Archaeological Impact Assessment Mountain Road Moycullen, Co. Galway

Client: Galway County Council Issue date: 30th October 2018

Prepared by: Seán Shanahan and Michael Greiner



Contents

No	n-Techr	nical Summary	1
1.	Introc	luction	2
	1.1	Proposed Development Site	2
2.	Asses	ssment Methodology	6
	2.1	Legislative Protection for Archaeological, Architectural and Industrial Heritage	6
	2.2	Assessment Criteria	7
	2.3	Desktop Study	9
	2.3.1	National Monuments	9
	2.3.2	Record of Monuments & Places and Sites & Monuments Record	9
	2.3.3	Topographical Files	10
	2.3.4	Archaeological Inventory of County Galway	10
	2.3.5	Galway County Development Plan 2015-2021	10
	2.3.6	National Inventory of Architectural Heritage	10
	2.3.7	Literary Sources	11
	2.3.8	Cartographic Sources	11
	2.3.9	Previous Archaeological Investigations	11
3.	Recei	ving Environment	12
	3.1	Archaeological and Historical Background12	
	3.1.1	Prehistoric Period	12
	3.1.2	Historic Period	13
	3.2	Sites and Monuments Record and Record of Monuments and Places	15
	3.3	Cartographic Analysis	
	3.4	Toponomy	
	3.5	Previous Archaeological Investigations 	
	3.6	Previous Archaeological Finds recorded in Topographical Files	24
	3.7	Galway County Development Plan 2015-2021	25
	3.7.1	Record of Protected Structures	25
	3.7.2	Conservation Areas	25

	3.7.3	Architectural Conservation Areas	. 26
	3.8	Maigh Cuilinn Local Area Plan 2013-2023	.26
	3.9	National Inventory of Architectural Heritage	26
	3.10	Site Inspection	26
4.	Legal	Status of Sites	28
	4.1	National Monuments Act 1930-2004	28
	4.1.1	Record of Monuments and Places	28
	4.2	Heritage Act 1995	29
	4.3	Architectural Heritage (National Inventory) & Historic Monuments Act,99) 30
	4.3.1	National Inventory of Architectural Heritage	30
	4.4	Planning and Development Acts 2000-2015	. 30
	4.4.1	Record of Protected Structures in City/County Development Plan	31
	4.4.2	Maigh Cuilinn Local Area Plan 2013-2023	. 32
5.	Impac	ct Assessment	. 34
	5.1	Recorded Monuments	
	5.2	Architectural Heritage	
	5.3	Industrial Heritage	
	5.4		
	5.4	Potential	
	5.5	Galway Council Conservation Areas	37
6.	Mitig	ation Measures	38
	6.1	Avoidance of Impact	.38
	6.2	Pre-Construction Phase Mitigation Measures	. 38
	6.2.1	Archaeological Monitoring & Investigation	.38
	6.2.2	Design	39
	6.3	Construction Phase Mitigation Measures	40
	6.3.1	Archaeological Monitoring & Investigation	.40
	6.3.2	Screening	
7.	Biblic	ography	.42
	Carto	graphic Sources	43

Other Sources	
Plates	45

Figures

Figure 1: Location of proposed development (<i>outlined in red</i>) (OSI Licence EN 0077918)
Figure 2: Location of proposed development (<i>outlined in red</i>) (OSI Licence EN 0077918)
Figure 3 - Plan of proposed development Phase 1 (outlined in red)4
Figure 4 - Plan of design for all phases of proposed development
Figure 5: General distribution map of Recorded Monuments (red dots) and their Zones of
Notification (in pink), and Built Heritage sites (blue dots) in relation to proposed
development site (outlined in red) (OSI Licence EN 0077918)15
Figure 6: Extract from 1655 'Down Survey' map, showing Moycullin village (Petty
1655)
Figure 7: Extract from Morden's 1695 map showing Moycully/Moycullen18
Figure 8: Extract from Moll's 1701 map of Ireland, showing Moycully/Moycullen18
Figure 9: Extract from John Rocque's 1790 map of Ireland, showing Moycullen19
Figure 10: Extract from Samuel Lewis' 1837 map of the Counties of Ireland19
Figure 11: Location of proposed development (in blue) on 1837-43 first edition OS map
(OSI Licence EN 0077918) 20
Figure 12: Location of proposed development (in red) on the 1888-1913 OS 25"map
(OSI Licence EN 0077918) 21
Figure 13: Location of proposed development (in red) on 6" Cassini OS map (OSI
Licence EN 0077918)
Figure 14: Map of proposed development (outlined in red) showing location in relation to
historic structures (orange) listed in Galway County Development Plan 2015-2021,
Record of Protected Structures (OSI Licence EN 0077918)
Figure 15 Sites of recorded monuments (1-2) and sites of architectural heritage in the
immediate vicinity of the proposed development (OSI Licence 0077918)34
Figure 16: Areas of Archaeological Potential (shaded pink) within 600m of the
development area (outlined in red) (OSI Licence EN 0077918)

Plates

Plate 1: North-east area of site, showing stream.	45
Plate 2: North-east area of site, showing stream.	45
Plate 3: Top of hill, at rear of site	. 46
Plate 4: Wall at corner to south-east of site.	. 46
Plate 5: North-western area of site.	. 47
Plate 6: Wall at north-west of site.	47
Plate 7: Wall at south-west of site	. 48
Plate 8: Wall at south-west of site; boundary to field.	48
Plate 9: Wall at north-east of site; not shown on maps	49
Plate 10: Footpath within the site	. 49
Plate 11: Footpath within the site	. 50
Plate 12: Footpath within the site	. 50
Plate 13: Interior of site	. 51
Plate 14: Interior of site	. 51
Plate 15: South-east area of site.	. 52
Plate 16: Construction rubble at south-east of site	. 52
Plate 17: Construction rubble at south-east of site	. 53
Plate 18: Existing playground at south-east of site; to be incorporated within the propo	osed
development	. 53

Tables

Table 1: Type of Impact	7
Table 2: Quality of Impacts	8
Table 3: Significance of Impact	8
Table 4: List of recorded monuments within 1km of the proposed development	16
Table 5: Previous archaeological excavations and geophysical surveys in the wider	
vicinity of the proposed development	23
Table 6: Protected Structures in proximity to the proposed development	25
Table 7: Industrial Heritage Features in proximity to the proposed development	26
Table 8: Summary Impact Assessment	35
Table 9: Areas of Archaeological Potential within 600m of the proposed developmen	t site
	36
Table 10: Summary of Impacts and Recommendations	41

Non-Technical Summary

An archaeological impact assessment was undertaken by Shanarc Archaeology at Mountain Road Moycullen, Co. Galway on behalf of Galway County Council. The assessment was compiled in support of an application to Galway County Council. The proposed development comprises a housing development of 31 residential units enclosing a communal green area with walk and play amenities. It is located just to the west of the historic village of Moycullen which is visible from the site.

The study comprises consultation of existing archaeological and built heritage records, readily available literary and cartographic sources, and a site inspection.

1

1. Introduction

An archaeological impact assessment was undertaken by Shanarc Archaeology at Mountain Road Moycullen, Co. Galway, on behalf of Galway County Council. The assessment was compiled in support of an application to construct a housing development and ancillary works. The proposed development site (see fig 2) comprises 31 residential units and associated services, including access routes and open green areas. The lands in blue are the entire lands in the ownership of Galway Co Co. The site is located just to the west of the historic village of Moycullen which is visible from the site.

The study comprises consultation of existing archaeological and built heritage records, readily available literary and cartographic sources, and a site inspection. Proposals are set out for:

- (i) evaluating the nature and extent of known archaeological remains, and potential sub-surface archaeological remains; and
- (ii) Mitigating the potential impact of the development on the archaeological resource.

