

## Chapter 14 Archaeology, Architecture and Cultural Heritage

### 14.1 Introduction

This chapter of the Environmental Impact Assessment Report (EIAR) consists of an assessment of the proposed Foynes to Limerick Road (including Adare Bypass), hereafter referred to as 'the proposed road development', under the heading of archaeology, architecture and cultural heritage.

This chapter sets out the assessment methodology (Section 14.2), describes the receiving environment (Section 14.3 and Appendices 14.1 – 14.7 and 14.14), and summarises the main characteristics of the proposed road development which are of relevance to the archaeological, architectural and cultural heritage. The construction and operational impacts of the proposed road development on archaeological, architectural and cultural heritage are described (Sections 14.4 and 14.5), measures are proposed to mitigate these impacts (Section 14.6), and residual impacts are described (Section 14.7). The chapter concludes with a summary of the difficulties encountered (Section 14.8) and a references section (Section 14.9).

This chapter has utilised the information gathered during the constraints, route selection studies and the design stage for the proposed road development to inform the archaeological, architectural and cultural heritage impact assessment.

Detailed baseline information relating to the known and potential archaeological, architectural and cultural heritage assets along the proposed road development and receiving environment are contained within Appendices 14.1 – 14.9. All heritage assets are illustrated on Figures 14.1 – 14.23 in Volume 3 of this EIAR.

### 14.2 Methodology

#### 14.2.1 Introduction

This EIAR determines, as far as is reasonably possible from existing records, the nature of the archaeological, architectural and cultural heritage resource within the footprint of the proposed road development and within the receiving environment using appropriate methods of study. The assessment consists of an analysis of existing written, cartographic, photographic and electronic information in order to identify the likely heritage assets (archaeological, architectural and cultural heritage), their interests and significance and the character of the receiving environment, including appropriate consideration of the settings of heritage assets (Chartered Institute for Archaeologists 2014). This leads to the following:

- Determining the presence of known archaeological, architectural and cultural heritage assets that may be directly or indirectly affected by the proposed road development;
- Assessment of the likelihood of finding previously unrecorded archaeological remains during the construction programme;
- Determining the direct impact on heritage assets or indirect impacts upon the setting of known heritage assets in the receiving environment; and
- Suggested mitigation measures based upon the results of the above research.

Research for this assessment has been undertaken in four phases:

- The first phase comprised a desktop survey of all available archaeological, architectural, historical and cartographic sources. This includes information gathered during the constraints and route selection studies and the design stage for the proposed road development;
- The second phase consisted of a LiDAR survey of the receiving environment, and archaeological analysis of the resultant LiDAR data by Dr Stephen Davis of UCD (Davis 2017);
- The third phase involved a field inspection of the proposed road development;
- The fourth phase involved geophysical survey of selected areas along the route of the proposed road development (Earthsound Geophysics 2019).

The study involved detailed interrogation of the archaeological, historical and architectural nature of the receiving environment for the proposed road development. This included information from the Record of Monuments and Places of County Limerick; the County Development Plan; the topographical files of the National Museum of Ireland as well as cartographic and documentary records. Aerial photographs of the receiving environment were also consulted. Field inspections were carried out along the route of the proposed road development in May – June 2018 and January 2019 in an attempt to confirm the form, extent and condition of heritage assets identified through desktop research and to identify any assets and previously unrecorded features, structures and portable finds within the footprint of the proposed road development.

The receiving environment is defined as an area measuring 250m from the edge of landtake required for the proposed road development (the edge of the landtake is hereafter known as ‘the boundary of the proposed road development’). Measurements are taken from the boundary of the proposed road development to the upstanding remains of a site or structure, or to the edges of features/monuments as identified through LiDAR and/or geophysical survey. Where there are no upstanding remains the measurement is taken to the centre of the site as indicated within Figures 14.1–14.23.

#### **14.2.2 Relevant legislation, guidance documents, survey methodology**

The assessment has been carried out in accordance with the Code of Practice for Archaeology agreed between Transport Infrastructure Ireland (TII) and the Minister for Arts, Heritage, Regional, Rural and Gaeltacht Affairs (now the Department of Culture, Heritage and the Gaeltacht (DoCHG)) (2017). The assessment methodology was based on TII’s (formerly the NRA) *Guidelines for the Assessment of Archaeological Heritage Impacts of National Road Schemes (2005a)* and *Guidelines for the Assessment of Architectural Heritage Impacts of National Road Schemes (2005b)*, as well as by the guidance and advice notes of the Environmental Protection Agency (EPA).

The following legislation, standards and guidelines were also consulted as part of the assessment:

- National Monuments Acts 1930 to 2014;
- The Planning and Development Acts 2000 to 2017;
- Heritage Act 1995, as amended;
- *Guidelines on the information to be contained in Environmental Impact Statements*, 2003, EPA;

- *Advice Notes on Current Practice (in preparation of Environmental Impact Statements)*, 2003, EPA;
- *Draft Advice Notes on Current Practice (in preparation of Environmental Impact Statements)*, 2015, EPA;
- *Guidelines on the information to be contained in Environmental Impact Statements*, Draft 2015, EPA;
- *Guidelines on the information to be contained in environmental impact assessment reports* (Draft August 2017), EPA;
- *Framework and Principles for the Protection of the Archaeological Heritage*, 1999, Department of Arts, Heritage, Gaeltacht and the Islands;
- Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act, 2000.

### 14.2.3 Sources of data

The following sources were examined and a list of heritage assets and areas of archaeological potential was compiled:

- Record of Monuments and Places for County Limerick;
- Sites and Monuments Record for County Limerick;
- National Monuments in State Care Database;
- List of Preservation Orders;
- Register of Historic Monuments;
- Topographical files of the National Museum of Ireland;
- Cartographic and documentary sources relating to the receiving environment;
- The development plan for County Limerick (2010–2016, as extended);
- Askeaton Local Area Plan 2015–2021;
- Adare Local Area Plan 2015–2021;
- Rathkeale Local Area Plan 2012–2018, as extended until October 2022;
- National Inventory of Architectural Heritage County Limerick (Architectural & Garden Survey);
- Aerial photographs;
- LiDAR assessment;
- Excavations Bulletins (1970–2018); and
- Placename analysis.

**Record of Monuments and Places (RMP)** was established under Section 12 (1) of the National Monuments Act (1994 amendment) which provides that the Minister for Arts, Heritage, Gaeltacht and the Islands (now the Minister for Culture, Heritage and the Gaeltacht) shall establish and maintain a record of monuments and places (RMP) where it is known that such monuments exist. The record comprises of a list of monuments and relevant places and mapping showing each monument and relevant place in respect of each county in the State. The RMP for County Limerick was published in 1997. Sites recorded on the RMP all receive statutory protection under the National Monuments Act. All sites listed on the RMP are referred to as Archaeological Heritage (AH sites) within this assessment.

**Sites and Monuments Record (SMR)** holds documentary evidence and records of field inspections of all known archaeological sites and monuments. Some information is also held about archaeological sites and monuments whose precise location is not known e.g. only a site type and townland are recorded. These are termed 'un-located sites' and cannot be afforded legal protection. As a result these are omitted from the RMP. SMR sites are also listed on a website maintained by the Department of Culture, Heritage and the Gaeltacht (DoCHG) – [www.archaeology.ie](http://www.archaeology.ie). All sites listed on the SMR are referred to as Archaeological Heritage (AH sites) within this assessment.

It should be noted that revisions are proposed to the RMP and SMR, with some sites listed as redundant records and proposed for removal and other, newly discovered sites, proposed for inclusion. Some of the recorded sites within the receiving environment of the proposed road development fall into this category. As the revisions have yet to take place, all current RMP / SMR sites are listed as AH sites within this assessment, with the relevant detail provided as to the nature and extent of each site.

**National Monuments in State Care Database** is a list of all the National Monuments in State guardianship or ownership. Each is assigned a National Monument number whether in guardianship or ownership and is briefly described. A National Monument receives statutory protection under the National Monuments Act and is defined 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' (National Monuments Act 1930, Section 2).

The Minister for the Department of Environment, Heritage and Local Government (now the Minister for Culture, Heritage and the Gaeltacht) may acquire National Monuments by agreement or by compulsory order. The State or Local Authority may assume guardianship of any National Monument (other than dwellings). The owners of National Monuments (other than dwellings) may also appoint the Minister or the Local Authority as guardian of that monument if the State or Local Authority agrees. Once the site is in ownership or guardianship of the State, it may not be interfered with without the written consent of the Minister. There are no National Monuments located within the footprint of the proposed road development, with one located within the receiving environment, Desmond Castle at Adare (AH 91).

**Preservation Orders** and / or Temporary Preservation Orders, can be assigned to a site or sites that are deemed to be in danger of injury or destruction. Orders are allocated under the National Monuments Act 1930. Preservation Orders make any interference with the site illegal. Temporary Preservation Orders can be attached under the National Monuments Act 1954. These perform the same function as a Preservation Order but have a time limit of six months, after which the situation must be reviewed. Work may only be undertaken on or in the vicinity of sites under Preservation Orders with the written consent, and at the discretion, of the Minister (DoCHG). There are three sites subject to Preservation Orders within the receiving environment of the proposed road development under assessment. These are referred to as Archaeological Heritage (AH sites) within this assessment.

**The Register of Historic Monuments** was established under Section 5 of the 1987 amendment to the National Monuments Act and requires the Minister to establish and maintain such a record. Historic monuments and archaeological areas included in the register are afforded statutory protection under the National Monuments Act 1987 amendment. The register also includes sites under Preservation Orders and Temporary Preservation Orders. All registered monuments are included in the RMP.

**Topographical files of the National Museum of Ireland** is the national archive of all known finds recorded by the National Museum. This archive relates primarily to artefacts but also includes references to monuments and unique records of previous excavations. The find spots of artefacts are important sources of information that may lead to the discovery of sites of archaeological significance.

**Cartographic sources** are important in tracing land use development within the proposed road development and its receiving environment as well as providing important topographical information on areas of archaeological potential and the construction of buildings. Cartographic analysis of all relevant maps has been made to identify any topographical anomalies, or structures that no longer remain within the landscape. These include current and former townland and parish boundaries.

All sites of potential archaeological or architectural heritage merit identified during the map analysis are listed as Cultural Heritage (CH) sites within this assessment. All townland boundaries are listed as TB 1, 2 etc. In addition, all Areas of Archaeological Potential (AAPs) identified during the analysis of mapping (and other sources including field inspection, review of geology and topography and review of previous excavations) are referred to as AAPs within this assessment.

The cartographic sources consulted include:

- Down Survey Barony Maps of Limerick (1654 – 6) including the Baronies of Connello, Kenry and Poblebryan; and
- Ordnance Survey 6" and 25" maps of Co. Limerick (1841, 1897–1903, 1928–29).

