavation of the aforementioned lagoons up to a depth of 8m. The proposed CD&E waste recovery facility is located an adequate distance from the site of the watermills in an infilled lagoon and will not impact on the recorded monument.

4.1.4 VISUAL IMPACTS

The recorded archaeological monument located within the Thornbush Site does not have any above-ground remains and was fully archaeologically excavated and removed from the site. Consequently, the development proposals at the Application Site will not have any visual impact on the monument. No recorded monuments or newly detected sites are located within the Thornbush Site, therefore it is unlikely that development works will have any direct visual impact.

4.2 IMPACT ON ARCHAEOLOGICAL MONUMENTS WITHIN 1KM OF THE THORNBUSH SITE

4.2.1 Direct Impacts

Seven recorded archaeological monuments listed in the Record of Monuments and Places (RMP) are located within 1km of the Thornbush Site (See Appendix II; Fig. 1 and 4). The church and graveyard (RMP CO075-020/01 and 02) and tower house (RMP CO075-021) are located to the north of the Thornbush Site and are separated from the latter by the now decommissioned Mitsui Denman industrial plant. The proposed entrance to the Application Site is currently located at the west side of the Thornbush Site over 300m from the aforementioned recorded monuments. These monuments are therefore unlikely to be directly archaeologically impacted by the proposed development. The recorded monuments at Castleview are located over 700m to the north-east of the Thornbush Site and were fully archaeologically excavated at the time of their discovery. The distance of these monuments from the Thornbush Site mitigates against any direct archaeological impact.

4.2.2 Visual Impacts

The visual impact of the proposed development at the Application Site on recorded archaeological monuments in the vicinity of the site is minimised by the distance of such monuments from the site boundary (i.e. in excess of 200m). No archaeological monuments are readily identifiable in the landscape from the Thornbush Site and are screened from view by existing boundaries and/or buildings. The area immediately surrounding the tower house and church and graveyard has been extensively developed for industrial purposes over the last number of decades therefore the original environment and setting of the monuments has already been significantly altered. It is unlikely, therefore, that the proposed development will have any significant negative visual impact on the archaeological landscape.

4.2.3 Summary of Effects

One recorded monument (RMP CO075-052) is located within the Thornbush Site. The monument is located in the portion of the site proposed for infilling and is situated c. 369m to the east of the Application Site. The monument was fully archaeologically excavated and removed from the site at the time of its discovery in the 1970s and therefore will not be directly or indirectly impacted by the

development proposals. Those recorded monuments located outside the Thornbush Site but within approximately 1km of its boundary are also unlikely to be directly affected by the current proposals.

The potential for impacts on previously unrecorded archaeological remains which may exist within the Thornbush Site is also low due to the extensive groundworks which took place on the site for the excavation of the 8m deep lagoons.

Potential visual impact on the recorded monument within the Thornbush Site by the proposed development at the Application Site is negated by the fact that no above-ground remains of the monument now exist. The distance of the recorded monuments located outside the site boundary and the industrial nature of the immediate environs also mitigates against such an impact.

4.3 MITIGATION MEASURES

While one recorded monument (CO075-052 – Water mills) is located within the Thornbush Site no above-ground or sub-surface remains of the mills now exist on the site. The construction of the CD&E facility at the Application Site will involve infilling the remainder of a partially infilled lagoon. As extensive groundworks have already taken place in this area no further archaeological input is anticipated for this development.

A structure of architectural significance is located within the Thornbush Site to the west of the Application site. The building referred to as a 'grotto' will not be directly impacted by the proposed CD&E waste recovery facility and is currently screened from view by a thicket of trees. It is recommended that no groundworks take place in the vicinity of the structure and that the trees surrounding the building be maintained in the interest of the continued preservation of the architectural heritage of the area.

- A copy of this report should be sent to the following agencies:

The Development Applications Unit,
National Monuments Service,
Department of the Environment, Heritage and Local Government,
Dún Scéine,
Harcourt Lane,
Dublin 2.

Catryn Power
County Archaeologist,
Heritage Unit,
Cork County Council,
Mill View house,
Traveller's Way,
Victoria Cross,
Cork.

Mona Hallinan
Conservation Officer
Heritage Unit,
Cork County Council,
Mill View house,
Traveller's Way,
Victoria Cross,
Cork.