1.1 Proposed Development Site

The proposed development comprises a housing development of 31 residential units alongside communal green areas with walk and plays amenities, and incorporates an existing playground. The development includes access roads, as well as a number of pedestrian links to neighbouring estates (Figures 1&2).



Figure 1: lands owned by Galway Co Co to which this report applies (outlined in red)



Figure 2 - Plan of proposed development (outlined in red) and the entire lands owned by GCC in blue

2. Assessment Methodology

2.1 Legislative Protection for Archaeological, Architectural and Industrial Heritage

Ireland has ratified several international and European conventions on the protection of cultural heritage, principally:

- UNESCO World Heritage Convention 1972;
- Charter for the Conservation and Restoration of Monuments and Sites (Venice) 1964;
- European Convention on the Protection of the Archaeological Heritage (Valetta Convention) 1992;
- European Convention on the Protection of the Architectural Heritage (Grenada Convention) 1985;
- European Council Directive on Environmental Impact Assessment (85/337/EEC) 1995 and amending Directive by (97/11/EC) 1997 and (2003/35/EC) 2003.

National legislation protecting cultural heritage sites comprises:

- National Monuments Act 1930, amended 1954, 1987, 1994 and 2004;
- Heritage Act 1995;
- Architectural Heritage (National Inventory) and Historic
 Monuments (Miscellaneous Provisions) Act 1999; and
- Planning and Development Acts 2000 2015.

The following standards and guidelines were also consulted as part of this assessment:

• Frameworks and Principles for the Protection of the Archaeological Heritage (1999), Department of Arts, Heritage, Gaeltacht & the Islands;

- Policy and Guidelines on Archaeological Excavation (1999), Department of Arts, Heritage, Gaeltacht & the Islands;
- The Heritage Council, 2000. Archaeology & Development: Guidelines for Good Practice for Developers (2000), The Heritage Council;
- Guidelines on the information to be contained in Environmental Impact Statements (2002), Environmental Protection Agency;
- Advice notes on current practice in the preparation of Environmental Impact Statements (2003), Environmental Protection Agency;
- Guidelines for the Assessment of Archaeological Heritage Impacts of National Road Scheme (2005), National Roads Authority; and
- Guidelines for the Assessment of Architectural Heritage Impacts of National Roads Schemes (2005), National Roads Authority.

2.2 Assessment Criteria

Impacts to cultural, archaeological and architectural heritage are generally categorised as one of three types, as described in Table 1.

Category of	Description		
Impact			
Direct	Occurs where an archaeological, architectural or cultural heritage feature, site or structure is physically located within the footprint of the proposed development, resulting in the partial or total removal of that feature or site.		
Indirect	Occurs where an archaeological, architectural or cultural heritage feature, site or structure, or its setting, is located in close proximity to the footprint of the proposed development.		
None predicted	Occurs where an archaeological, architectural or cultural heritage feature, site or structure is not adversely or positively affected by the proposed development.		

Table 1: Type of Impact

The impacts on cultural, archaeological and architectural heritage are assessed in terms of their quality, as described in Table 2.

Quality of Impact	Description
Negative	A change that will detract from or permanently remove an archaeological, architectural or cultural heritage feature, site or structure.
Neutral	A change that will not affect an archaeological, architectural or cultural heritage feature, site or structure.
Positive	A change that will improve or enhance the setting of an archaeological, architectural or cultural heritage feature, site or structure.

Table 2: Quality of Impacts

The level, or significance, of impact is assessed, as described in Table 3.

Table 3: Significance of Impact

Level of Impact	Description
Profound	An impact that completely and irreversibly destroys an archaeological, architectural or cultural heritage feature, site or structure. Mitigation is unlikely to remove adverse effects. Reserved for adverse, negative effects only.
Significant	An impact that, by its magnitude, duration or intensity alters the character and/or setting of an archaeological, architectural or cultural heritage feature, site or structure. These effects arise where an aspect or aspects of the archaeological, architectural or cultural heritage are permanently impacted on, leading to a loss of character, integrity and data about the feature/site/structure. Appropriate mitigation is likely to reduce the impact.

Potentially	An impact to a potential feature/area of archaeological,
significant	architectural or cultural heritage that could be significant without mitigation measures being implemented, e.g. potential sub-surface archaeological remains.
Moderate	An impact that results in a change to an archaeological,
Level of Impact	Description
	architectural or cultural heritage feature, site or structure, which, although noticeable, does not compromises the integrity of the heritage. These effects arise where an archaeological, architectural or cultural heritage feature, site or structure can be incorporated into a modern day development without damage and that all procedures used to facilitate this are reversible.
Slight	An impact that causes a minor change in the character of the environment, which, although noticeable, does not directly impact or affect the integrity of an archaeological, architectural or cultural heritage feature, site or structure. Such impacts are generally reversible and of relatively short duration.
Imperceptible	An impact on an archaeological, architectural or cultural heritage feature, site or structure, which can be measured, but without noticeable consequences.

2.3 Desktop Study

An archaeological desk-based study of existing archaeological records and other relevant cartographic and literary sources was undertaken. A list of all consulted sources is provided in bibliographic form.

2.3.1 National Monuments

Under the National Monuments Act 1930-2004, archaeological sites in the ownership or guardianship of the State or a Local Authority and sites under Preservation Orders are designated as National Monuments. Such sites are offered the highest level of protection under Irish legislation.

2.3.2 Record of Monuments & Places and Sites & Monuments Record

The Record of Monuments and Places (RMP) is a list of archaeological monuments known to the National Monuments Service. There are over 120,000 Recorded Monuments in the RMP. This RMP list is based on the earlier Sites & Monuments Record (SMR) files housed at the National Monuments Service. The SMR was initially based on cartographic, documentary and aerial photographic sources, revised through fieldwork and forms the basis of the statutory RMP. The record is updated on a constant basis.

2.3.3 Topographical Files

The topographical files of the National Museum of Ireland (NMI) are the national archive of all known antiquities recorded by the NMI. These files relate primarily to artefacts but also include references to monuments and contain a unique archive of records of previous excavations. The NMI's files present a catalogue of objects reported to the institution from 1928-95. The find-spots of artefacts can be an important indication of the archaeological potential of the related or surrounding area.

2.3.4 Archaeological Inventory of County Galway

The Archaeological Survey of Ireland was initiated after the National Monuments Act 1930 and remains ongoing. The inventory for Galway was published in 1993.

2.3.5 Galway County Development Plan 2015-2021

Each City and County Development Plan is compiled in accordance with the requirements of the Planning and Development Acts 2000 – 2014 and contains lists of national monuments, recorded monuments, a Record of Protected Structures (a list of buildings which cannot be materially altered or demolished without grant of permission under the Act) and Conservation Areas and Architectural Conservation Areas (to protect and enhance the special character of an area). Local Area Plans (LAPs) compiled under the City/County Development Plan are also consulted.

2.3.6 National Inventory of Architectural Heritage

The National Inventory of Architectural Heritage (NIAH) is an ongoing survey within the Department of Arts, Heritage and the Gaeltacht. The work of the NIAH involves identifying

and recording the architectural heritage of Ireland, from AD1700 to the present day and includes country houses, churches, mills, bridges and other buildings of note.

2.3.7 Literary Sources

These are a valuable means of completing the written archaeological and architectural record of an area and gaining insight into the history of the receiving environment. The various sources consulted are listed in the bibliography.

2.3.8 Cartographic Sources

A wide range of maps were consulted, a full list of which is provided in the bibliography. Information gathered from cartographic sources is fundamental to the identification of archaeological and architectural heritage sites and demesne landscapes which are now located based on cartographic records alone. For example, the earliest Ordnance Survey maps date to the late 1830s and 1840s. Much change has occurred in the use and treatment of the landscape in the intervening years, with the destruction rate increasing rapidly during the second half of the 20th century.