**Documentary sources** were consulted to compile background information on the archaeological, architectural and cultural heritage receiving environment of the proposed road development. A full list of references is given in Section 14.9.

**Development Plans** contain a catalogue of all the Protected Structures, archaeological sites and Architectural Conservation Areas within every county. The development plan for County Limerick (2010–2016, as extended) along with the local area plans for Adare (2015–2021), Rathkeale (2012–2018, as extended until 2022) and Askeaton (2015–2021) were examined as part of this assessment. All protected structures are referred to as Built Heritage sites (BH) as part of this assessment. There is one Architectural Conservation Area located within the receiving environment of the proposed road development at Adare.

**The National Inventory of Architectural Heritage (NIAH)** was established under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999. It is a government-based organisation tasked with making a nationwide record of locally, regionally, nationally and internationally significant structures dating to post-1700 AD, which in turn provides county councils with a guide as to what structures to list within the Record of Protected Structures (RPS). Only those structures of regional importance or above are included in the Minister's recommendations for inclusion in the RPS. The NIAH have also carried out a nationwide desk-based survey of historic gardens, including demesnes that surround large houses. All NIAH structures are referred to as Built Heritage sites (BH) as part of this assessment.

The **NIAH Garden Survey** was utilised as part of this assessment, in conjunction with detailed analysis of the first edition Ordnance Survey maps and field inspection, in order to identify all designed landscapes (DL) within the receiving environment of the proposed road development.

**Aerial photographic** coverage is an important source of information regarding the precise location of sites and their extents. It also provides information on the terrain and its likely potential for archaeology. Ordnance Survey aerial photographs (1995, 2000, 2005), Google Earth coverage (2003–2018), Bing Maps and scheme specific orthophotos (2016) were examined for this assessment. All potential archaeological sites identified during cartographic or aerial photographic assessment are referred to as Cultural Heritage (CH) sites within this assessment.

**LiDAR** (Light Detection and Ranging) is a form of aerial survey that captures distance measurements using a laser scanner mounted on an aircraft. The data collected consists of millions of points, each containing an easting (X), northing (Y) and height value (Z), which are interpolated to create a surface model. A Digital Terrain Model (DTM), or 'bare earth model', is usually the desired output for archaeological prospection as it can be used to identify potential archaeological features that retain even a slight surface expression. A LiDAR survey was carried out for the proposed road development in 2017 and the resulting DTM was analysed by Dr. Stephen Davis (University College Dublin). Potential archaeological sites identified through this analysis are referred to as LiDAR sites (LI) within this assessment.

**Excavations Bulletin** provides a summary of the archaeological excavations that have taken place in Ireland since 1970. From 1970 to 2010 it was a printed publication; since 2011 the excavation summaries are provided online only ([www.excavations.ie](http://www.excavations.ie)). Information from this resource is vital when examining the archaeological content of any area, which may not have been recorded under the SMR and RMP files. Previous excavations are referred to as EX sites in this assessment.

**Placenames** are an important part in understanding both the archaeology, history and cultural heritage of an area. Placenames can be used for generations and in some cases have been found to have their roots deep in the historical past. The main references used for the placename analysis is Irish Local Names Explained by P.W Joyce (1870), the Placenames Database of Ireland ([www.logainm.ie](http://www.logainm.ie)) and the Ordnance Survey Name Books ([www.limerickcity.ie/Library/LocalStudies/FieldNameBooksofLimerick/](http://www.limerickcity.ie/Library/LocalStudies/FieldNameBooksofLimerick/)).

#### 14.2.4 Field Inspection

Field inspection is necessary to determine the extent and nature of archaeological and architectural remains and can also lead to the identification of previously unrecorded or suspected sites and portable finds through topographical observation and local information.

The archaeological and architectural field inspection was carried out from 28 May to 06 June 2018, January 2019 and December 2019 and entailed:

- Noting and recording the terrain type and land usage;
- Noting and recording the presence of known and previously unknown features of archaeological, architectural or cultural heritage significance;
- Verifying the extent and condition of recorded sites and structures (RMP / RPS / NIAH); and
- Visually investigating any suspect landscape anomalies to assess the possibility of their being anthropogenic in origin and of archaeological, architectural or cultural heritage significance.

### 14.2.5 Geophysical Survey

Geophysical survey is used to create 'maps' of subsurface archaeological features. Features are the non-portable part of the archaeological record, whether standing structures or traces of human activities left in the soil. Geophysical instruments can detect buried features when their electrical or magnetic properties contrast measurably with their surroundings. In some cases, individual artefacts, especially metal, may be detected as well. Readings taken in a systematic pattern become a dataset that can be rendered as image maps. Survey results can be used to guide excavation and to give archaeologists insight into the patterning of non-excavated parts of the site. Unlike other archaeological methods, geophysical survey is not invasive or destructive.

A geophysical survey was undertaken by Earthsound Geophysics Ltd to inform this assessment in July, September and October 2018 at selected areas along the proposed road development (Licence Ref.: 18R0122). A total of 105.6 hectares across 44 sites were surveyed using magnetometer surveys, while a total of 22.7 hectares across 23 sites were targeted by resistivity surveys. In addition, three sites containing topographical features and geophysical survey anomalies were targeted by a total of seven electrical resistivity tomography profiles. The full report included in Appendix 14.5.

### 14.2.6 Impact Evaluation Methodology

The quality and type of a potential impact can vary to include the following as per TII's *Guidelines for the Assessment of Archaeological Heritage Impacts of National Road Schemes* (NRA 2005a, p. 54) and *Guidelines for the Assessment of Architectural Heritage Impacts of National Road Schemes* (NRA 2005b, p. 21):

*“Negative Impact: A change that will detract from or permanently remove an archaeological / architectural heritage site from the landscape.*

*Neutral Impact: A change that does not affect the archaeological / architectural heritage.*

*Positive Impact: A change that improves or enhances the setting of an archaeological / architectural heritage site.*

*Direct Impact: Where an archaeological / architectural heritage site is physically located within the footprint of the proposed route and entails the removal of part, or all of the monument or feature.*

*Indirect Impact: Where an archaeological / architectural heritage site or its setting is located in close proximity to the proposed route.*

*No Predicted Impact: Where the proposed route does not adversely or positively affect an archaeological / architectural heritage site.”*

It should be noted that whilst impact levels and definitions are applied consistently to the cultural heritage resource, direct impacts on sites that are subject to statutory protection are considered to be more significant than direct impacts on sites / structures not subject to statutory protection.

Impact Definitions (as outlined in the *Guidelines for the Assessment of Archaeological / Architectural Heritage Impacts of National Road Schemes* (NRA, 2005a / 2005b, p. 54 / 33), are included in Table 14.1 and Table 14.2, below. These have been supplemented with the additional impact definitions as per the most recent EPA guidelines (2017).

**Table 14.1 Impact Definitions: Archaeology**

Type of Impact	Definitions relating to sites of an archaeological nature
Profound	Applies where mitigation would be unlikely to remove adverse effects. Reserved for adverse, negative effects only. These effects arise when an archaeological site is completely and irreversibly destroyed by a proposed development.
Very Significant	Effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment.
Significant	An impact which, by its magnitude, duration or intensity, alters an important aspect of the environment. An impact like this would be where part of a site would be permanently impacted upon, leading to a loss of character, integrity and data about the archaeological feature / site.
Moderate	A moderate impact arises where a change to the site is proposed, which although noticeable, is not such that the archaeological integrity of the site is compromised, and which is reversible. This arises where an archaeological feature can be incorporated into a modern day development without damage and that all procedures used to facilitate this are reversible.
Slight	An impact which causes changes to the character of the environment which are not significant or profound and do not directly impact or affect an archaeological feature or monument.
Not significant	Impacts which cause noticeable changes in the character of the environment but without significant consequences
Imperceptible	An impact capable of measurement but without noticeable consequences.

**Table 14.2 Impact Definitions: Architectural Heritage**

Type of Impact	Definitions relating to sites of an architectural nature
Profound	An impact that obliterates the architectural heritage of a structure or feature of national or international importance. These effects arise where an architectural structure or feature is completely and irreversibly destroyed by the proposed development. Mitigation is unlikely to remove adverse effects.
Very Significant	An impact which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment.
Significant	An impact which, by its magnitude, duration or intensity alters the character and / or setting of the architectural heritage. These effects arise where an aspect or aspects of the architectural heritage is / are permanently impacted upon leading to a loss of character and integrity in the architectural structure or feature. Appropriate mitigation is likely to reduce the impact.
Moderate	An impact that results in a change to the architectural heritage which, although noticeable, is not such that alters the integrity of the heritage. The change is likely to be consistent with existing and emerging trends. Impacts are probably reversible and may be of relatively short duration. Appropriate mitigation is very likely to reduce the impact.



Type of Impact	Definitions relating to sites of an architectural nature
Slight	An impact that causes some minor change in the character of architectural heritage of local or regional importance without affecting its integrity or sensitivities. Although noticeable, the effects do not directly impact on the architectural structure or feature. Impacts are reversible and of relatively short duration. Appropriate mitigation will reduce the impact.
Not significant	An impact which causes noticeable changes in the character of the environment but without noticeable consequences
Imperceptible	An impact on architectural heritage of local importance that is capable of measurement but without noticeable consequences.

## 14.3 Description of Receiving Environment

### 14.3.1 Context

The proposed road development is located across largely agricultural land, with some scrubland also impacted, particularly at the western end of the proposed road development (to the south of Foynes). It crosses two Limerick County Landscape Categories (as defined by the Limerick County Development Plan (2010 – 2016, as extended)) - the Shannon Integrated Coastal Management Zone and the Limerick Agricultural Lowlands. The Agricultural Lowlands are defined by a series of regular field boundaries, often allowed to grow to maturity. The well-developed hedgerow system is one of its main characteristics and can be seen across the receiving environment (Limerick County Council 2010 – 2016 as extended, pages 7-8 and 7-9). The landscape of the Coastal Management Zone is generally that of an enclosed farm type across a hedgerow dominant landscape. The field patterns, particularly those close to the estuary, tend to be less regular than those elsewhere in the county (*ibid.* pages 7-11 and 7-12). The dominant land use across the receiving environment is pastoral farming, with settlements at Foynes, Askeaton, Rathkeale, Croagh and Adare. A dispersed settlement pattern dominates outside of these towns, with farm houses and isolated dwellings dominating.