5. CONCLUSION

This assessment was carried out as part of an Environmental Impact Statement for a proposed CD&E waste recovery facility at Inchera and Wallingstown, Little Island, Co. Cork. The assessment included desktop research and a programme of field-walking to identify areas of archaeological potential within and outside the Application Site. One recorded archaeological monument is located within the Thornbush Site but no longer has any above-ground or sub-surface remains. No previously unrecorded monuments were detected in the site during field walking. Seven recorded archaeological monuments occur within 1km of the Thornbush Site and will not be directly or indirectly impacted by the development. It is unlikely that they will be significantly visually impacted by the development given their distance from the Application Site.

6. REFERENCES

Bence Jones, M., 1978, *Burke's Guide to Country Houses*. Burke's Peerage Ltd., London.

Flanagan, D. and Flanagan, 2002, *Irish Place Names*. Gill and Macmillan, Dublin.

Framework and Principles for the Protection of the Archaeological Heritage, 1999, Department of the Arts, Heritage, Gaeltacht and the Islands.

Joyce, P.W., 1870, *Irish Place Names*. Appletree Press, Belfast.

Lewis, S., 1837, *A Topographical Dictionary of Ireland*. London.

Power, D. et al., 1994, *The Archaeological Inventory of County Cork, Vol. II – East and South Cork*. Stationery Office, Dublin.

Rynne, C. B., 1988, *The Archaeology and Technology of the Horizontal-Wheeled Watermill, with Special Reference to Ireland Vol I-II*. Unpublished MA Thesis.

Rynne, C. B., 1992, Milling in the 7th century. *Archaeology Ireland*, **6**, No. 20, 22-4.

Rynne, C. B., 1993, *The Archaeology of Cork City and Harbour from the Earliest Times to Industrialisation*. The Collins Press, Cork.

Rynne, C. B., 1999, *The Industrial Archaeology of Cork City and its Environs*. Stationery Office, Dublin.

CARTOGRAPHIC SOURCES

Record of Monuments and Places (RMP) for County Cork, Sheet 75.

1st Edition 6" OS map (1841) Sheet 75.

2nd Edition 25" OS map (1898) Sheet 75.

APPENDIX I: DESCRIPTION OF RECORDED MONUMENTS WITHIN THE PROPOSED DEVELOPMENT SITE¹

RMP C0075-052

Townland: Wallingstown

NGR: 17426/07198

Horizontal wheeled mill On N side of Lough Mahon in inner reaches of Cork Harbour, on reclaimed land in Little Island. Site in grounds of Mitsui Denman (Ireland) Ltd., Little Island. Timber remains of two tidal mills uncovered here c. 1978 during extension work to factory; one vertical wheeled and one horizontal wheeled mill, both dendrochronologically dated to c. 630 AD and thereby 'the earliest known example of its type in either Europe or Aisa' (Rynne 1992, 63). Horizontal mill site consisted of wooden framing from inlet channel leading to side timbers and plank flooring for millhouse substructure (see reconstruction drawing Rynne 1992, 64, fig.6). Two hollow-log penstocks found out of position but presumably associated with this mill; they are 'wholly unlike the normal type' being 'comparatively short (flume 1, 2.10m; flume 2, 2.03m), but their most striking feature was the height of their sides, some 81cm' (Rynne 1992, 60). Immediately to S, remains of undershot vertical wheeled mill consist of wooden framing for headrace channel, partially wattle-floored, converging on two-piece wooden penstock (L3.11m; Wth converging 1.3m-0.8m) (Rynne 1988, app. 1, vol.2). (Power *et al.* 1994, 165).

¹ Description taken from the *Archaeological Inventory of County Cork Vol II – East and South Cork* (Power *et al.*, 1994).

APPENDIX II: DESCRIPTION OF RECORDED MONUMENTS WITHIN 1KM OF THE PROPOSED DEVELOPMENT AREA²

RMP CO075-020/01

Townland: Wallingstown

NGR: 17447/07196

Graveyard In flat area of waste ground, inside industrial estate; formerly in grounds of Little Island house. L-shaped graveyard (21m E-W; 12m N-S), to E and S of ruined parish church of Little Island, N walls of church and graveyard in line. Enclosed by low stone wall with concrete cap. Six rows of inscribed headstones and many rows of uninscribed grave markers. Area of burial extends inside church and into annexe at EW gable. Many 18th-century inscriptions, earliest noted dates to 1715. According to Coleman (1904-6e) known as 'St Lappan's Churchyard'. (Power *et al.* 1994, 272).