2.3.9 Previous Archaeological Investigations

The Excavations Bulletin is both a published annual directory and an on-line database (<u>www.excavations.ie</u>) that provides summary accounts of all the excavations carried out in Ireland from 1970 to 2015. The database provides access to summary descriptions of almost 24,000 reports.

3. Receiving Environment

3.1 Archaeological and Historical Background

The extent of prehistoric and historic activity within the wider study area is attested to by the number and range of known archaeological monuments within the surrounding landscape. The Record of Monuments and Places (RMP) list four monuments within a 550mm radius of the proposed development site.

3.1.1 Prehistoric Period

Mesolithic c. 7000-4000BC

The earliest evidence of human occupation in Ireland can be seen in the remains of Mesolithic hunter-gatherers, who arrived in Ireland c. 7000BC, in the form of flint scatters and shell middens. A scatter of lithic finds (GA054-047) on the western shores of Lough Corrib at Oughterard approximately 13km north of the development site is a good indicator of Mesolithic activity in this part of Galway (Waddell, 1998, 23).

Neolithic *c*. 4000-2500BC

The transition from the Mesolithic to the Neolithic periods is marked by the shift from a hunter-gatherer lifestyle to the introduction of an agricultural economy, and evidence of this new increasingly settled style of occupation.

Neolithic monuments, evidence of communal funerary and ritual activity, represent a change in burial practices and religion during this era. There are numerous examples of Neolithic burial or ceremonial monuments within the wider surroundings of the development area. A Portal Tomb (GA082-067) is located at Menlough 8km to the southeast, and a Megalithic Court tomb (GA055-034) is located at Carrownakib 12km to the north.

The nearest Neolithic structure is located just 520m to the east of the development area at Gort Uí Lochlainn, and consists of a Megalithic Structure (GA081-036) likely used for ritual or burial activities.

Evidence of Neolithic activity in the form of pits, pottery remains, stone axes and worked stone was uncovered on the shores of Ballyquirke Lough at Ballyquirke East, 1.2km to the south-east of the development site; they appear to represent lakeside settlement in Neolithic times. This is a very significant addition to the sparse record of prehistory in Connemara, though it is consistent with reported finds of prehistoric objects from the Lough Corrib basin, which includes Ballyquirke Lough (Delaney, 2014).

Bronze Age c. 2500-800BC

Activity during the Bronze Age is characterised by the introduction of metalworking technology, as is evidenced by changes in material culture as well as the nature of sites

and monuments of this era. The first metal artefacts were made of copper, before it was mixed with tin to form bronze. Stone tools continued in production and use.

Burnt mounds, referred to as fulachta fia when associated with a trough, have traditionally been interpreted as cooking places (Waddell 1998, 174) and constitute one of the most common monument types of the Bronze Age. A fulacht Fia (GA068-020) is located approximately 5km to the north-east of the site at Gortmore.

In contrast to the megalithic tombs which characterised the Neolithic era, individual burials such as cist graves became common during the Bronze Age. A possible cist burial (GA067-029001-) is located at Cnoc Raithní 5km to the north-west of the development site.

3.1.2 Historic Period

Early Medieval Period c. AD500-1100

Settlement activity in the Early Medieval or Early Christian period (c.500-1100 A.D.) is represented predominantly by ringforts. Often referred to as *Rath, Lios or Cashel,* these circular or sub-circular enclosures usually delineated by earthen banks (Raths), but sometimes by stone walls (Cashels), enclosed by a fosse or ditch, constitute the most common monument type in the Irish landscape. There are over 500 Cashels and 500 unclassified ringforts in County Galway. Some evidence for early medieval settlement exists within approximately a 2km radius of the proposed development.

A cashel ringfort (GA068-026) is located at Cill Ráine 550m to the north-east of the development area, and another is located at Baile Dóith 1.6km to the north-east.

There are a number of enclosures, (GA068-033) at Cnoc An tSeanbhaile, (GA081-012) at Cill Ogúla, and (GA068-043) at Maigh Cuilinn, as well as a Souterrain (GA068-075) at Ballynahallia.

Medieval Period c. AD1100-1600

A castle (GA068-044) with a defensive bawn (GA068-044001) was located at Moycullen 2km to the east of the development site. The castle of which no surface remains are visible, was in existence in 1574 when it was in the possession of 'Rory Oflairte' (Nolan 1901, 115). A medieval church (GA068-042) is also located at Moycullen approximately 1.7km to the east of the development site.

Post-Medieval Period c. AD1600-1800

William Petty's Down Survey map of 1655 shows the village of Moycullin/Moycullen located within the Barony of Moycullin, a church is shown at this location, but no further information is provided.

Nineteenth & Twentieth Centuries

During the great famine of 1845-50 West Galway's population was decimated by up to 35% (Molloy, M.<u>oughterardheritage.org</u>). At this time the principle landowners within the immediate area of the proposed development were the Burkes (Molloy, M. / Lewis, 1837), whose residence 'Danesfield House' was located c.260m to the north of the development area. Though now demolished Danesfield House is clearly visible on the 1st edition OS maps (Figure 11).

Moycullen parish and village are briefly described by Samuel Lewis in his 1837 Topographical Dictionary of Ireland. Of Moycullen Lewis says, "The land is of very indifferent quality; and there is a large quantity of reclaimable waste bog. In the village, which has a penny post to Galway, petty sessions are held on alternate Tuesdays; and fairs on Feb. 1st, May 28th, Sept. 2nd and Dec. 8th......A fine Danish fort at Danesfield gives name to the estate on which it stands: and there are the ruins of two old castles" (Lewis, 1837).

3.2 Sites and Monuments Record and Record of Monuments and Places

The Record of Monuments and Places list in excess of thirty sites within a 2km radius of the proposed development. Four RMP sites are located within 1km of the development area, these are listed below (Table 4).

The development site is immediately to the west of the historic village of Moycullen (GA081-030); a chapel (GA068-002) and an early medieval ringfort (GA068-026) are located just to the east and north-east of the village. A megalithic structure is located 520m to the west of the development area.

A fifth RMP site is indicated on RMP maps 310m to the south-west of the development area, however this is now classified as a redundant record.

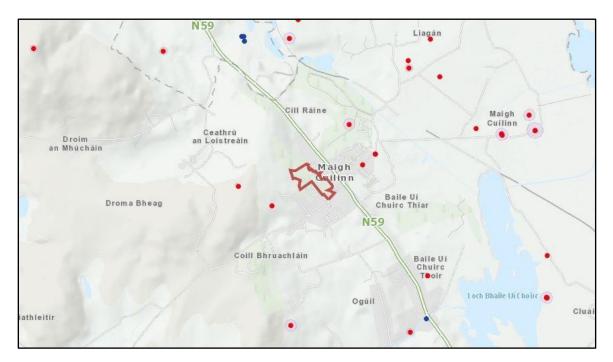


Figure 5: General distribution map of Recorded Monuments (red dots) and their Zones of Notification (*in* pink), and Built Heritage sites (*blue dots*) in relation to proposed development site (*outlined in red*) (OSI Licence EN 0077918)

Table 4: List of recorded monuments within 1km of the proposed development						
SMR No.	Class	Townland	ITM Reference (E,N)		Proximity to Development Site	
GA081-036-		C and U				
SMR ZONE: R127214	Megalithic Structure	Gort Uí Lochlainn	520376.00	732572.00	520m	
GA081-010-	Redundant record	Gort Uí Lochlainn	520703.00	732376.00	310m	
GA081-030-	Town	Baile Uí Chuirc Thiar, Gort Uí Lochlainn, Cill Ráine, Coill Bhruachláin.	521597.00	732784.00	50m - 350m+	
GA068-026- SMR ZONE: R127219	Ringfort / Cashel	Cill Ráine	521465.00	733181.00	570m	

Table 4: List of recorded monuments within 1km of the proposed development

GA068-002-	Chapel	Baile Uí Chuirc Thoir	521723.00	732885.00	520m
------------	--------	--------------------------	-----------	-----------	------

3.3 Cartographic Analysis

A wide range of historic maps were consulted, a full list of which is provided in the bibliography. Relevant extracts are presented from the following historic maps:

- Down Survey map, 1655-58(Figure 6);
- Robert Morden's map of "the Kingdom of Ireland" 1695 (Figure 7);;
- Moll, H., 1701. Map of Ireland (Figure 8);
- Rocque. J., 1790.Map of Ireland (Figure 9);
- Lewis, S., 1837. Counties of Ireland and a General Map of the Kingdom (Figure 10);
- First edition Ordnance Survey 6" Map, 1837-43 (Figures 11);
 Ordnance Survey 25" Map, 1888-1913 (Figure 12);
- Ordnance Survey Cassini 6" map (Figure 13).