The topography at the north-western end of the proposed road development is of generally flat land ranging from 2m above Ordnance Datum (OD) at Foynes to 12m above OD at Askeaton, with a rise up to 60m OD in the townlands of Craggs and Mulderricksfield. The landscape rises steadily southwards from 12m to 36m OD, from the townland of Ballyclogh to Rathkeale. From Rathkeale to Adare the landscape undulates from 36m to 25m OD as far as Croagh, falling steadily then to 1m OD to the north of Adare, where the proposed road development crosses the River Maigue.

The bedrock geology of the receiving environment largely consists of limestones with some mudstone also recorded at Rathkeale (Geological Survey of Ireland 2018). Superficial geology across the receiving environment consists largely of till derived from limestones, with areas of alluvium along the river systems of the Deel and Maigue and limited pockets of fen, peat, eskers and bedrock outcrops (*ibid.*).

The receiving environment is drained by the rivers Ahacronane, Deel, Clonshire, Greanagh and Maigue, as well as numerous streams. The north western end of the proposed road development is also located in close proximity to the River Shannon, which flows 1km to the north.

### 14.3.2 Character

A wide range of archaeological, architectural and cultural heritage assets are located across the receiving environment. A full historical and archaeological background is detailed in Appendix 14.1 and gazetteers of all known assets are given in Appendices 14.2 - 14.7. All assets are illustrated in Figures 14.1–14.23.

### 14.3.3 Archaeology

In summary, a total of 122 Archaeological Heritage (AH) sites have been recorded on the RMP / SMR within the receiving environment (Table 14.3). However, the existing SMR and RMP are currently under review and a number of changes relating to some sites have been proposed in the record by the Department of Culture, Heritage and the Gaeltacht ([www.archaeology.ie](http://www.archaeology.ie)). As such, four redundant records (AH18, 35, 38 and 50) are included within the 122 sites, which will be removed from the SMR / RMP at the next revision. These sites have been classed by the DoCHG as being non-archaeological. The medieval settlement of Clonshire (AH 89) will also not be included on the revised RMP as its current location is unknown, though it may have been located in the vicinity of Clonshire Castle (AH 69).

Seven sites are listed on the SMR which do not currently have statutory protection, however, these will be added to the RMP at the next revision (AH 68, 75, 78, 79, 84, 88, 118). A number of archaeological sites recorded by the SMR are not subject to statutory protection and have been preserved by record through archaeological excavation (AH 67, 70 – 74, 76, 77, 80–83, 85–87, 94, 101, 103, 105–107, 109, 111–113 and 115).

Three monuments within the receiving environment are subject to a Preservation Order (No. 4 / 77; cashel at Milltown North, AH 22, castle within cashel at Milltown north AH 23 and souterrain at Milltown North cashel, AH 88) and one is a National Monument (No. 622; Desmond Castle, Adare AH 91). Of the 122 sites, five are also classed as Protected Structures (AH 1, 53, 56, 69 and 91) within the Limerick County Development Plan (2010–2016, as extended). As such, these structures are also subject to statutory protection under the Planning and Development Act 2000, as amended.

Evidence for prehistoric occupation of the landscape can be seen in the number of *fulachtaí fia* which have been identified during previous construction works. *Fulachtaí fia* generally consist of a low mound of burnt stone, commonly in a horseshoe shape, centred around an earth-cut trough, and generally date to the Bronze Age. They are found in low-lying marshy areas or close to streams or rivers. Sixteen *fulachtaí fia*/burnt mounds (AH 68, 72–73, 75, 78–79, 81, 85, 87, 94 103, 105–106, 109, 111 and 113) have been recorded within the receiving environment. Other known prehistoric sites located along the proposed road development include the site of a standing stone (AH 51) in Rathkeale, a megalithic structure in Attyflin (AH 110), and an Iron Age ring ditch in Ballybronoge South (AH 67).

Of the 122 archaeological sites within the receiving environment, 28 are classed as ringforts (AH 2–4, 6, 8, 10–12, 15–16, 19, 22, 25–27, 29–30, 32–33, 37, 39, 52, 90, 96 and 119–122), and a further 35 as enclosures (AH 7, 9, 13, 20–21, 24, 31, 40–44, 46–49, 57–61, 62–66, 84, 92, 97, 99, 102, 104, 108,114 and 118). Ringforts and potential ringforts - often recorded as enclosures - are the most common archaeological sites recorded within the receiving environment and largely represent early medieval farmsteads and stock enclosures. Indeed, West Limerick has one of the highest ringfort densities in the country, at c. 1.52 per square kilometre (Stout 1997, 99). A crannóg, a partially or entirely artificial island used as a dwelling place, is also

located within the receiving environment (AH 34) and may also date to this period. During the course of the present assessment a significant number of additional sites that are likely to date to the early medieval period were identified through aerial photographs, LiDAR analysis and geophysical surveys (detailed below).

Five medieval castles are recorded within the receiving environment (AH 1, 17, 23, 69 and 91) as well as a number of other medieval remains in Adare village, including a church, graveyard and chapel (AH 53, 54 and 56). The medieval towns of Adare (AH 117), Rathkeale (AH 116) and Askeaton are all located either within or adjacent to the receiving environment. Further information on the medieval development of the landscape can be found in Appendix 14.1 (Historical and Archaeological Background). The remaining sites consist of mills (14, 36, 98), burial grounds (5, 93, 95) and other miscellaneous sites.

Table 14.3 summarises the archaeological monuments and features within the receiving environment; full descriptions of the monuments are given in Appendix 14.2 (Recorded Monuments Located Within the Receiving Environment).

**Table 14.3 Archaeological Heritage Sites within the Receiving Environment**

AH No.	RMP No.	Townland	Classification	Approx. Ch	Dist. from Boundary of Proposed Road Development	Statutory Protection
AH 1	LI010-007	Corigrig	Castle - tower house	Beyond proposed road development	116m W	Yes
AH 2	LI010-012	Ardaneer	Ringfort - rath	1+900	70m W	Yes
AH 3	LI010-068	Robertstown	Ringfort - rath	2+600	35m NE	Yes
AH 4	LI010-070	Robertstown	Ringfort - rath	3+200	0m	Yes
AH 5	LI010-071	Robertstown	Burial ground	3+450	84m N	Yes
AH 6	LI010-073	Rincullia	Ringfort - rath	3+850	165m N	Yes
AH 7	LI010-074	Rincullia	Enclosure. Geophysical survey carried out outside of the enclosure revealed possible archaeological features to the east, including a pit and linear features.	4+050	0m	Yes
AH 8	LI010-081	Craggs	Ringfort - rath	4+650	0m	Yes
AH 9	LI010-087	Craggs	Enclosure	5+200	25m S	Yes
AH 10	LI010-090	Mulderricksfield	Ringfort - cashel	5+600	105m S	Yes
AH 11	LI010-098	Ballyclogh (ED Askeaton West)	Ringfort - rath	6+450	175m S	Yes
AH 12	LI010-099	Mulderricksfield	Ringfort - rath	6+550	80m N	Yes
AH 13	LI010-103	Cloonreask	Enclosure	10+900	178m S	Yes
AH 14	LI010-106	Sroolane North	Mill – unclassified	2+300	205m E	Yes
AH 15	LI011-090	Cloonreask	Ringfort - rath	11+850	168m SE	Yes
AH 16	LI019-058	Ballyclogh (ED Askeaton West)	Ringfort - rath	20+650	125m W	Yes
AH 17	LI019-059	Ballycullen	Castle - unclassified	20+600	100m E	Yes
AH 18	LI019-060	Ballycullen	Redundant record -quarry	20+950	175m NE	Yes

AH No.	RMP No.	Townland	Classification	Approx. Ch	Dist. from Boundary of Proposed Road Development	Statutory Protection
AH 19	LI019-064	Lismakeery	Ringfort – rath. Lidar and geophysical survey indicate the site is bivallate. Outer bank is outside the road boundary. Possible associated features identified within road boundary by geophysical survey’.	21+550	7m S	Yes
AH 20	LI019-238	Craggs	Enclosure	5+400	183m S	Yes
AH 21	LI020-002	Ballynacaheragh	Enclosure	22+750	40m S	Yes
AH 22	LI020-004001 / Preservation Order No. 4/1977	Milltown North	Ringfort - cashel	23+950	250m W	Yes
AH 23	LI020-004002/ Preservation Order No. 4/1977	Milltown North	Castle - tower house	23+950	250m W	Yes
AH 24	LI020-005	Milltown North	Enclosure. Geophysical survey revealed that the majority of the monument is located outside of the road boundary, however c.4m of the outer ditch is located within the road boundary.	24+050	0m	Yes
AH 25	LI020-007	Booaglass	Ringfort - rath	24+650	180m E	Yes
AH 26	LI020-053	Feeagh	Ringfort - rath	25+700	175m SW	Yes
AH 27	LI020-054	Nantinan	Ringfort - rath	25+150	188m NE	Yes
AH 28	LI020-055	Ardgoul South	Ritual site - holy well	26+050	145m NE	Yes
AH 29	LI020-057	Graigeen	Ringfort - cashel	26+900	156m W	Yes
AH 30	LI020-058	Ballingarrane	Ringfort - rath	27+400	240m E	Yes
AH 31	LI020-087	Graigue (ED Croagh)	Enclosure	55+900	165m N	Yes
AH 32	LI020-088	Graigue (ED Croagh)	Ringfort - rath	55+900	40m N	Yes
AH 33	LI020-095	Clonshire More	Ringfort - rath	57+150	62m S	Yes
AH 34	LI020-113	Kyletaun	Crannog	29+050	114m NW	Yes
AH 35	LI020-115	Wolfesburgess east	Redundant record	50+750	0m	Yes

AH No.	RMP No.	Townland	Classification	Approx. Ch	Dist. from Boundary of Proposed Road Development	Statutory Protection
AH 36	LI020-135	Feeagh	Mill - unclassified	25+650	200m NE	Yes
AH 37	LI020-137	Ballycannon	Ringfort - rath.	53+300	185m S	Yes
AH 38	LI020-152	Rathkeale	Redundant record	50+650	0m	Yes
AH 39	LI021-005	Tuogh	Ringfort – rath. Geophysical survey carried out directly adjacent to the ringfort revealed a possible ditch, possibly post-medieval in date.	58+750	0m	Yes
AH 40	LI021-010	Ardshanbally	Enclosure	61+350	0m	Yes
AH 41	LI021-011001	Mondellihy	Enclosure. Arching possible bank material was identified to the north of the monument during geophysical survey.	62+250	50m S	Yes
AH 42	LI021-011002	Mondellihy	Enclosure. Two arching banks identified surrounding the monument during geophysical survey, as well as numerous internal pits.	62+250	13m S	Yes
AH 43	LI021-014	Kilgobbin	Enclosure	63+600	120m N	Yes
AH 44	LI021-015	Rineroe	Enclosure	63+850	13m S	Yes
AH 45	LI021-017	Gorteen	Moated site	65+000	0m	Yes
AH 46	LI021-018	Ballycarrane	Enclosure	65+400	250m N	Yes
AH 47	LI021-021	Ballybronoge South	Enclosure	65+850	195m N	Yes
AH 48	LI021-118	Islandea	Enclosure	60+550	180m N	Yes
AH 49	LI021-121	Monearla	Enclosure	64+400	170m S	Yes
AH 50	LI021-122	Ballybronoge South	Redundant record	66+400	11m S	Yes
AH 51	LI029-029	Rathkeale	Standing stone	50+000	55m S	Yes
AH 52	LI029-037	Blossomhill	Ringfort - rath	51+300	110m S	Yes
AH 53	LI021-032004	Adare	Church	61+900	169m S	Yes
AH 54	LI021-032005	Adare	Graveyard	61+900	112m S	Yes
AH 55	LI021-032009	Adare	Gatehouse	61+750	172m S	Yes