RMP CO075-020/02

Townland: Wallingstown

NGR: 17445/07194

Church Forming NW corner of graveyard ruins of rectangular church (13.35m E-W; 8.5m N-S). W gable and N wall stand to full height but much of E and S walls reduced to c. 1.1m in height, much repaired. Inner wall face plastered and interior used for burials; E half divided between two 19th-century grave plots. Doorway near E end of S wall much destroyed but lower jambs survive with deep chamfer on outer edge. Opposite in N wall, inserted door with brick surround. In E wall lower courses of inserted window with brick surround. Appears to be core of late medieval church much repaired at later date(s). Built against outside of W gable is much ruined and overgrown gabled structure (c. 3.5m E-W; c. 5m N-S), containing railed 19th-century grave plot. Parish church of Little Island, in repair 1615 and 1639 (Brady 1863, vol. 1, 209), described in 1700 as 'built with stones and lime, in good repair; there is a pulpit and desks, but no seats; a tomb in the church belonging to the Courthy's family; the church is about 40 feet long and 20 broad' (*ibid.*); may have gone out of use when parish united to Cahirlag in 1769 (*ibid.*, 210). Power (1923, 185) describes walls as 'standing to their original

² *Site descriptions are taken from the Archaeological Inventory of County Cork Vol II – East and South Cork (Power et al., 1994) and the excavations database (www.excavations.ie).*

height....in the south side of wall is the pointed doorway of cut stone'; he also describes pointed windows in S and E walls which had been 'modernised'. (Power *et al.* 1994, 254).

RMP CO075-021

Townland: Wallingstown

NGR: 17454/07194

Tower house In level area on Little Island, now part of industrial estate but formerly in demesne of Little Island House. Small rectangular tower (6.1m N-S; 7.6m E-W), now standing to 4 storeys. Reconstructed ground-floor door near W end of N wall, now partially fallen; segmental vault over door passage; elliptical arch-stone, lying on ground, probably from door surround. Lintelled door, at 1st-floor level, in centre of S wall. At 2nd-floor level is another door, near E end of S wall, flanked by corbels on outside which must have supported fore-stairs. This doorway gives access straight through to 2nd-floor chamber, and E to stairway which rises in E wall to central door into 3rd-floor chamber.

Ground floor lit by broken window in N wall, splayed internally; double-splayed window in W wall. First floor lit by similar windows in E and W walls; wide ope, broken externally, on N wall. Second floor lit by window in E wall, splayed from narrow flat-headed light; this floor covered by pointed wicker-centred vault. N wall gone above vault; E, W and S walls reduced to form gables for recent roof, now gone; wide central ope in S 'gable' of recent appearance. Though known as 'Wallingstown Castle', no apparent direct link with Wallyns or Waleys (later Walsh) family; castle was held for a time in 16th century by Fitzgeralds, though part of Barrymore estate (Coleman 1915, 62). Nearby Little island House now reduced to mound of rubble; described as 'large late eighteenth-century house sometimes attributed to Davis Duckart', residence of Bury family (Glin *et al.* 1988, 52). (Power *et al.* 1994, 231-2).

RMP CO075-082, CO075-084, CO075-085 and CO075-086

Townland: Castlevew

NGR: 17500/07240, 17517/07239, 17510/07237 and 17504/07239

Fulacht fiadh and stone-lined features

Licence No. 99E0462

Excavations were undertaken at Castlevew, Little Island, Co. Cork, over five weeks in August and September 1999. The monitoring of topsoil removal revealed four archaeological sites consisting of three stone-lined linear features (Sites 1-3) and a levelled fulacht fiadh (Site 4). This work was carried out before

the construction of three factories, four business units and a landfill area, as part of the East Gate development project. The fulacht fiadh had clearly been levelled before the present development was undertaken. There was no surface indication of its presence before topsoil removal, and it was not marked on any edition of the Ordnance Survey maps. A laneway had been built over the northern edge of the site, probably as part of the pre-existing farmlands, sometime between 1842 and 1935, on OS map evidence.

Topsoil removal revealed a large spread of burnt material consisting of charcoal and heat-shattered stones, which overlay several cut features. A modern land drain extended in a north-south direction through the burnt spread, and a curvilinear arc of stones to the south of the fulacht fiadh was also investigated. It became apparent on excavation that the arc of stones overlay a thick layer of grey clay that sealed the outer extremities of the burnt mound material. The land drain, the arc of stones and the layer of grey clay were relatively modern in date, as they all contained numerous fragments of modern glass.