Figure 6: Extract from 1655 'Down Survey 'map, showing Moycullin village (Petty 1655)

Sir William Petty's 1655 'Down Survey' map of "*The County of Gallway* (sic)" illustrates Moycullen village within the barony of Moycullen. The detailed barony and parish maps for this section of the Down Survey were lost in a fire in the Surveyor General's office in 1711; so other than the name of the village and an indicator of a church no significant information about Moycullen is available.



Figure 7: Extract from Morden's 1695 map showing Moycully/Moycullen.

Robert Morden's 1695 and Herman Moll's 1701 maps of Ireland show the village of Moycullen with the alternative title of Moycully (Figures 7 & 8).



Figure 8: Extract from Moll's 1701 map of Ireland, showing Moycully/Moycullen.

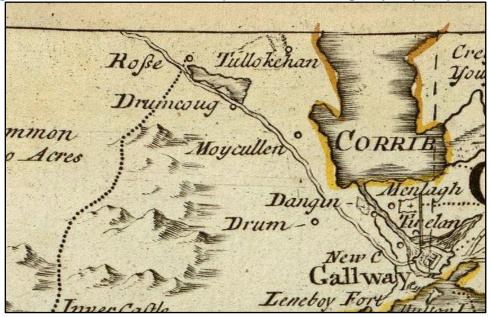


Figure 9: Extract from John Rocque's 1790 map of Ireland, showing Moycullen.

Moycullen is marked on John Rocque's 1790 "A Map of the Kingdom of Ireland" (Figure 9). It is also shown on Samuel Lewis' "Counties of Ireland and a General Map of the Kingdom" the companion piece to his 1837 "A Topographical Dictionary of

Ireland"(Figure 10). In both instances no detailed information is given for the village or its surroundings.

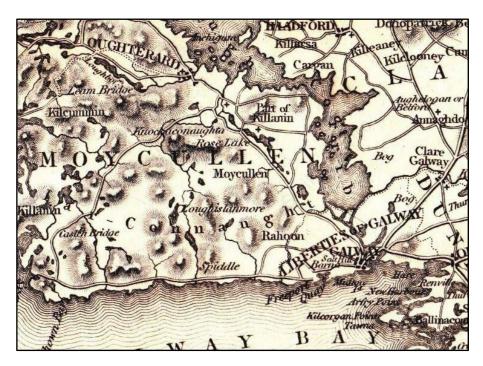


Figure 10: Extract from Samuel Lewis' 1837 map of the Counties of Ireland.

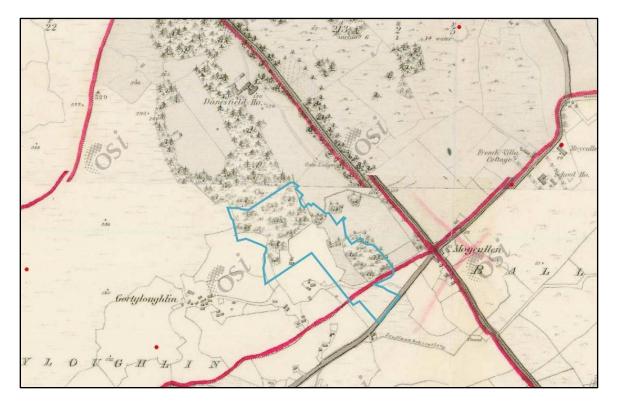
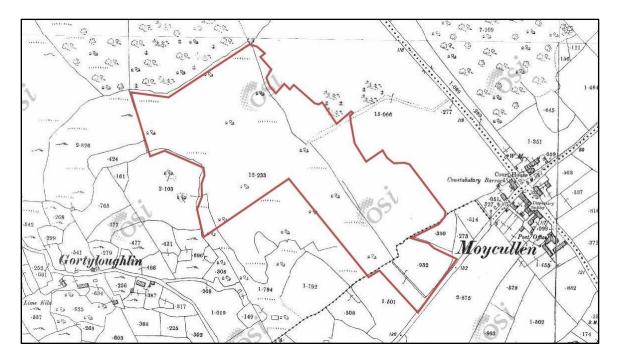


Figure 11: Location of proposed development (in blue) on 1837-43 first edition OS map

(OSI Licence EN 0077918)

The 1837-43 first edition Ordnance Survey (OS) map (Figure 11) shows the development area as a mixture of fields, and woodland; possibly parklands associated with Danesfield House. Danesfield house and gate lodge are shown just to the north and north-east of the development area. Two small house structures are shown within the western section of the development area. The villages of Gortyloughlin to the west and Moycullen to the east are shown outside of the proposed development area.

The development area is shown to be located principally within the townland of Gortyloughlin to the north. A small section at the southern end of the site, where it is cut north-east to south-west by the historic townland boundary, falls within the townland of Kylebroghlan.





The 1888-1913 OS 25" map (Figure 12) and the OS 6" Cassini map (Figure 13), show some minor changes from the 1stedition map (Figure 11). The two house structures previously shown in the western section of the site on the 1st edition OS map are no longer present, and there are slight changes in the field boundaries within the development area, as well as a seeming reduction in the amount of woodland within the site.

While Gortyloughlin to the west seems relatively unchanged, the village of Moycullen to the east shows a certain amount of expansion. In addition to the church and school shown on the 1st edition map, the 1888-1913 map shows a constabulary barracks, court house, smithy, dispensary and post-office. The somewhat later Cassini map shows a relocated post-office and police station as well as a new knitting factory at the north of the village.

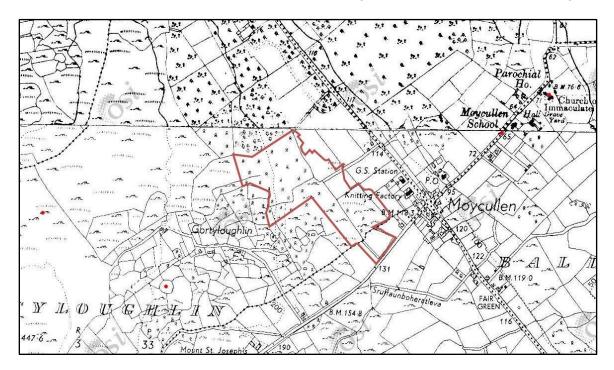


Figure 13:Location of proposed development (*in red*) on 6" Cassini OS map (OSI Licence EN 0077918)

3.4 Toponomy

A townland name may preserve valuable information relating to its archaeology, history, folklore, pervious ownership, topography or land use. Many place names were anglicised by the Ordnance Survey which begun in the 1830's. Despite some inaccuracies in translation, the Gaelic, Viking, Anglo-Norman and English origins of place names are generally recognisable.

Moycullen village in the civil parish of Moycullen in the barony of Moycullen, derives its name from the anglicised version of the name *Maigh Cuilinn*, from the Irish '**maigh**'plain and '**cuileann**'holly (www.logainm.ie).