AH No.	RMP No.	Townland	Classification	Approx. Ch	Dist. from Boundary of Proposed Road Development	Statutory Protection
AH 56	LI021-032011	Adare	Chapel	61+900	148m S	Yes
AH 57	LI021-143	Ardshanbally	Enclosure	61+700	40m N	Yes
AH 58	LI021-144	Ardshanbally	Enclosure. This enclosure was not identified during the geophysical survey, however, linear features, possible ditches or gullies were identified.	61+850	0m	Yes
AH 59	LI021-145	Mondellihy	Enclosure	62+400	50m S	Yes
AH 60	LI021-146	Kilgobbin	Enclosure. No evidence for this enclosure was identified during the LiDAR or geophysical survey.	62+700	0m	Yes
AH 61	LI021-147001	Kilgobbin	Enclosure.	62+850	22m S	Yes
AH 62	LI021-147002	Kilgobbin	Enclosure. Geophysical survey identified the enclosure which contains internal features including pits, post holes and slot trenches. Multiple features located outside of the enclosure, including further pits and post holes and various curving features.	62+850	0m	Yes
AH 63	LI021-148	Kilgobbin	Enclosure	63+600	9m S	Yes
AH 64	LI021-149	Ardshanbally	Enclosure	61+300	0m	Yes
AH 65	LI021-151001	Ardshanbally	Enclosure	61+050	125m S	Yes
AH 66	LI021-151002	Ardshanbally	Enclosure	61+100	117m SE	Yes
AH 67	LI021-167	Ballybronoge South	Ring-ditch	66+300	0m	No
AH 68	LI021-173	Ardshanbally	Fulacht fia	61+550	64m N	No
AH 69	LI020-159	Clonshire More	Castle - hall-house	56+450	60m E	Yes
AH 70	LI021-179	Kilgobbin	Excavation - miscellaneous	63+300	0m	No
AH 71	LI021-180	Gorteen	Kiln - corn-drying	65+050	0m	No
AH 72	LI021-181001	Ballycarrane	Fulacht fia	64+700	0m	No
AH 73	LI021-181002	Ballycarrane	Fulacht fia	64+700	0m	No
AH 74	LI010-134	Ballyellinan	Pit	7+000	131m N	No

AH No.	RMP No.	Townland	Classification	Approx. Ch	Dist. from Boundary of Proposed Road Development	Statutory Protection
AH 75	LI020-163001	Baunreagh	Fulacht fia	22+450	0m	No
AH 76	LI020-163002	Baunreagh	Excavation - miscellaneous	22+450	0m	No
AH 77	LI019-267	Baunreagh	Pit	22+300	14m N	No
AH 78	LI019-268	Baunreagh	Fulacht fia	21+850	225m N	No
AH 79	LI019-269	Baunreagh	Fulacht fia	21+850	225m N	No
AH 80	LI010-140	Rincullia	Excavation - miscellaneous	3+900	0m	No
AH 81	LI010-141001	Rincullia	Burnt mound	4+300	0n m	No
AH 82	LI010-141002	Rincullia	Pit	4+300	0m	No
AH 83	LI010-141003	Rincullia	Road - gravel / stone trackway - peatland	4+300	0m	No
AH 84	LI010-144	Robertstown	Enclosure	2+700	79m NE	No
AH 85	LI020-175	Milltown North	Fulacht fia	23+300	110m SW	No
AH 86	LI020-177	Milltown North	Excavation - miscellaneous	23+250	135m SW	No
AH 87	LI010-149	Ballycullen	Fulacht fia	10+350	40m S	No
AH 88	LI020-176 / Preservation Order No. 4/1977	Milltown North	Souterrain	23+950	230m W	Yes
AH 89	LI020-094	Clonshire	Clonshire medieval settlement – precise location unknown	56+450	71m E	Yes
AH 90	LI020-003	Milltown North	Ringfort	23+750	219m SW	Yes
AH 91	LI021-032003 / Nat. Mon. No. 622	Adare	Desmond Castle and Bawn	61+800	199m S	Yes
AH 92	LI010-009	Durnish	Enclosure	Beyond proposed road development	155m NW	Yes
AH 93	LI010-069002	Robertstown	Graveyard	2+300	235m NE	Yes
AH 94	LI010-142	Robertstown	Fulacht fia	2+775	230m SW	No



AH No.	RMP No.	Townland	Classification	Approx. Ch	Dist. from Boundary of Proposed Road Development	Statutory Protection
AH 95	LI020-056002	Nantinan	Graveyard	25+850	225m E	Yes
AH 96	LI020-060	Ballingarrane	Ringfort	27+550	250m E	Yes
AH 97	LI020-116	Amogan Beg	Enclosure	51+950	240m S	Yes
AH 98	LI021-002	Tuogh	Mill - unclassified	58+200	250m N	Yes
AH 99	LI021-020	Killeen	Enclosure	65+250	250m S	Yes
AH 100	LI021-025001	Ballybronoge South	Deserted medieval settlement	66+150	250m S	Yes
AH 101	LI021-185	Ballybronoge South	Hearth	66+300	0m	No
AH 102	LI021-085	Ballybronoge North	Enclosure	66+600	157m N	Yes
AH 103	LI021-177	Attyflin	Fulacht fia	66+500	45m SE	No
AH 104	LI021-027	Attyflin	Enclosure	66+600	185m SE	Yes
AH 105	LI021-183	Attyflin	Fulacht fia	66+775	0m	No
AH 106	LI021-178	Attyflin	Fulacht fia	66+775	0m	No
AH 107	LI012-138	Attyflin	Designed landscape feature	66+750	0m	No
AH 108	LI012-088	Attyflin	Enclosure	67+200	180m NW	Yes
AH 109	LI021-186	Attyflin	Fulacht fia	67+250	0m	No
AH 110	LI012-099	Attyflin	Megalithic structure	67+200	54m SE	Yes
AH 111	LI012-098	Attyflin	Fulacht fia	67+325	0m	No
AH 112	LI012-139	Attyflin	Excavation miscellaneous	67+350	0m	No
AH 113	LI012-137	Attyflin	Fulacht fia	67+350	0m	No
AH 114	LI012-091	Fortetna	Enclosure	67+400	233m SE	Yes
AH 115	LI021-187	Gorteen	Corn drying kiln	64+950	17m S	No
AH 116	LI029-031001	Rathkeale	Historic town	0+200	230m SE	Yes
AH 117	LI021-032001	Adare	Historic town	61+850	Adjacent to S	Yes

AH No.	RMP No.	Townland	Classification	Approx. Ch	Dist. from Boundary of Proposed Road Development	Statutory Protection
AH 118	LI029-147	Blossomhill (ED Rathkeale Rural)	Enclosure	51+450	11m W	No
AH 119	LI010-079	Craggs	Ringfort - rath	4+350	220m N	Yes
AH 120	LI019-048	Craggs	Ringfort - rath	5+850	Adjacent to S	Yes
AH 121	LI010-097	Ballyclogh (ED Askeaton West.)	Ringfort - rath	6+450	250m S	Yes
AH 122	LI019-062	Lismakeery	Ringfort - rath	21+100	205m SW	Yes

## LIDAR

Following the route selection assessment and based on potential sites identified during aerial photographic analysis, a LiDAR survey was undertaken (Davis 2017) along the preferred route corridor, which identified 93 previously unrecorded potential archaeological sites across the receiving environment. That study also provided additional detail on the morphology and condition of known monuments (i.e. those listed in Table 14.3) and this is summarised in Appendix 14.2. The full LiDAR report is contained within Appendix 14.3.

The survey identified an additional 59 possible ringforts / enclosures / cashels (LI 2–3, 5–6, 8–11, 13–15, 17–18, 20–21, 23–29, 33–35, 38, 40–43, 47–49, 51, 54, 56, 59, 61–62, 65–66, 69, 71–72, 75–79, 80, 83, 84, 87, 89–92, 94 and 97), together with 16 field systems (LI 1, 7, 19, 22, 31–32, 36, 39, 45, 62, 64, 68, 85–86, 88 and 95), five possible small medieval settlements (LI 16, 37, 49, 58 and 70) as well as a number of other potential archaeological features. Many of the features identified most likely relate to the early medieval (AD 500–1100) and medieval (AD 1100–1600) occupation of the landscape.