The trough consisted of two adjoining circular pits (F16 and F18), which were revealed following removal of the burnt mound material. The fills were a black, charcoal-enriched, sandy silt with inclusions of heat-shattered stones (80%) and water. Both pits were circular in plan with a sharp break of slope at the top that graded towards a rounded base. F16 measured 1.45m x 1.45m and was 0.5m deep. The eastern edge of this pit was lined with a curved stone. F18 measured 2m x 1.92m and had a maximum depth of 0.25m. A small, slightly curving stone lined the western edge of the pit. The two circular troughs were divided by a large, flat stone oriented north-south between the two cuts.

To the south of F16 and F18 were three small stake-holes aligned along the same axis as the troughs. The fills were a black, loosely compacted, silty sand with occasional charcoal flecks. They measured c. 0.2m in diameter with depths of 0.2m to 0.31m. An intact wooden stake was recovered from one of the stake-holes and was 0.42m long.

A large waterlogged pit (F12) was found to the north of the trough, close to the limits of the site. The pit was subcircular in plan, measuring 1.5m x 1.4m and 0.35m deep. The fill resembled that of the trough, a black, silty sand with large quantities of heat-shattered stones. A shallower pit (F10) was exposed close to the northern edge of the trough. It was oval in plan and measured 0.29m x

0.24m and 0.26m deep. The fill was a black, silty sand with pebble inclusions and charcoal flecks. Two other pits, 0.16m deep, were excavated to the south of the trough. The fills were a black, sandy silt with occasional flecks of charcoal and large pebbles.

Sites 1-3 can be described as linear stone-lined features with fills consisting of charcoal-enriched deposits and red, oxidised soil resulting from intense burning. They were between 2.2m and 4.1m long and had an average width and depth of 0.65m and 0.52m respectively. A large quantity of charred cereal grain was recovered from Site 1, which seemed to indicate that this particular feature functioned as a cereal-drying kiln. No artefacts or bone material were found in the fills, despite an intensive programme of sieving. Large quantities of charcoal were recovered from all three features, and these, along with samples from the fulacht fiadh, have been submitted for radiocarbon dating.

(Margaret McCarthy, with Annette Quinn and Miriam Carroll, for Archaeological Services Unit, University College, Cork.) (www.excavations.ie)

For inspection purposes only.
Consent of copyright owner required for any other use.

APPENDIX III: PHOTOGRAPHIC RECORD OF PROPOSED DEVELOPMENT SITE



Plate 1: Area of proposed CD&E facility looking north.



Plate 2: Proposed entrance into CD&E facility looking north.



Plate 3: General view of location of RMP CO075-052 Mill Site.



Plate 4: Infilled (foreground) and water-filled (background) lagoons within the proposed development site, looking SW.



Plate 5: General view of grotto/lodge looking north-east.



Plate 6: South-west facing elevation of proposed protected structure.



Plate 7: 'Right of way' at SW side of site, looking E from area of grotto / lodge.



Plate 8: Church and Graveyard (RMP CO075-020) adjacent to tower house.



Plate 9: Tower House RMP CO075-021 located to the north of the proposed development site.