The development site is located within the townlands of Gortyloughlin and Kylebroghlan.

Gortyloughlin comes from the Irish Gort Uí Lochlainn, which derives from 'gort (also: gart)' field and Lochlainn 'loch/lough'lake or inlet.

Kylebroghlan comes from the Irish Coill Bhruachláin, which derives from 'coill' wood.

3.5 Previous Archaeological Investigations

A search of the online Excavations Bulletin for previous archaeological investigations within the proposed development area produced no results.

Several investigations have been undertaken within the wider vicinity. These are summarised in Table 5.

License No.	Excavation No.	Location& ITM	ation& ITM Site Type	
-	1991:060	Moycullen, E 523067m, N 733128m	Church and graveyard. A foundation trench, 5.5m x 1.6m, was dug at the west boundary of the graveyard, in a two-day period in April. No archaeological material was found in the strata above the natural clays.	Miriam Clyne
License No.	Excavation No.	Location& ITM	Site Type	Author
00E0513	2000:0399	Moycullen, E 522971m, N 733083m	No archaeological significance	Ruth Elliott
00E0363	2000:0370	Moycullen Ballyquirke West. E 521978m, N 732424m	No archaeological significance	Marcus Casey
01E0929	2001:524	Moycullen. E 521388m, N 732746m	No archaeological significance	Richard Crumlish
05E1176	2005:633	Moycullen, E 521388m, N 732746m	No archaeological significance	Markus Casey
07E0483	2007:635	Homefarm, Moycullen, E 523247m, N 733176m	No archaeological significance	Finn Delaney
E4514	2014:031	Ballyquirke East, E 522383m, N 731816m	No archaeological significance	Mark Moraghan

Table 5: Previous archaeological excavations and geophysical surveys in the wider vicinity of the proposed development

E4580	2014:184	Ballyquirke East 1,Neolithic pits and axe headE 522420m, N 731732mfind spot		Shane Delaney
E4578	2014:182	Killarainy 4. MoycullenCharcoal-production kilnsE 521162m, N 733338mand burnt mound		Shane Delaney
E4576	2014:180	Killarainy 2. Moycullen, E 521007m, N 733353m	Charcoal-production kiln/clamp	Shane Delaney
E4575	2014:179	Killarainy 1. Moycullen, E 520920m, N 733320m	Pit. Possible Neolithic or Early Bronze Age context.	Shane Delaney
E4513	2014:186	Ballyquirke West. E 522077m, N 732944m	No archaeological significance	Johnny Ryan & Shane Delaney
15E0298	2015:036	Leagaun, Moycullen, E 522000m, N 733840m	Pre-development testing. No archaeological significance	Nora Bermingham

3.6 Previous Archaeological Finds recorded in Topographical Files

The topographical files list no archaeological finds from Gortyloughlin or Kylebroghlan townlands, Co. Galway. The files were inspected on 12th October 2018.

3.7 Galway County Development Plan 2015-2021

3.7.1 Record of Protected Structures

The Galway County Development Plan 2015-2021 lists two Protected Structures within the relative vicinity of the proposed development (Table 6), (see also Figure 14).

RPS	NIAH No.	Name	Townland	ITM	Description	Proximity to
No.	NIAT NO.	Name	Towniana	1174	Description	Proposed
						Development

703	-	Gateway /Killarainy	Gort Uí Lochlainn / Gortyloughlin	E 521027.83 N 733047.55	Walled garden or paddock containing round headed doorway with cut stone rusticated surround, and a wrought iron gate, c1810. Set adjoining the road.	280m
711	30408101	Galway Unit Furniture / Factory	Gort Uí Lochlainn / Gortyloughlin	E 521347.76 N 732627.64	5 bay 2 storey factory with gabled breakfront containing giant Diocletian window, c.1910. 5 bayside elevation. It is built of rough cut stone with cut-stone dressings.	60m

3.7.2 Conservation Areas

There are no Conservation Areas within or in the immediate vicinity of the proposed development site.

3.7.3 Architectural Conservation Areas

The proposed development is not located within an Architectural Conservation Areas (ACA), as set out in the Galway County Development Plan 2015-2021.

3.8 Maigh Cuilinn Local Area Plan 2013-2023

The Local Area Plan for Moycullen/Maigh Cuilinn is a land use plan and overall strategy for the development of Maigh Cuilinn over the period 2013-2023. The current plan was adopted on 25th March 2013 and expires in 2023. The aim of this Local Area Plan is to have a positive impact on Maigh Cuilinn ensuring it develops in a sustainable manner, and to also complement the implementation of the current Galway County Development Plan.

3.9 National Inventory of Architectural Heritage

There are no NIAH site within the proposed development area, however the NIAH survey identifies three structures within 1.5km of the site (Table 7).

Reg. No.	Name	Rating	Proximity to Proposed Development
30406813	Church of the Immaculate Conception	Regional	520m
30408102	Barn / Previously Water Mill	Regional	1.5km
30406812	Drimcong House	Regional	1.3km

Table 7:Industrial Heritage Features in proximity to the proposed development

3.10 Site Inspection

A site inspection was carried out on Wednesday 24th October by Edel Barry of Shanarc Archaeology. Weather conditions were dry and overcast.

The site is bounded to the southeast by Mountain Road (L1320), which runs in a southwesterly direction from the Clifden Road (N59). There is an early 21st century housing development to the southwest and late 20th century housing developments to the northeast. At the northeast, a small area of land to the rear of this latter housing development has been partially cleared and is in use for lawns and recreation space. This area is enclosed with undergrowth of brambles, nettles and rushes of considerable depth and thickness. At the southeast, at the entrance to the site, a small area has been tarmacadamed and is dotted with mounds of construction waste comprising large pieces of concrete, some formed into troughs and reinforced posts, and some evidently having formed part of a flooring slab. To the westernmost corner of the site are some fields, apparently in use for pasture. The area to the northwest of the site is similar in terms of topography and use.

The topography of the ground surface to the southwest of the N59 is very uneven and irregular, first sloping gently upwards and then steeply and suddenly to a high elevation. There appear to be two steep-sided hills, one to the southeast and one to the northwest. A steep slope exists at the northeast. On occasion pathways have been worn through the site, which is heavily forested with relatively mature native trees, shrubs and ferns. At the

rear of the site a small stream apparently rises from the high ground at the west and flows in a tortuous manner towards the cleared area at the northeast of the site, adjacent to the end of Páirc Na gCaor. Several stone walls were observed throughout the proposed development area. One, running northeast-southwest, appears to follow the rear boundary of the proposed development and is depicted on the 3rd edition Ordnance Survey map. The field boundaries which mark the southwest boundary of the proposed development and are also depicted on this map also seem to partially survive as stone walls, heavily overgrown with moss. Other stone wall remnants can be seen atop the hill to the rear of the site, which are not marked on the OS map.

4. Legal Status of Sites

4.1 National Monuments Act 1930-2004

The term 'National Monument' was initially defined by the 1930 National Monuments Act as:

'a monument or the remains of a monument the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic, or archaeological interest attaching thereto.'

Four subsequent Amendment Acts 1954-2004 widened the content and scope of the Act. This definition does not restrict inclusion based on date and includes land adjacent to a national monument, which is required to preserve the amenities of the monument. National monuments may be acquired by the Minister by agreement or compulsory order. A national monument (excluding dwellings) in the ownership/guardianship of the State or Local Authority may not be interfered with without written consent of the Minister.

There are no National Monuments within or in close immediate proximity to the proposed development.