**Table 14.4 LiDAR Sites Within the Receiving Environment**

LI No.	LiDAR Report Feature No	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch.	Statutory Protection
LI 1	1.1	Corrig	Probable field system associated with AH 1, 148 x 85m	92m NW	Beyond proposed road development	No
LI 2	1.2	Corrig	Possible oval enclosure, 33.9m NE–SW, 31.4m NW–SE. No indications on early mapping or on geophysical survey	120m W	Beyond proposed road development	No
LI 3	1.3	Corrig	Very low-profile circular enclosure, 22.4m diameter. Not visible in aerial photos or 6-inch mapping	145m W	1+050	No
LI 4	1.5	Durnish	Oval raised area, possibly modified natural platform, 56.4 x 41.5m. Truncated to NE by railroad. Series of linear features identified on the geophysical survey of possible archaeological or agricultural origin	0m	1+000	No
LI 5	1.7	Corrig	Small enclosure, truncated to west by modern farm buildings, 24m diameter	225m SW	1+250	No
LI 6	2.2	Ardaneer	Possible ringfort. Oval, 22m NE–SW, 29m NW–SE	14m S	1+350	No
LI 7	5.4	Ardaneer	Extensive field system, perhaps associated with AH 2 and extending as far as LI010-010 and LI010-011, 475 x 423m	0m	1+650	No
LI 8	6.1	Ardaneer	Possible ringfort, NW portion only. Defined by curving bank, describing an oval, 30m along its long axis	96m W	2+100	No
LI 9	6.2	Sroolane North	Low profile ringfort, apparently truncated to west, probably by field boundary evident in 6-inch mapping. Diameter c. 35.4m. No evidence of feature on geophysical survey	0m	2+250	No
LI 10	6.4	Ardaneer	Possible ringfort, 27m diameter, within field system 5.4	75m SW	1+700	No
LI 11	8.3	Rincullia	Low profile, sub-circular enclosure, 31 x 23m	245m N	4+100	No
LI 12	9.1	Mulderricksfield	Small mound in otherwise flat field, 8m diameter	90m NE	5+650	No
LI 13	11.1	Ballycullen	Possible oval enclosure, 36m NW–SE, 22m SW–NE. Geophysical survey revealed possible fulacht fia and two L shaped features which may contain burnt remains. Enclosing feature marked on OS maps and possible ditch or gully.	0m	10+450	No

LI No.	LiDAR Report Feature No	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch.	Statutory Protection
LI 14	11.2	Ballycullen	Possible ringfort, defined by curving bank to NW. Truncated to SE, c. 32.6m diameter	24m N	10+800	No
LI 15	12.1	Cloonreask	Very low-profile possible ringfort, c. 26.2m diameter. Best preserved to SW	152m SE	11+300	No
LI 16	12.2	Cloonreask	Possible settlement cluster defined by two rectangular enclosures, and a third possibly truncated to SW, 66 x 49m. Geophysical survey revealed possible structure or burnt deposit as well as ditches or drains and possible metalled surface.	0m	11+400	No
LI 17	14.3	Robertstown	Small enclosure, one of a pair. Probable ringfort. 40m x 35 m diameter. Geophysical survey indicates it is bivallate, with a dense concentration of internal and external associated features'	0m	3+000	No
LI 18	14.4	Robertstown	Pair to LI 17 which is c. 100m to the north. 41.5m diameter, confirmed by geophysical survey. Evidence for associated internal and external features	0m	3+000	No
LI 19	14.5	Robertstown	Field system with roughly triangular field defined by low banks, 38m x 22m	165m SW	3+100	No
LI 20	15.1	Robertstown	Probable ringfort, 26m diameter. Some suggestion of internal structure	106m S	3+300	No
LI 21	15.2	Robertstown	Possible ringfort, truncated to NW and associated with extensive field system LI 22, c. 25m diameter. No evidence for this ringfort was identified by the geophysical survey	11m N	3+450	No
LI 22	15.3	Robertstown	Extensive field system associated with LI 21 and LI 23, 370 x 190m. Geophysical survey revealed a wide range of linear and curvilinear features representing a likely field system and possible laneway. A circular feature at the centre of the site also contains a number of pits which may contain burnt material.	0m	3+550	No
LI 23	15.4	Robertstown	Possible ringfort associated with field system LI 22, 32m diameter. No evidence for this ringfort was identified by the geophysical survey	14m S	3+550	No
LI 24	16.2	Rincullia	Small cashel, 23m diameter with associated field system. Possibly also associated with enclosure LI 25	162m S	4+300	No
LI 25	16.3	Rincullia	Large D-shaped enclosure with associated field boundaries. Flattened to N, 60m N-S, 50m E-W. Geophysical survey may have picked up northern limit	0m	4+200	No
LI 26	16.5	Ballinknockane	Possible oval enclosure, 31 x 20m	62m W	4+500	No

LI No.	LiDAR Report Feature No	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch.	Statutory Protection
LI 27	17.1	Mulderricksfield	Large, oval enclosure defined by a low platform, 56 x 50m. Probably a large ringfort	85m N	5+300	No
LI 28	17.3	Mulderricksfield	Substantial possible ringfort, somewhat flattened / damaged to SW, 38 x 22m	135m N	5+600	No
LI 29	17.4	Mulderricksfield	Low profile rectangular enclosure, 25m E-W, 40.5m N-S. No evidence for this feature seen on geophysical survey.	0m	5+500	No
LI 30	17.5	Craggs	Flattened terrace, possible natural feature with modification, 35 x 35m located south of the road boundary with possible associated field system extending in to road boundary. Geophysical survey identified ditches, pits and a rectangular feature of possible archaeological origin'.	0m	5+500	No
LI 31	17.6	Craggs	Possible field system associated with AH 10. Sub-rectangular, 48 x 33m. Truncated to east	166m S	5+550	No
LI 32	17.8	Mulderricksfield	Field system under dense woodland, possibly incorporating ringfort, 43m diameter	207m S	5+700	No
LI 33	18.1	Ballyclogh (ED Askeaton West)	Probable ringfort, 29m diameter	160m S	6+350	Uncertain
LI 34	18.2	Ballyclogh (ED Askeaton West)	Possible enclosure / farmstead, 39m diameter. May be part of a ringfort. No access during geophysical survey.	0m	6+250	No
LI 35	18.4	Ballyellinan	Possible enclosure, 23 x 15m diameter. Possible quarry	203m N	6+850	No
LI 36	18.5	Ballyclogh (ED Askeaton West)	Series of probable field boundaries extending northwards from 18.3. 577 x 438m. No access during geophysical survey.	0m	6+650	No
LI 37	19.1	Ballyclogh (ED Askeaton West)	Series of rectangular plots along road; possible deserted medieval settlement, 101 x 39m	60m W	20+300	No
LI 38	19.2	Ballyclogh (ED Askeaton West)	Possible ringfort or demesne feature, heavily wooded, 24m diameter	60m W	20+350	No
LI 39	19.3	Ballyclogh (ED Askeaton West)	Field system including possible enclosure, 40m diameter	50m W	20+550	No
LI 40	19.4	Ballyclogh (ED Askeaton West)	Small enclosure, probable ringfort associated with LI 37 and LI 38, c. 26.5 x 25.5m diameter. No access during geophysical survey.	0m	20+200	No

LI No.	LiDAR Report Feature No	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch.	Statutory Protection
LI 41	20.1	Baunreagh	Small, D-shaped enclosure, 21 x 19m	202m NE	22+250	No
LI 42	26.1	Milltown North	Small enclosure, 14.5m diameter. Part of field system extending SE	198m S	22+800	No
LI 43	26.2	Milltown North	Well-defined ringfort, 26.5m diameter. In 6-inch mapping but apparently not included in RMP	164m S	23+100	No
LI 44	26.4	Ballynacaheragh	Rectangular platform, 42.2 x 29 m. Marked as wooded area in 6-inch mapping but with clear structure in LiDAR data	210m NE	23+100	No
LI 45	26.5	Milltown North	Field system. Irregular, raised boundaries associated with enclosures LI 42 and LI 43, 502 x 146m	21m S	22+900	No
LI 46	30.1	Rineroe	Small circular depression, 18.5m diameter. Possible quarry	47m S	63+950	No
LI 47	31.1	Ballycarrane	Possible enclosure. Sub-rectangular, 71 x 85m. Possible demesne feature associated with Ballycarrane House	94m N	64+750	No
LI 48	31.2	Gorteen (ED Clarina)	Trapezoidal enclosure, approx. 38 x 31m. Possible moated site	37m S	65+150	No
LI 49	32.1	Ballybronoge South	Large, circular enclosure with some subdivision, c. 55 x 51 m diameter. Possible ecclesiastical site	Adjacent to the south	Beyond proposed road development	No
LI 50	34.1	Milltown North	Substantial hollow-way, 18m across, 135m in length. Potentially connected to LI020-004002	120m SW	23+850	No
LI 51	35.1	Boolaglass	Possible enclosure; however, form suggests this might be a small quarry, 26 x 24m	91m E	24+050	No
LI 52	35.2	Boolaglass	Rectangular platform, 44 x 56m. Probably a natural rise with some modification	138m E	24+250	No
LI 53	35.3	Boolaglass	Tree-covered mound, 10m diameter. Possibly landscape feature	37m W	24+200	No
LI 54	35.4	Boolaglass	Ringfort, c. 27.5 x 24m. Under heavy woodland	95m E	24+700	No
LI 55	35.5	Bullaun	Small, crescentic mound located adjacent to river, c. 13m diameter with underlying spread N-S	112m SW	25+600	No

LI No.	LiDAR Report Feature No	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch.	Statutory Protection
LI 56	38.1	Kilknockan	Possible enclosure. Curving bank to north with some disruption to south, 45m diameter. No access to this area during the geophysical survey due to high vegetation.	0m	59+700	No
LI 57	38.2	Kilknockan	Moated site, 54 x 43m to exterior of ditches. Identified on LiDAR and confirmed by geophysical survey. Evidence for internal occupation. Also external associated features'	0m	59+850	No
LI 58	39.1	Islandea	Possible row of settlement plots along present field boundary (c. 212 x 48m). The LiDAR features were not definitively seen on the geophysical survey results, however possible ditches, gullies and pits/post-holes were identified.	0m	60+350	No
LI 59	40.1	Ardshanbally	Small enclosure, probable ringfort. Defined by broad bank. Overall diameter 27 m	37m S	61+250	No
LI 60	49.1	Clonshire Beg	Formal designed gardens within grounds of Clonshire Demesne, c. 253 x 132m	94m S	57+800	No
LI 61	49.2	Rower More	Possible enclosure. Raised circular area, 21m diameter	135m SE	58+350	No
LI 62	49.3	Tuogh (ED Adare North)	Enclosure and associated field system (250 x 240m). Central enclosure sub-rectangular but likely to be a ringfort, c. 25 x 21m. The geophysical survey did not identify the enclosure, however a large semi-circular trend was identified at the location of the enclosure.	0m	59+050	No
LI 63	49.4	Tuogh (ED Adare North)	Mound, 10 m diameter. May be natural but in area of underlying low topography. Geophysical survey revealed a rectilinear enclosure with numerous pits and post holes. A possible small stone or compacted earth structure located outside the above enclosure, at the northeast end of the survey area	0m	59+100	No
LI 64	53.2	Graigeen	Associated with AH 29. Extensive field system with enclosure elements, 409 x 338m. Geophysical survey to the north revealed possible curving ditches as well as other linear features and two pits or postholes which may be associated with this field system.	0m	26+800	No
LI 65	53.4	Graigeen	Low profile, possible oval ringfort to the west of AH 29, 31m diameter	239m E	26+800	No
LI 66	53.5	Graigeen	Small ringfort under heavy forestry, 26m diameter	48m E	26+550	No