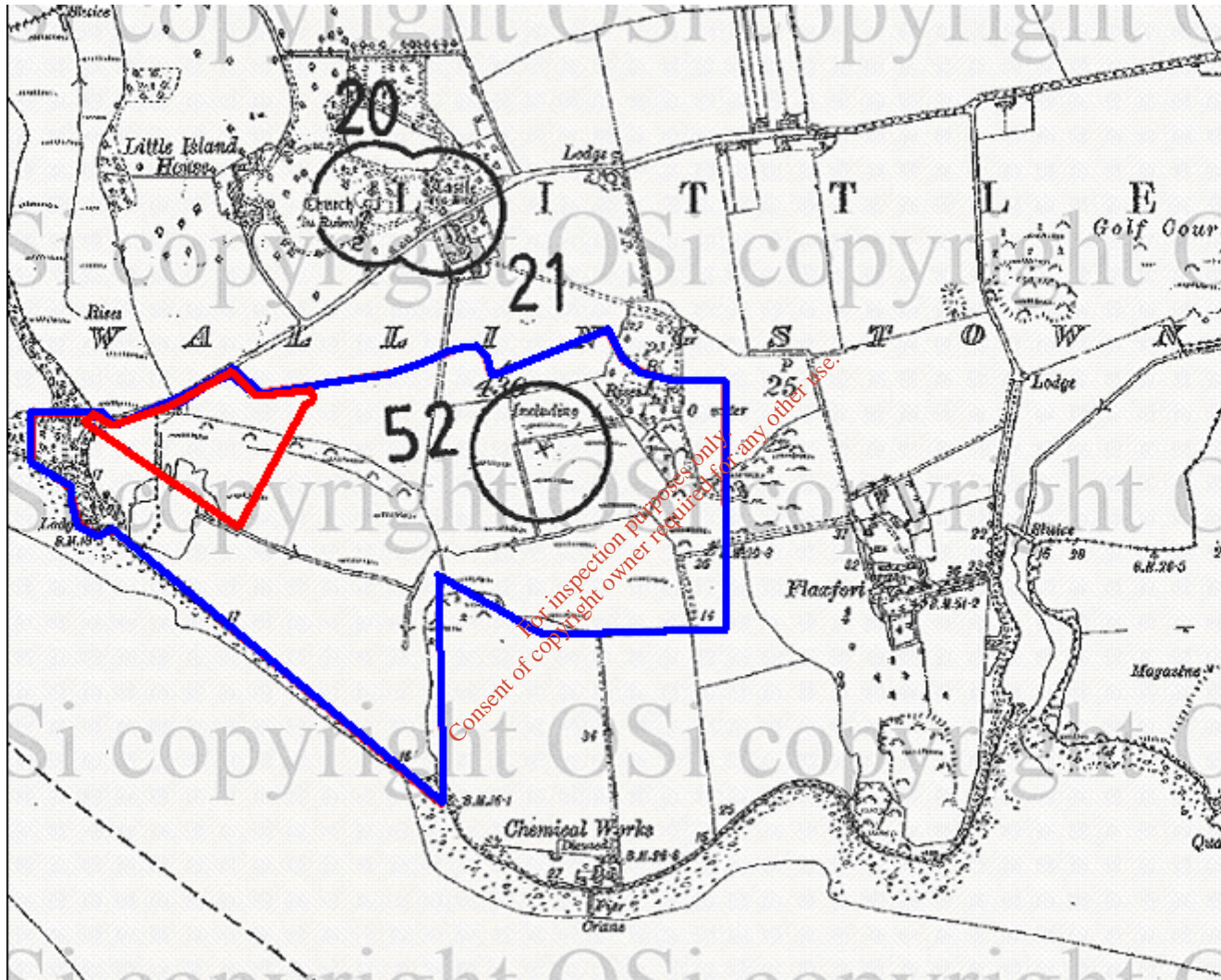


Figure 1: Extract from Record of Monuments and Places Sheet 75 with approximate Application Site boundary in red and Thornbush Site boundary in blue.