4.1.1 **Record of Monuments and Places**

The Record of Monuments and Places (RMP) was established under Section 12 of the 1994 National Monuments (Amendment) Act. Under the terms of this Act, the Minister is required to establish and maintain a record of the monuments and places where the Minister believes there are monuments present. This RMP gives protection without having to establish that a monument is falling into decay. The term 'monument' as used in this Act encompasses all artificial structures, regardless of date, whether or not they are of archaeological or architectural interest, but excludes buildings used for ecclesiastical purposes. All monuments, whether or not they are in State ownership/guardianship, or can be designated or subject to any legal protection, could potentially be classed as 'National Monuments'. A 'Historic Monument' includes:

'a prehistoric monument and any monument associated with the commercial, cultural, economic, industrial, military, religious or social history of the place where it is situated or of the county.'

Any monument pre-dating AD1700 is automatically protected as a historic monument. Monuments post-dating AD 1700 have been increasingly included in the RMP, mostly represented by architectural and industrial heritage sites.

The earlier Sites and Monuments Record (SMR) and the Archaeological Survey of Ireland, both initiated after the 1930 National Monuments Act, form the basis of the statutory RMP. Therefore the RMP includes all previously known archaeological sites, but also potential archaeological sites. As a result of this Act, it is unlawful to carry out work on a Recorded Monument without the consent of the Department of the Arts, Heritage and Gaeltacht. Written consent for any development on such a site must be sought.

Four RMP sites are situated in relative proximity to the proposed development. The development site is immediately to the west of the historic village of Moycullen (GA081030). A chapel (GA068-002) is located 520m to the east, an early medieval ringfort (GA068-026) is located 570m to the north-east of the development area, and a megalithic structure is located 520m to the west of the development area (Table 4).

Should finds or features of archaeological significance be identified at the proposed development area, they would be legally protected under the National Monuments Act 1930-2004. In that event, it is envisaged that the mitigation strategy as set out in 6.2.1 Recommendations Prior to Construction would apply.

4.2 Heritage Act 1995

'Architectural heritage 'is defined in the Heritage Act 1995 as:

'all structures, buildings, traditional and designed, and groups of buildings including streetscapes and urban vistas, which are of historical, archaeological, artistic, engineering, scientific, social or technical interest, together with their setting, attendant grounds, fixtures, fittings and contents, and, without prejudice to the generality of the foregoing, includes railways and related buildings and structures and any place comprising the remains or traces of any such railway, building or structure.'

The Act created the Heritage Council and also protects all heritage buildings held by a local authority.

4.3 Architectural Heritage (National Inventory) & Historic Monuments Act, 1999

'Architectural heritage' is defined in the Architectural Heritage (National Inventory) & Historic Monuments Act, 1999, as meaning all:

- (a) structures and buildings together with their settings and attendant grounds, fixtures and fittings,
- (b) groups of such structures and buildings, and
- (c) sites, which are of architectural, historic, archaeological, artistic, cultural, scientific, social or technical interest.

The Act requires the Minister to establish a survey that will identify, record and assess the architectural heritage of the country; the National Inventory of Architectural Heritage (NIAH)

4.3.1 National Inventory of Architectural Heritage

The National Inventory of Archaeological Heritage (NIAH) Surveys are designed to assist the local authorities with the compilation of the Record of Protected Structures (see 4.4.1). However, the inclusion of a structure in the NIAH does not in itself provide statutory protection. There are no entries for the development area in the NIAH Survey.

4.4 Planning and Development Acts 2000-2015

Under Section 2 of the 2000 Planning and Development Act a 'Protected Structure' is defined as:

- (a) a structure, or
- (b) a specified part of a structure which is included in a record of protected structures, and, where that record so indicates includes, any specified feature which is within the attendant grounds of the structure and which would not otherwise be included in this definition.'

Local planning authorities have an obligation under Section 51(1) of the Planning and Development Act 2000 to create a Record of Protected Structures (RPS) which includes all structures or parts of structures in their functional areas which, in their opinion, are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. The RPS forms part of a planning authority's development plan.

4.4.1 Record of Protected Structures in City/County Development Plan

Each City/County Development Plan is compiled in accordance with the requirements of the Planning and Development Acts 2000-2015. The plans set out each City/County Council's policy for the conservation and enhancement of a city's natural and built environment and lists items of special environmental or archaeological interest. The inclusion of archaeological objectives by planning authorities in their statutory development plan provides the basis for such authorities to provide for the protection of the archaeological heritage. The majority of sites recorded in the Register of Historic Monuments are generally listed for protection in the City/County Development Plan. In certain circumstances the City/County Councils highlight certain archaeological sites in their respective areas for protection from development under the provisions of the National Monuments (Amendment) Acts. However, these methods of protection can be applied at any stage should the relevant authorities feel a site or monument is in sufficient danger. The 2000 Local Government (Planning & Development) Act introduced a range of new measures for the protection of architectural heritage, 'for the purpose of protecting structures, or parts of structures, which form part of the architectural heritage and which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest'.

Provision was made for the compilation of a Record of Protected Structures (RPS); a list of buildings which may not be materially altered or demolished without grant of permission under the Act. Protection extends to the interior of the structure, to the land in its curtilage¹, and to any other structures on that land and their interiors. This protection also applies to all fixtures and features forming part of the interior and exterior of the protected structure, or any structure on the grounds attached to it. Such structures, which include vernacular and country houses, churches, mills, bridges and other notable buildings, are generally listed in the relevant City/County Development Plan in terms of their international, national, regional or local significance. It is the policy of each County Council to seek the preservation of listed structures. The Development plan (2015 – 2021) does not proposed any significant amendments in terms of archaeology.

While there are no protected structures within the proposed development area, two protected structures are located between 60m-280m from the site (Figure 14) (see also Table 6).

¹ Curtilage means the land and outbuildings immediately surrounding a structure which is (or was) used for the purposes of the structure.

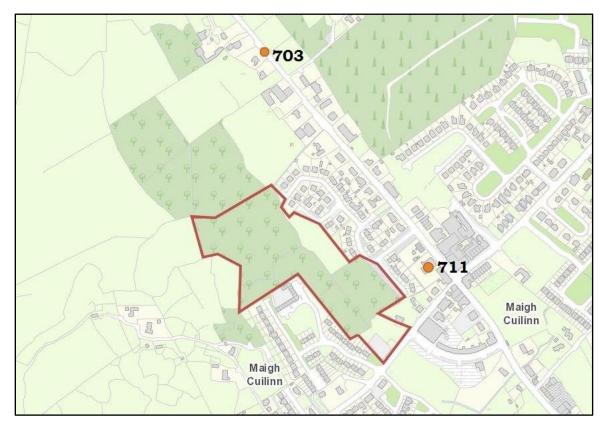


Figure 14: Map of proposed development (*outlined in red*) showing location in relation to historic structures (*orange*) listed in Galway County Development Plan 2015-2021, Record of Protected Structures (OSI Licence EN 0077918).

4.4.2 Maigh Cuilinn Local Area Plan 2013-2023

A Local Area Plan (LAP) sets out a strategy for the proper planning and sustainable development of a specific area within a local authority and for a timescale as specified by the authority. The policies or objectives contained in an LAP must be consistent with the objectives of the Development Plan and must include information on the likely significant effects on the environment of implementing the Plan. LAPs are prepared and adopted in accordance with Part II Section 20 of the Planning and Development Act, 2000 and as amended 2002. When considering an application for permission within the boundary of an LAP, the Planning Authority or An Bord Pleanála shall have regard to the provisions set out in the LAP. During its life the LAP may be amended or revoked following a public consultation process.

The Local Area Plan for Moycullen/Maigh Cuilinn was adopted on 25th March 2013 and expires in 2023. The aim of this Local Area Plan is to have a positive impact on Maigh Cuilinn

ensuring it develops in a sustainable manner, and to also complement the implementation of the current Galway County Development Plan.

5. Impact Assessment

Following an assessment of relevant and readily available archaeological and built heritage records, cartographic and literary sources, and a visual inspection of the site, four recorded monuments (1-4), and three structure of architectural heritage (5-7), were identified within 600m of the proposed development. These are presented in Figure 13& Table 8.