LI No.	LiDAR Report Feature No	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch.	Statutory Protection
LI 67	55.1	Gortnagrour	Trapezoidal area defined by depression, 38.5 x 24.5m, identified on LiDAR. Geophysical survey indicates this is a banked enclosure. Located just outside road boundary but possible associated features within road boundary'	0m	57+450	No
LI 68	55.2	Clonshire More	Field system associated with AH 69, 181 x 115m	95m S	56+450	No
LI 69	57.2	Ballingarrane	Possible oval enclosure, truncated to west, 26 x 21m. Connected to possible building by low spur to NE. Enclosure not seen on geophysical survey results but some linear features present. No evidence of building on site	41m W	27+400	No
LI 70	58.1	Ballingarrane	Group of rectangular plots aligned along field boundary. Possible medieval settlement plots, 45 x 15m	98m E	28+100	No
LI 71	59.1	Clogh East	Small, circular enclosure, 21.8m diameter. Probable ringfort	218m N	53+700	No
LI 72	60.1	Croagh	Small circular enclosure defined to the NE by curve in field boundary. Diameter 18.1m	192m NW	55+350	No
LI 73	61.1	Croagh	Raised, circular area, 8m diameter. Possible windmill stump	170m NW	55+600	No
LI 74	61.2	Croagh	Possible farmstead. Rectangular building platform with associated field systems to NE, 71 x 48m. Geophysical survey revealed a limekiln and possible ditches. No definitive evidence for settlement cluster.	0m	55+600	No
LI 75	61.3	Croagh	Circular enclosure, c. 34m diameter, identified on LiDAR and confirmed by geophysical survey. Evidence for internal and external associated features'.	0m	55+550	No
LI 76	61.4	Croagh	Oval enclosure, c. 28.5 x 24m, identified on LiDAR and confirmed by geophysical survey. Evidence for internal and external associated features'.	0m	55+600	No
LI 77	61.5	Croagh	Roughly plectrum-shaped enclosure defined by slight bank, 56 x 51m. Clearly visible as crop-mark in aerial photos and 2018 Google satellite imagery	145 NE	55+800	No
LI 78	63.1	Kyletaun	Possible trapezoidal enclosure, truncated to south, 50 m NE-SW. Projected NW-SE measurement 49m	198m SW	28+250	No
LI 79	65.1	Wolfesburgess East	Low profile circular enclosure on low rise, 32 x 28m diameter	150m N	50+950	No
LI 80	66.3	Clogh West	Small circular enclosure, probable ringfort, 19.4m diameter	130m N	52+750	No



LI No.	LiDAR Report Feature No	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch.	Statutory Protection
LI 81	66.4	Clogh West	Depression/possible quarry (19.4m diameter) identified on LiDAR. No evidence of this in geophysical survey, however two possible sub-rectangular features identified to the north'.	0m	52+650	No
LI 82	66.5	Clogh West	Low mound with ditch to NW. Visible in orthophotography, 29m diameter. Possibly natural mound with quarry	165 S	52+900	No
LI 83	2.1	Durnish	Possible ringfort, c. 34m diameter, identified on LiDAR. No evidence for this site was identified by geophysical survey'.	0m	1+200	No
LI 84	1.6	Durnish	Long, curving bank, possibly forming SW portion of a large enclosure	50m N	1+150	No
LI 85	15.5	Robertstown	Elements of field system	205m S	3+350	No
LI 86	24.1	Ballyclogh	Field system with some enclosure elements	186m SW	20+650	No
LI 87	26.3	Milltown North	Possible enclosure 20.5 x 11.5 m.	240m SE	23+100	No
LI 88	47.1	Nantinan	Field system associated with adjacent church (LI020-056001)	225m NE	25+850	No
LI 89	64.1	Ballingarrane	Circular raised platform, 29 m diameter, possible ringfort.	225m E	28+550	No
LI 90	63.3	Kyletuan	Very low-profile possible enclosure defined by a shallow circular depression. 44 m diameter	250m W	28+600	No
LI 91	33.3	Attyflin	Rectangular enclosure as part of field system, c. 26 x 26 m but partially obscured by road	190m SE	66+400	No
LI 92	33.4	Attyflin	Ringfort adjacent to AH 103	160m E	66+700	No
LI 93	2.3	Ardaneer	Settlement cluster with well-defined rectangular enclosure and small enclosure, also possible hollow ways. Much of this site is located just outside the 250m study area	215m NE	1+450	No
LI 94	15.6	Robertstown	Ringfort constituting the southern end of field system LI 22. 31m in diameter	250m S	3+600	No
LI 95	16.1	Rincullia	Rectangular field system, possibly stock enclosure. Measure 38m x 36m	235m SE	4+150	No
LI 96	17.7	Craggs	Rectangular platform in dense woodland measuring 38m x 25m	74m W	5+750	No
LI 97	60.2	Knockdromin	Circular enclosure, truncated to the west. Possible ringfort 38.8m in diameter	250m N	54+750	No

### **Geophysical survey**

A geophysical survey was carried out at selected sites along the proposed road development (see Appendix 14.5 for full report). The survey was carried out under Licence 18R0122. A total of 105.6 hectares across 44 sites were surveyed using magnetometer surveys, while a total of 22.7 hectares across 23 sites were targeted by resistivity surveys. In addition, three sites containing topographical features and geophysical survey anomalies were targeted by a total of seven electrical resistivity tomography profiles. The following table details the new archaeological sites and features identified during the survey. Information relating to surveys undertaken at known archaeological sites (AH), sites identified during LiDAR survey (LI) and cultural heritage sites (CH) are contained within Tables 14.3, 14.4 and 14.8. The location of all survey areas detailed in the table below are shown on Figures 14.1 – 14.23.

**Table 14.5 Geophysical Survey Results within the boundary of the proposed road development**

Site Code	Townland	Known / Potential Archaeology	Chainage	Results
M-17	Ballycullen	LI 14 - Possible ringfort to the north	10+750–10+900	A possible semi-circular enclosing feature was identified, as well as a number of linear features of possible archaeological origin.
M-19 / ER-8	Lismakeery	AH 19 Ringfort to the south	21+350–21+750	Outer bank and possible ditch of AH 19 to south, beyond road boundary. Possible oval enclosure (13 x 11.5m) with central pit within road boundary; also numerous linear features and pits of possible archaeological origin'.
M-20	Ballynacaheragh	AH 21 – Enclosure to the south CH 88 - site of vernacular structure	22+600–22+800	Enclosure (85m diameter) with associated internal features; largely within road boundary. Concentration of possible linear features and pits to the east, some of which may relate to 19th century settlement and farming'.
M-21 / ER-17	Ballynacaheragh	LI 42, 43, 45-Possible enclosure, ringfort and field system all to the southwest	23+050–23+550	Possible enclosure (53m diameter) partly within road boundary. Curvilinear and linear features both internally and externally which don't form a consistent pattern but may be of archaeological origin and associated with the enclosure
M-22a	Boologlass	LI 51 and 53- possible enclosure and tree-covered mound to north and south	24+050–24+350	Two possible ring ditches (14m and 11m diameter) and a number of other pits of possible archaeological origin. Linear features, some of likely agricultural origin.
M-24	Graigeen	DL 5 / LI 64-Field system to the southwest	26+650–27+000	Possible curving ditches as well as other linear features and two pits or postholes.
M-26 / ER-19	Kyletuan	AAP 14 - Wetland	28+250–28+650	Extensive possible habitation site containing numerous pits, post holes and slot trenches. All enclosed by surrounding ditches. Possible large enclosure (91 x 74m) with a potential kiln, and an external possible structure. Range of linear features which may relate to agricultural practices.
M-27	Kyletuan	AAP 15 - Wetland	28+650 - 29+450 and 49+050- 50+150	Probable double-banked enclosure (28m diameter); numerous curvilinear and linear features of possible archaeological origin, some of which form a relict post-medieval field system.
M-28	Wolfesburgess East / Blossomhill	AAP 16 - Wetland	50+950–51+300	Possible ditch and 4 pits or postholes, 2 possible gullies or ditches.
M-31 / ER-25	Clogh West	LI 82- Possible enclosure	52+550–53+000	2 possible sub-rectangular features directly north of LI 82. Limited linear features at the eastern end of the survey area. Curvilinear compacted feature which may relate to a relict field boundary. Two areas of disturbed soil or dug features.

Site Code	Townland	Known / Potential Archaeology	Chainage	Results
M-32 / ER-20	Ballycannon	Area of potential north of Croagh village	53+850–54+300	Possible habitation site with dense concentration of possible pits/postholes, ditches, curvilinear and linear features'
M-34 / ER-21	Graigue	AH 69- Hall house / Clonshire Castle to the east AAP 17	56+150–56+500	Linear features, possible ditches or trackway A range of linear and curvilinear features of unknown origin, little to no pattern in distribution
M-38a	Kilknockan	N/A	59+300–59+600	Two curvilinear features of possible archaeological origin and one pit.
M-41	Ardshanbally	In vicinity of enclosures AH 40, AH 64, AH 57 -and fulacht fia AH 68 -	61+200–61+700	A number of possible circular ditched features, some with internal pits of possible archaeological origin. Other linear features throughout the area, some double linears, possible former field boundaries. Western extent not surveyed.
M-43	Mondellihy	AH 41 / 42 – Enclosures to the south	61+950–62+350	Possible enclosure (31m diameter) identified northwest of AH 41/42, with evidence for internal pits and external curvilinear features'
M-44	Kilgobbin	AH 60-62 - Enclosures (x3)	62+650–63+300	Possible enclosure (39m diameter) with internal pits/postholes; cut by railway line. Numerous external pits, ditches and curvilinear features. Circular anomaly to east (12m diameter) with internal pits/postholes. Possible sub-rectangular structure (12 x 8m) at eastern end of survey area'.

#### 14.3.4 National Museum of Ireland (NMI): Topographical Files

Information from the NMI topographical files listed the site of human burials in Robertstown (IA / 12 / 64; AH 5), a small bronze chisel (1961:275–8), bronze ring (1995:47), musket balls (1995:48–54) and copper coins (1995:55–66) from Cloonreask and a gold band from Rathkeale (record only). Full details of the finds are given in Appendix 14.4.

#### 14.3.5 Architecture

Forty-nine built heritage assets (Table 14.6) are located across the receiving environment, of these, 27 are Protected Structures (BH2, 4, 6–7, 17, 23, 25–34, 36–45 and 49) as defined in the Limerick County Development Plan, while the remaining 21 have been recorded by the NIAH (BH1, 3, 5, 8–16, 18–22, 24 and 46–48). There is also one Architectural Conservation Area within the receiving environment, at Adare (BH 35).

Full details of the built heritage across the receiving environment are given in Appendix 14.6.