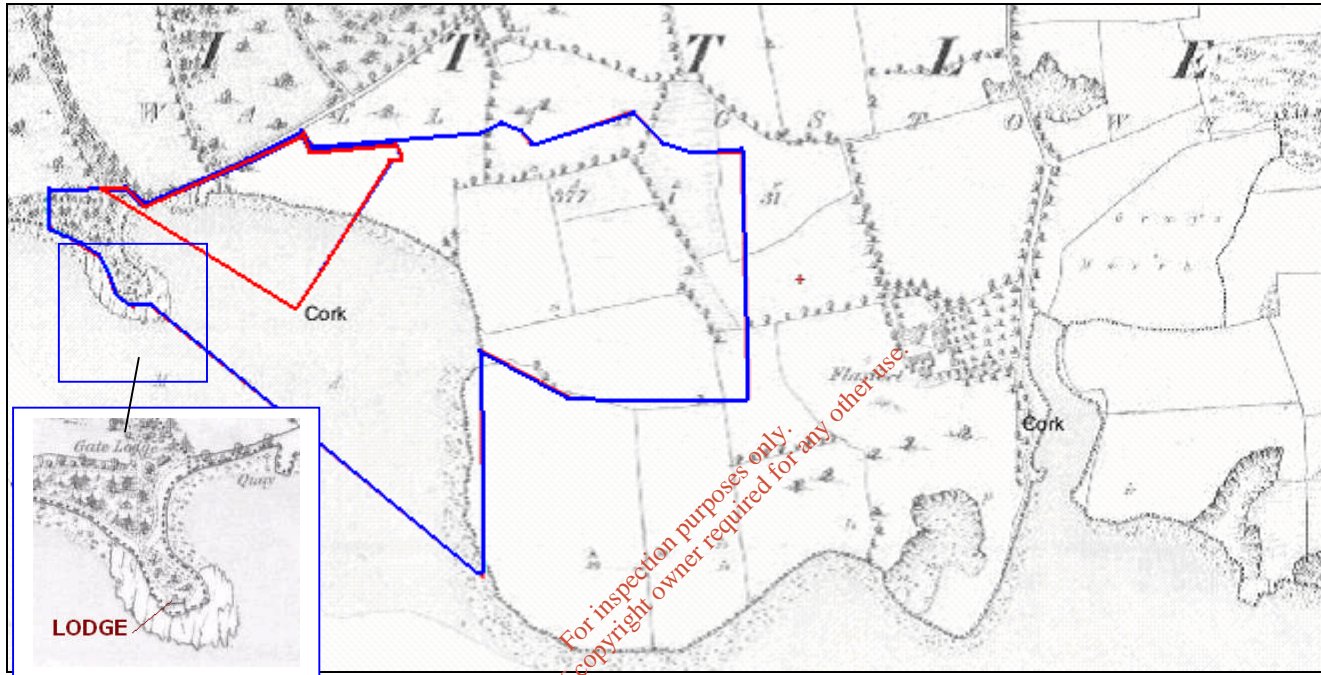


Figure 2: Extract from 1st Edition OS map (1841) with approximate Application Site boundary in red and Thornbush Site boundary in blue.