Figure 15Sites of recorded monuments (1-2) and sites of architectural heritage in the immediate vicinity of the proposed development (OSI Licence 0077918).

The predicted impacts of the proposed development on the heritage resource are summarised in Table 8 and discussed below. Mitigation strategies are presented in Section 6.

Table 8: Summary Impact Assessment

Site	Name	Status of Site	Proximity to Proposed Development	Predicted Impact
1	Megalithic Structure	SMR: GA081-036- SMR Zone: R127214	520m	No Predicted Impact
2	Ringfort / Cashel	SMR: GA068-026- SMR Zone: R127219	570m	No predicted impact
3	Town, (Moycullen / Maigh Cuilinn)	Smr: Ga081-030-	50m+	Moderate visual impact
4	Chapel	SMR: GA068-002-	520m	No predicted impact
5	Church of the Immaculate Conception	NIAH: 30406813	520m	No predicted impact
6	Gateway /Killarainy	RPS: 703	280m	No predicted impact
7	Galway Unit Furniture / Factory	RPS: 711 NIAH: 30408101	60m	Moderate visual impact

5.1 Recorded Monuments

Four RMP sites are situated in the vicinity of the proposed development. The development site is immediately to the west of the historic village of Moycullen (GA081030). A chapel (GA068-002) is located 520m to the east, and an early medieval ringfort (GA068-026) is located 570m to the north-east of the development area. A megalithic structure is located 520m to the west of the development area

The proposed development lies c.50m west of the recorded monument of Moycullen historic town (GA081-030), presenting the possibility of a moderate visual impact on the town. Sub-surface remains associated with this monument may exist within the proposed development area.

The remaining RMP sites discussed above are located at such a distance from the development area that no direct or indirect impacts are predicted.

5.2 Architectural Heritage

While there are several NIAH sites within the wider surroundings of the site (Table 7), none are located within 500m of the proposed development area. Therefore no impacts, either direct or indirect are predicted for these sites.

5.3 Industrial Heritage

There are no industrial heritage sites within the vicinity of the proposed development.

5.4 Areas of Archaeological Potential

Two areas of archaeological potential exist within the relative proximity of the site. These are the buffer zones (SMR Zone: R127214) associated with the Megalith Structure 520m to the west of the development area, and (SMR Zone: R127219) associated with the Cashel 570m to the north-east. Due to their distance from the development area no impacts area predicted for these Areas of Archaeological Potential. (Table 9) (Figure 16).

Name	Area of Archaeological Potential	Proximity to Proposed Development	Predicted Impact
Megalithic Structure(GA081036-)	SMR Zone: R127214	520m	No Predicted Impact
Ringfort / Cashel(GA068-026-)	SMR Zone: R127219	570m	No predicted impact

Table 9: Areas of	Archaeological Potential wit	thin 600m of the proposed	development site
Tuble 7. Aleus Ul	Alchueologicul i olennul wi	min ocom or me proposed	development sile



Figure 16: Areas of Archaeological Potential (shaded pink) within 600m of the development area (outlined in red) (OSI Licence EN 0077918).

5.5 Galway Council Conservation Areas

There are no Conservation Areas in the immediate vicinity of the proposed development site.

6. Mitigation Measures

It is recommended that the following measures be undertaken well in advance of the construction phase. This will allow for a satisfactory timeframe in which the mitigation measures can be conducted and the results assessed without causing delays to construction.

Mitigation measures, both at pre-construction and construction phases, are required to be undertaken in compliance national policy guidelines and statutory provisions for the protection of archaeological and architectural heritage, including the National Monuments Acts 1930 – 2004, the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999 and the Planning and Development Acts 2000 - 2014.

6.1 Avoidance of Impact

Avoidance of direct and indirect impacts upon all cultural heritage sites is the preference with regards to the proposed development. As this is not always feasible due to the nature of the development, pre-, during and post-construction recommendations are offered to provide ameliorative measures when avoidance and preservation *in situ* are not possible.

6.2 **Pre-Construction Phase Mitigation Measures**

6.2.1 Archaeological Monitoring & Investigation

It is strongly recommended that:

- i. A suitably qualified archaeologist monitor all ground disturbance works, including breaking and removal of the current ground surface;
- ii. Archaeological investigation, in the form of targeted test trenching, should be employed to investigate the nature, date, extent and significance of any archaeology present within the footprint of the proposed development area; and
- iii. This work should be undertaken in accordance with Section 26 of the National Monuments Acts 1930 – 2004, the National Monuments Service (Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs) and the National Museum of Ireland.

It is envisaged that the following will apply:

iv. Should investigation yield evidence of archaeologically significant material or structures, preservation *in situ* may be recommended. Strategies for the *in situ* preservation of archaeological remains are conducted in consultation with the

statutory authorities, and may include avoidance, if possible, of the remains during construction, or preservation through redesign.

- v. Should investigation yield evidence of archaeologically significant material or structures that cannot be preserved *in situ*, archaeological excavation and recording, to full resolution, is recommended.
- vi. Where less substantial archaeology is anticipated, it is proposed that ground works across the entire development site are monitored by a suitably qualified archaeologist, with the provision for full excavation of any archaeologically significant material uncovered at this time (if an impact cannot be avoided) (see 6.3 below).
- vii. In the event of archaeological features or material being uncovered during construction phase, it is crucial that machine work cease in the immediate area to allow the archaeologist to assess, excavate and record any such material, once agreed by the heritage authorities and the client.
- viii. Should archaeological features or material be uncovered, adequate funds to cover excavation, fencing (if required), post-excavation analysis and reporting, and conservation work should be made available.

6.2.2 Design

Appropriate design that is empathetic Moycullen town and the established surrounding heritage hinterland is recommended.

6.3 **Construction Phase Mitigation Measures**

6.3.1 Archaeological Monitoring & Investigation

It is strongly recommended that:

- i. A suitably qualified archaeologist monitor all site development works within the project area;
- ii. In the event of archaeological features or material being uncovered during construction phase, it is crucial that machine work cease in the immediate area to allow the archaeologist to assess, excavate and record any such material; and iii.

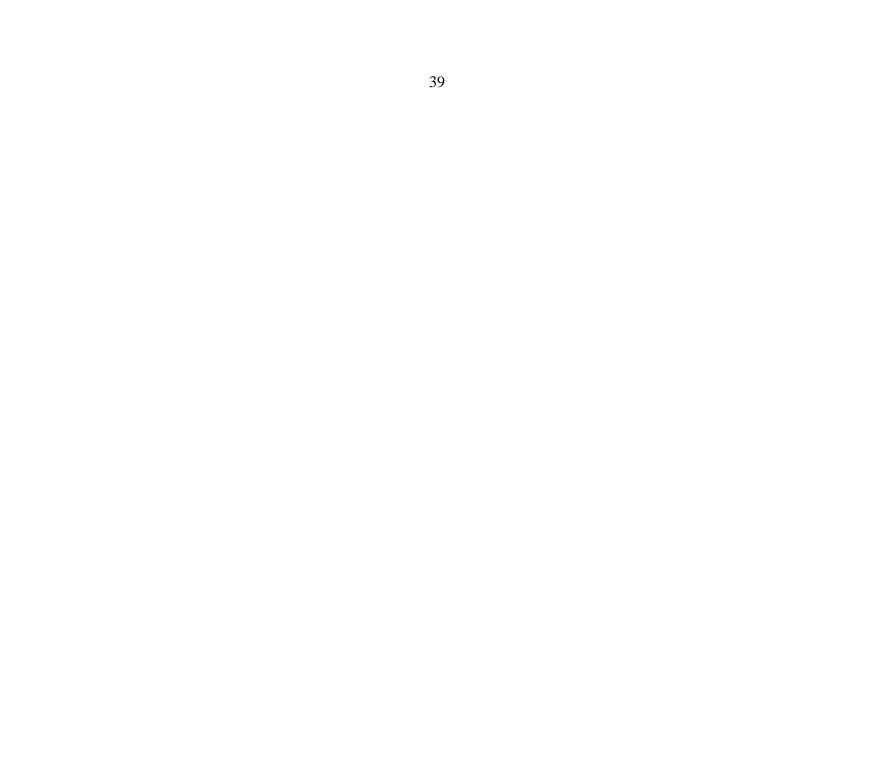
Should archaeological features or material be uncovered during construction phase, adequate funds to cover excavation, fencing (if required), postexcavation analysis and reporting, and conservation work should be made available.