**Table 14.6 Built Heritage Sites Within the Receiving Environment**

BH No.	RPS; NIAH No.	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch.	Statutory Protection
BH 1	21831013	Rathkeale	Palatine Heritage Centre	0m	0+000	No
BH 2	839; 21824059	Ardshanbally	Shanbally House	155m SW	61+700	Yes
BH 3	21902034	Graigue	Castle Farm House	4m W	56+100	No
BH 4	298; 21902035	Croagh	Smithfield House	153m W	55+250	Yes
BH 5	21826001	Cloonreask	Saint Mary's Roman Catholic Church	160m S	11+950	No
BH 6	838; 21824058	Ardshanbally	Ardshanbally House	165m SW	61+700	Yes
BH 7	301; 21902104	Curraghbridge	O'Neill's thatched building	237m N	60+000	Yes
BH 8	21902105	Tuogh	Coolah Bridge	112m SE	59+100	No
BH 9	21902135	Tuogh	Cregaun House including gate piers to south	40m N	59+050	No
BH 10	21831018	Rathkeale	Boundary wall of Saint Anne's Convent of Mercy	225m SE	0+300	No
BH 11	21902106	Clonshire Beg	Gate lodge to Clonshire Lodge (main house outside of receiving environment)	138m SE	57+550	No
BH 12	21831019	Rathkeale	Saint Mary's Roman Catholic Church	157m SE	0+300	No
BH 13	21902102	Clonshire Beg	Single-arch limestone railway bridge, built c. 1856	60m N	57+750	No
BH 14	21902101	Tuogh	Tuogh Bridge	250m N	58+150	No
BH 15	21829031	Corigrig	Corigrig House	195m NW	No chainage	No
BH 16	21824002	Islandea	Detached six-bay single- and two-storey former railway station, built in 1856	177m S	60+750	No
BH 17	668; 21901005	Robertstown	Saint Robert's Roman Catholic Church	37m NE	2+700	Yes
BH 18	21902013	Nantinan	Single-bay single-storey former sextons house and pair of square-profile limestone piers to south of St James Church of Ireland (outside of receiving environment)	250m E	25+850	No
BH 19	21902121	Ballyloughnaan	Detached three-bay two-storey house, built c. 1840	150m N	64+250	No
BH 20	21901916	Ballycullen	Ballycullen House	106m E	20+600	No

BH No.	RPS; NIAH No.	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch.	Statutory Protection
BH 21	21902120	Ballyloughnaa	Detached three-bay two-storey house, built c. 1820, with additions in the later nineteenth and twentieth centuries	187m N	63+900	No
BH 22	810; 21902113	Adare	Lantern (Limerick) Lodge	217m S	62+500	No
BH 23	872; 21824001	Islandea	Good Lattice Bridge	185m SE	60+850	Yes
BH 24	21902114	Rineroe	Fort Union including gate piers adjacent to boundary of proposed road development	5m SE	63+050	No
BH 25	73	Ballyclogh (ED Askeaton West)	'Concrete Pill Box (1)'	22m S	7+100	Yes
BH 26	74	Ballyclogh (ED Askeaton West)	'Concrete Pill Box (2)'	0m	6+350	Yes
BH 27	75	Ballyclogh (ED Askeaton West)	'Concrete Pill Box (3)'	125m N	6+450	Yes
BH 28	45	Ballingarrane	Former Forge	207m E	26+500	Yes
BH 29	69	Ballycannon	Duneeven House	22m S	54+350	Yes
BH 30	873	Islandea	Remnants of 1st canal built in Ireland	233m SE	60+850	Yes
BH 31	113	Ballyloughnaa	Methodist Church	115m N	64+250	Yes
BH 32	18	Ardaneer	Vernacular farmhouse, associated farmyard and outbuildings	198m W	2+000	Yes
BH 33	1209	Corrig	Detached Dwelling	4m N	No chainage	Yes
BH 34	266	Clonshire More	Hall house	60m E	56+450	Yes
BH 35	ACA	Adare	Adare Village	Adjacent to S	61+800 to 62+200	Yes
BH 36	811	Adare	Adare Manor demesne wall	Adjacent to S	61+800 to 62+200	Yes
BH 37	834	Adare	Medieval chapel	145m S	61+900	Yes
BH 38	833	Adare	Medieval church	170m S	61+900	Yes

BH No.	RPS; NIAH No.	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch.	Statutory Protection
BH 39	31; 21901242	Attyflin	Patrickswell Railway Station	174m NW	66+700	Yes
BH 40	1533	Attyflin	Limekiln	212m NW	67+200	Yes
BH 41	835	Adare	Desmond Castle	200m S	61+850	Yes
BH 42	840	Ardshanbally	Former rectory	244m SW	61+650	Yes
BH 43	667	Robertstown	Graveyard wall of medieval Church	241m NE	2+550	Yes
BH 44	620	Nantinan	Graveyard wall of Nantinan Church	223m NE	25+850	Yes
BH 45	376; 21901243	Fortetna	Fort Etna House	231m E	67+400	Yes
BH 46	21901241	Attyflin	Railway bridge	156m N	66+600	No
BH 47	21902005	Ardgoul South	Wellmount House	230m W	25+900	No
BH 48	21901006	Robertstown	House	158m S	3+150	No
BH 49	1216	Corgrig	Corgrig Castle	116m NW	Beyond boundary of proposed road development	Yes

### 14.3.6 Designed Landscapes

A number of sources were reviewed in order to define the nature and extent of designed landscapes within the receiving environment of the proposed road development. These included the historic Ordnance Survey (OS) mapping, aerial photographic coverage, the NIAH Garden Survey, the Landed Estates Database and field inspections.

A total of eighteen designed landscapes have been identified within the receiving environment of the proposed road development (Table 14.7). Of these, eleven are associated with a principal structure that is listed as protected within the Limerick County Development Plan 2010-2016 (as extended), and one is proposed for entry in the record of Protected Structures. The landscapes are shown as shaded 'demesne' landscapes on the first edition OS mapping. These environments were intended to represent a natural parkland setting for a large house, a practice that became fashionable from the latter part of the 18th century onwards. The landscapes, which can vary greatly in size, often possess specific features, such as long driveways, gate lodges, stately entrances, walled gardens, bodies of water and belts, avenues and stands of deciduous and specimen trees.

Full details of the designed landscapes are given in Appendix 14.7.

**Table 14.17 Designed Landscapes Within the Receiving Environment**

DL No.	NIAH No	Classification	Townland	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection
DL 1	LI-64-R-311484	Ballyclogh House demesne	Ballyclogh (ED Askeaton West)	0m	20+400	House in RPS
DL 2	LI-64-R-318488	Ballycullen House demesne	Ballycullen	Adjacent to E	20+400–21+400	House proposed for the RPS
DL 3	LI-64-R-350455	Wellmount House demesne	Ardgoul South	86m W	26+150	No
DL 4	LI-64-R-354464	Nantinan House demesne	Nantinan	120m E	25+500–26+050	House in RPS
DL 5	LI-64-R-353438	Stoneville House demesne	Graigeen / Stoneville	0m	26+550–27+050	House in RPS
DL 6	LI-65-r-415437	Smithfield House demesne	Croagh	Adjacent to S	55+100–55+500	House in RPS
DL 7	LI-65-R-435452	Clonshire Lodge demesne	Clonshire Beg	Adjacent to S	57+500–58+000	House in RPS
DL 8	LI-65-R-452475	Curraghbridge House demesne	Curraghbridge	0m	60+250–60+400	House in RPS
DL 9	LI-65-R-473461	Adare Manor demesne	Adare	Adjacent to S	59+500–62+300	Demesne walls are Protected Structures, ACA, House and range of other buildings in RPS
DL 10	LI-65-R-498479	Ballycarrane House demesne	Ballycarrane	0m	64+600–65+000	No
DL 11	N / A	Ballybronoge South (unnamed)	Ballybronoge	0m	65+400–66+400	No



DL No.	NIAH No	Classification	Townland	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection
DL 12	LI-65-R-414367	Grove House	Croagh	155m S	55+100–55+450	No
DL 13	LI-65-R-492474	Monearla Cottage	Monearla	0m	64+100–64+800	No
DL 14	LI-65-R-521492	Fort Etna demesne	Fortetna	Adjacent	67+400 eastwards	House in RPS
DL 15	LI-65-R-517483	Attyflin House Demesne	Attyflin	0m	66+400 – 67+400	House in RPS
DL 16	N / A	Corgrig House demesne	Corgrig	0m	1+000	No
DL 17	LI-65-R-474483	Mondellihy House	Mondellihy	0m	61+950-63+500	House in RPS
DL 18	LI-65-R-494486	Newborough House Demesne	Ballyloughnaan	210m N	64+450–65+100	House in RPS

### 14.3.7 Cultural Heritage

Cultural heritage assets can incorporate both archaeological and built heritage remains which are not subject to statutory protection or which have not been previously recorded as heritage assets in any known datasets. A number of sources were reviewed in order to identify cultural heritage assets within the receiving environment. These included the historic Ordnance Survey (OS) mapping, Down Survey Barony Map of Limerick 1654- – 56, Ordnance Survey 6” and 25” maps of Co. Limerick 1841, 1895–1900, 1928–29), aerial photographic coverage (Ordnance Survey aerial photographs 1995, 2000, 2005, Google Earth coverage 2003–2018, Bing Maps and scheme specific orthophotos 2016) and field inspections.

A characteristic of the post-medieval landscape are the vernacular buildings that represent the homes of farmers and workers. ‘Vernacular architecture’ is a term used to describe traditional buildings constructed using locally available materials and according to local / regional styles i.e. the homes and workplaces of the ordinary people. This is in contrast to formal architecture, such as the grand estate houses of the gentry, churches and public buildings, which were often designed by architects or engineers. The majority of vernacular buildings are domestic dwellings. Examples of other structures that may fall into this category include shops, outbuildings, mills, limekilns, farmsteads, forges, gates and gate piers. There are multiple examples of vernacular structures, including houses, bridges and limekilns, located within the receiving environment of the proposed road development and these have been classified as Cultural Heritage (CH) sites and are listed in the Table below.