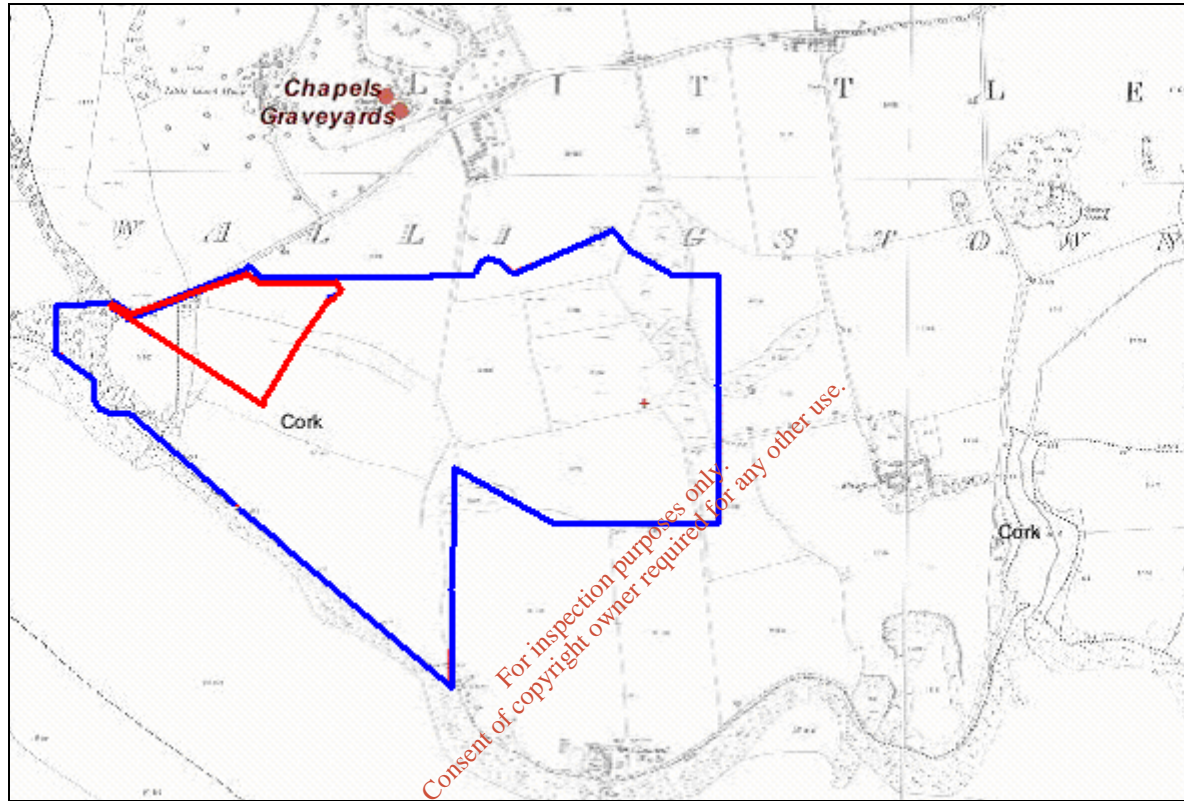


Figure 3: Extract from 2nd Edition OS map (1898) with approximate Application Site boundary in red and Thornbush Site boundary in blue.

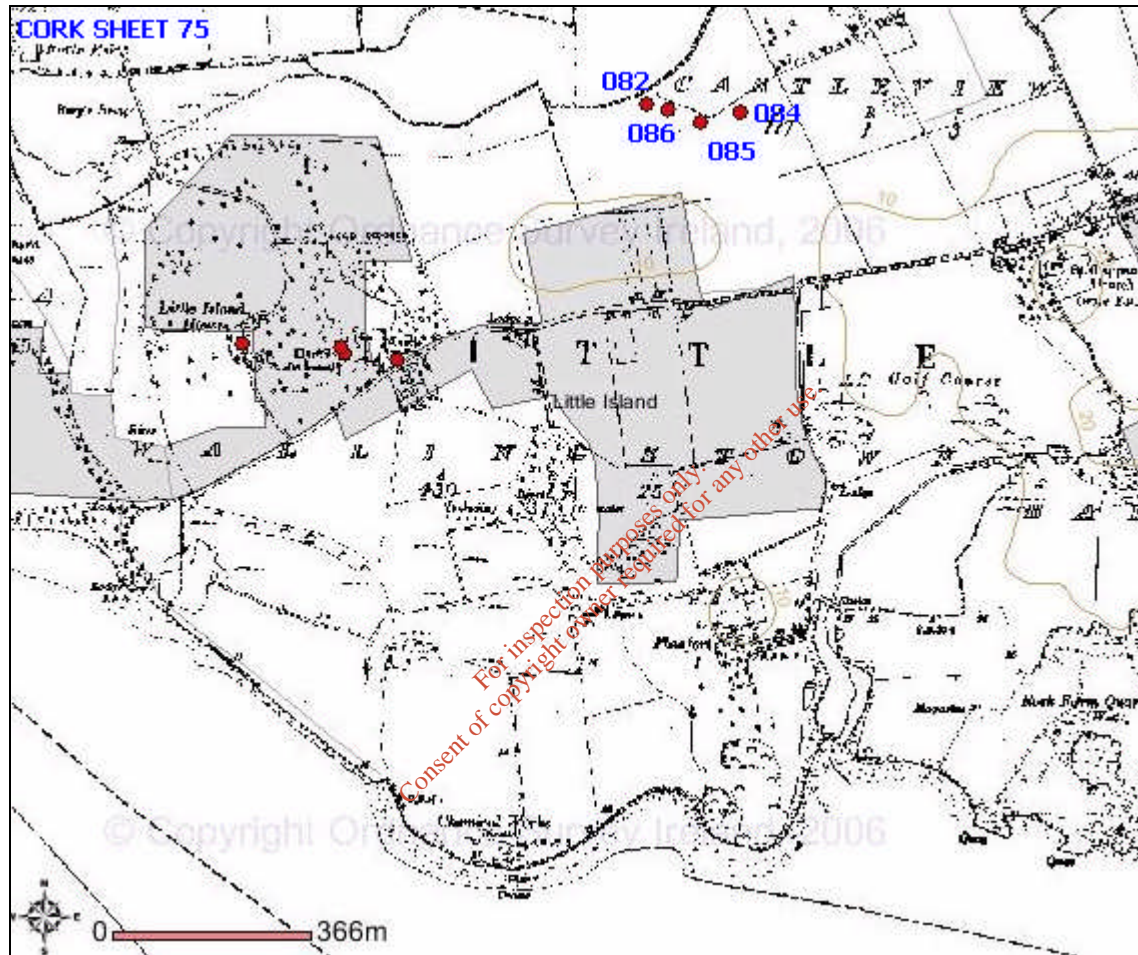


Figure 4: OS map showing nearby recorded monuments in Castleview townland (www.archaeology.ie).