PLEASE NOTE: All of the above recommendations are based on maps provided by the client at the time of writing. Should any alterations be made to these design drawings, further assessment may be necessary.

Recommendations are subject to approval by the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

Table 10: Summary of Impacts and Recommendations

Site	Name	Status of Site	Proximity to Proposed Development	Predicted Impact	Recommended Mitigation Measures
1	Megalithic Structure	SMR: GA081-036- SMR Zone: R127214	520m	No Predicted Impact	No ameliorative measures are recommended.
2	Ringfort / Cashel	SMR: GA068-026- SMR Zone: R127219	570m	No predicted impact	No ameliorative measures are recommended.
3	Town, (Moycullen / Maigh Cuilinn)	SMR: GA081-030-	50m+	Moderate visual impact	No ameliorative measures are recommended.
4	Chapel	SMR: GA068-002-	520m	No predicted impact	No ameliorative measures are recommended.
5	Church of the Immaculate Conception	NIAH: 30406813	520m	No predicted impact	No ameliorative measures are recommended.
6	Gateway /Killarainy	RPS: 703	280m	No predicted impact	No ameliorative measures are recommended.
7	Galway Unit Furniture / Factory	RPS: 711 NIAH: 30408101	60m	Moderate visual impact	No ameliorative measures are recommended.



7. Bibliography

Delaney, S., 2014. Excavation Report 2014:184.<u>https://excavations.ie/report/2014/Galway/0024049/</u> Retrieved 17 October 2018.

Gosling, P., (ed.) 1993. Archaeological inventory of County Galway. Dublin Stationery Office.

- Lewis, S., 1837. A Topographical Dictionary of Ireland. Lewis & Co., London.<u>https://www.libraryireland.com/topog/M/Moycullen-</u> <u>MoycullenGalway.php</u>retrieved 17October 2018.
- Molloy, M., The Famine Part 1: Barony of Moycullen, Co. Galway 1845-1850. <u>http://www.oughterardheritage.org/content/topics/murt-molloy-killannin-</u> <u>andoughterard-local-history/the-famine-barony-of-moycullen-co-galway-1845-</u> <u>1850</u> Retrieved 17 October 2018.

Nolan, J. P., 1901. Journal of the Galway Archaeological and Historical Society 1:2 (1900–1901)

O'Kelly, M. J., 1997. Early Ireland. Cambridge University Press.

Ryan, M. (ed.), 1991. The Illustrated Archaeology of Ireland. County House, Dublin.

Waddell, J., 1990. The Bronze Age Burials of Ireland. Galway University Press, Galway.

Waddell, J., 1998. The Prehistoric Archaeology of Ireland. Galway University Press, Galway.

Galway County Development Plan 2015-2021

http://www.galway.ie/en/services/planning/developmentplansandpolicy/galway.ountydevelopmentplan2015-2021/

Moycullen / Maigh Cuilinn Local Area Plan 2013-2023 <u>http://www.galway.ie/en/services/planning/developmentplansandpolicy/localar</u> <u>eaplans/maighcuilinnlap/</u> Retrieved 17 October 2018.

Landed Estates: Burke (Danesfield). http://landedestates.nuigalway.ie/LandedEstates/jsp/estate-show.jsp?id=839

Retrieved 17 October 2018 www.buildingsofireland.ie retrieved 17 October 2018.

www.excavations.ie retrieved 17October 2018. www.logainm.ieretrieved 17October

2018. <u>www.nra.ie/archaeology/nra-archaeological-database/</u> retrieved 17 October

2018.

Mountain Road, Moycullen, Co. Galway Archaeological Impact Assessment

Cartographic Sources

Ordnance Survey,

1837-43. First edition 6" map.

1912. Third edition 25" map.

6" Cassini map

- Lewis, S., 1837. Counties of Ireland and a General Map of the Kingdom <u>https://www.swilson.info/lewismaps37.php?coid=11</u> Retrieved 16 October 2018.
- Moll, H., 1701. Map of Ireland. <u>https://www.swilson.info/maps/Irelandc1701b.php</u> Retrieved 16 October 2018.
- Morden, R., 1695. Map The Kingdom of Ireland. <u>https://www.swilson.info/maps/ireland_1695.php</u> Retrieved 16 October 2018.
- Petty, W, 1655-58. Down Survey. <u>http://downsurvey.tcd.ie/down-survey-</u> <u>maps.php#c=Galway</u> Retrieved 16 October 2018.

Rocque, J., 1790. A Map of the Kingdom of Ireland <u>https://www.davidrumsey.com/luna/servlet/workspace/handleMediaPlayer?luna</u> <u>Mediald=RUMSEY~8~1~3640~420015</u> Retrieved 16 October 2018.

Other Sources

- Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999.
- Dept. of Arts, Heritage, Gaeltacht & the Islands, 1999. Frameworks and Principles for the Protection of the Archaeological Heritage, Government Publications, Dublin.

1999. Policy and Guidelines on Archaeological Excavation. GovernmentPublications, Dublin.

- Department of the Environment, Heritage and Local Government, 2004. Architectural Heritage Protection Guidelines for Planning Authorities.
- Environmental Protection Agency, 2002. Guidelines on the information to be contained in Environmental Impact Statements.

2003. Advice notes on current practice in the preparation of Environmental Impact Statements.

- National Inventory of Architectural Heritage (2002). An introduction to the Architectural Heritage of Fingal Department of the Environment, Heritage and Local Government.
- National Roads Authority, 2005. Guidelines for the Assessment of Archaeological Heritage Impacts of National Road Scheme.

43

2005. Guidelines for the Assessment of Architectural Heritage Impacts of National Roads Schemes.

National Monuments Acts 1930-2004.

National Museum of Ireland, Topographical Files, Co. Dublin

Planning and Development Acts 2000 - 2014.

The Heritage Council, 2000. Archaeology & Development: Guidelines for Good Practice for Developers. The Heritage Council of Ireland Series, Kilkenny.

Shanarc Archaeology Ltd

Mountain Road, Moycullen, Co. Galway Archaeological Impact Assessment

Plates



Plate 1: North-east area of site, showing stream.



Plate 2: North-east area of site, showing stream.



Plate 3: Top of hill, at rear of site.



Plate 4: Wall at corner to south-east of site.



Plate 5: North-western area of site.



Plate 6: Wall at north-west of site.



Plate 7: Wall at south-west of site.



Mountain Road, Moycullen, Co. Galway Archaeological Impact Assessment



Plate 8: Wall at south-west of site; boundary to field.

Plate 9: Wall at north-east of site; not shown on maps.





Plate 10: Footpath within the site.

Plate 11: Footpath within the site.





Plate 12: Footpath within the site.

Plate 13: Interior of site.



Plate 14: Interior of site.



Plate 15: South-east area of site.



Plate 16: Construction rubble at south-east of site.



Plate 17: Construction rubble at south-east of site.



Plate 18: Existing playground at south-east of site; to be incorporated within the proposed development.

Shanarc Archaeology Ltd

Mountain Road, Moycullen, Co. Galway Archaeological Impact Assessment