**Table 14.8 Cultural Heritage Sites Within the Receiving Environment**

CH No.	Classification	Townland	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection
CH 1	Vernacular buildings	Ardaneer	78m NE	1+650	No
CH 2	Vernacular buildings	Churchfield	175m E	2+100	No
CH 3	Vernacular buildings	Sroolane North	142m E	2+200	No
CH 4	Relic field system	Ardaneer	0m	1+600– 1+750	No
CH 5	Relic field system. Geophysical survey revealed numerous linear, L-shaped and curvilinear features of possible archaeological origin, along with occasional pits and the remains of a former field boundary seen on historic maps	Robertstown	0m	2+650– 2+800	No
CH 6	Possible large-scale circular enclosure. Geophysical survey did not identify the large circular enclosure, however, a wide range of linear and curvilinear features representing a likely field system and possible laneway were identified. A small circular feature at the centre of the site also contains a number of pits which may contain burnt material.	Robertstown	0m	3+450– 3+600	No
CH 7	Vernacular buildings	Rincullia	139m N	4+000	No
CH 8	Relic field system. Geophysical survey revealed a number of linear and pit like features which may be archaeological or agricultural in origin.	Rincullia	0m	4+000– 4+350	No
CH 9	Vernacular building	Mulderricksfield	77m N	5+400	No
CH 10	Site of vernacular buildings	Mulderricksfield	0m	5+550	No
CH 11	Possible circular enclosure. No evidence for this feature seen on geophysical survey.	Mulderricksfield	0m	5+550	No
CH 12	Possible circular enclosure	Ballyclogh (ED Askeaton West)	163m S	6+200	No
CH 13	Vernacular buildings, in ruins	Ballyclogh (ED Askeaton West)	132m S	6+900	No
CH 14	Possible circular enclosure	Ballyclogh (ED Askeaton West)	50m S	20+200	No
CH 15	Site of vernacular buildings. No access during geophysical survey.	Ballyclogh (ED Askeaton West)	0m	20+150	No

CH No.	Classification	Townland	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection
CH 16	Site of vernacular building, in ruins. No evidence on geophysical survey.	Ballycullen	0m	10+450	No
CH 17	Site of vernacular buildings. Possible structural remains identified on geophysical survey.	Ballycullen	17m N	10+650	No
CH 18	Railway	Cloonreask	0m	11+300	No
CH 19	Cloonreask House	Cloonreask	155m W	11+400	No
CH 20	Vernacular buildings	Coolrahee	25m N	11+900	No
CH 21	Limekiln	Ballycullen	235m SE	20+250	No
CH 22	House	Ballycullen	104m SE	20+450	No
CH 23	Site of vernacular building	Ballynacagheragh	0m	22+550	No
CH 24	Vernacular buildings	Ballynacagheragh	250m NE	23+400	No
CH 25	Possible circular enclosure	Milltown North	187m SW	23+900	No
CH 26	Railway bridge	Boolaglass/ Ballynacagheragh	236m NE	23+900	No
CH 27	Vernacular buildings	Boolaglass	67m E	24+500	No
CH 28	Vernacular buildings	Boolaglass	163m E	24+750	No
CH 29	Vernacular buildings & limekiln	Bullaun	13m W	24+800	No
CH 30	Vernacular building	Feeagh	228m SW	25+700	No
CH 31	Limekiln, in ruins	Ardgoul South	165m W	26+050	No
CH 32	Level crossing	Ballingarrane	133m N	26+700	No
CH 33	Railway	Ardgoul South	33m E	26+150	No
CH 34	Level crossing & cottage	Ballingarrane	250m E	26+950	No
CH 35	Former School House	Ballingarrane	117m E	26+750	No
CH 36	Vernacular buildings, in ruin	Ballingarrane	110m E	27+100	No
CH 37	Former railway	Ballingarrane/ Kyletaun	0m	27+550– 28+450	No

CH No.	Classification	Townland	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection
CH 38	Vernacular buildings & Limekiln, in ruins	Kyletaun	180m E	28+700	No
CH 39	Site of vernacular building	Ballingarrane	0m	27+650	No
CH 40	Vernacular buildings	Ballingarrane	80m W	27+650	No
CH 41	Site of vernacular building	Rathkeale	64m N	50+200	No
CH 42	Vernacular buildings	Wolfesburgess East	15m N	50+950	No
CH 43	Vernacular buildings	Blossomhill	24m S	51+350	No
CH 44	Vernacular buildings	Croagh	28m W	54+450	No
CH 45	Vernacular buildings	Croagh	65m NW	55+600	No
CH 46	Site of limekiln, identified on geophysical survey and on 1897-1903 OS map	Croagh	0m	55+600	No
CH 47	Vernacular building	Croagh	140m SE	55+750	No
CH 48	Smithfield Mill, in ruins	Croagh	90m SE	56+150	No
CH 49	Clonshire Bridge	Graigue	0m	56+500	No
CH 50	Vernacular buildings, in ruin	Clonshire More	244m W	57+150	No
CH 51	Gate lodge, in ruins (also BH 11)	Clonshire Beg	135m S	57+550	No
CH 52	Railway Bridge	Clonshire Beg/ Rower More	15m S	58+150	No
CH 53	Site of mill race	Tuogh	Adjacent	58+200	No
CH 54	Vernacular buildings, in ruins	Rower More	141m E	58+600	No
CH 55	Site of vernacular building	Tuogh	0m	58+550	No
CH 56	Vernacular buildings	Tuogh	54m N	58+850	No
CH 57	Vernacular buildings	Gortnagrour	200m N	57+700	No
CH 58	Vernacular buildings	Clonshire Beg	150m N	57+900	No
CH 59	Site of vernacular buildings	Clonshire Beg	152m NW	58+050	No
CH 60	Vernacular buildings	Kilknockan	143m S	59+800	No

CH No.	Classification	Townland	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection
CH 61	Site of vernacular building	Curraghbridge	0m	60+250	No
CH 62	Site of quay	Ardshanbally	0m	61+000	No
CH 63	Site of vernacular building	Ardshanbally	0m	61+100	No
CH 64	Site of limekiln	Ardshanbally	0m	61+200	No
CH 65	Level crossing	Ardshanbally	0m	61+200	No
CH 66	Railway	Ardshanbally	0m	61+200	No
CH 67	Vernacular building	Mondellihy	0m	62+600	No
CH 68	Level crossing & cottage	Kilgobbin	15m N	62+650	No
CH 69	House & outbuildings	Kilgobbin	60m N	62+950	No
CH 70	Site of circular enclosure	Kilgobbin	49m N	63+200	No
CH 71	Rose Cottage	Rineroe	200m S	63+950	No
CH 72	Vernacular building	Rineroe	26m S	64+100	No
CH 73	Vernacular buildings	Ballyloughnaan	147m N	64+250	No
CH 74	Ballycarrane House & outbuildings	Ballycarrane	66m N	64+850	No
CH 75	Site of railway	Ballycarrane	0m	65+300	No
CH 76	Quarry	Ardaneer	0m	1+200	No
CH 77	Site of vernacular structure	Sroolane North	5m N	2+500	No
CH 78	Site of vernacular structure	Mulderricksfield	0m	5+750	No
CH 79	Site of vernacular structure	Mulderricksfield	15m N	5+650	No
CH 80	Site of vernacular structure	Mulderricksfield	16m N	6+075	No
CH 81	Site of vernacular structure	Ballyclogh	20m N	6+600	No
CH 82	Site of vernacular structure	Ballycullen	0m	10+900	No
CH 83	Disused sand pit	Ballyclogh (ED Askeaton West)	47m SW	20+750	No
CH 84	Disused sand pit	Ballyclogh (ED Askeaton West)	0m	20+850	No

CH No.	Classification	Townland	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection
CH 85	Vernacular structures	Lismakeery	50m S	21+450	No
CH 86	Site of vernacular structures	Ballynacagheragh	8m E	22+550	No
CH 87	Site of vernacular structures	Ballynacagheragh	0m	22+650	No
CH 88	Disused gravel pit	Ballynacagheragh	0m	23+000	No
CH 89	Site of vernacular structures	Graigeen	0m	26+600	No
CH 90	Site of vernacular structure	Graigeen	0m	26+650	No
CH 91	Site of vernacular structures	Ballingarrane	0m	27+200	No
CH 92	Site of vernacular structure	Ballingarrane	0m	27+650	No
CH 93	Site of vernacular structure	Blossomhill	0m	51+350	No
CH 94	Site of vernacular structure	Blossomhill	7m S	51+350	No
CH 95	Site of vernacular structure	Blossomhill	0m	51+350	No
CH 96	Site of vernacular structure	Blossomhill	22m S	51+450	No
CH 97	Site of vernacular structure. No evidence for this structure on geophysical survey.	Tuogh	0m	58+850	No
CH 98	Site of vernacular building	Curraghbeg	0m	60+300	No
CH 99	Site of disused gravel pit	Ardshanbally	0m	61+200	No
CH 100	Vernacular farm structures	Gortaganniff	0m	62+025	No
CH 101	Site of vernacular structures with gardens	Kilgobbin	0m	63+350	No
CH 102	Gate post / standing stone	Ardaneer	0m	2+000	No
CH 103	Pill box	Mulderricksfield	0m	5+500	No (but associated with three other pillboxes which are protected structures BH 25–27)

CH No.	Classification	Townland	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection
CH 104	Pill box	Ballyclogh (ED Askeaton West)	0m	20+700	No (but associated with three other pillboxes which are protected structures BH 25–27)
CH 105	Gateposts	Feeagh	80m SW	25+800	No
CH 106	Pill box	Cloonreask	85m S	11+000	No
CH 107	Pill box	Mulderricksfield	144m N	6+550	No
CH 108	Site of vernacular structure	Corgrig	0m	0+025	No
CH 109	Ardaneer cottage	Ardaneer	205m W	2+000	Yes Protected Structure
CH 110	Vernacular structures	Sroolane North	210m SW	2+600	No
CH 111	Vernacular structure	Mulderricksfield	170m N	5+900	No
CH 112	Site of vernacular structures	Rincullia	85m N	4+150	No
CH 113	Site of vernacular structures	Ballyellinan	135m NW	10+400	No
CH 114	Site of vernacular structure	Ballyellinan	165m NNE	10+200	No
CH 115	Vernacular structure	Ballyclogh (ED Askeaton West)	0m	20+650	No
CH 116	Site of vernacular structure	Graigeen	0m	26+750	No
CH 117	Site of former School house	Graigeen	15m E	26+800	No
CH 118	Site of vernacular structures	Ballingarrane	45m NE	28+100	No
CH 119	Site of vernacular structure	Blossomhill	24m	51+600	No
CH 120	Site of RC Chapel	Ballycannon	31m S	54+400	No
CH 121	Small vernacular structure	Croagh	0m	55+600	No
CH 122	Pillbox	Coolrahee	230m N	N69 tie in at Askeaton	No
CH 123	Pillbox	Ballycullen	200m S	10+550	No

CH No.	Classification	Townland	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection
CH 124	Pillbox	Ballycullen	180m E	10+300	No
CH 125	Curving linear feature, potentially part of larger enclosure visible on 2018 Google Satellite imagery	Ballingarrane	0m	27+800	No
CH 126	Site of vernacular structure	Baunreagh	0m	22+550	No
CH 127	Railway	Clonshire Beg	0m	58+000	No
CH 128	Site of vernacular structure	Lismakeery	190m SW	21+200	No
CH 129	Site of vernacular structure	Lismakeery	40m SE	21+300	No
CH 130	Site of vernacular structure	Lismakeery	60m E	21+300	No
CH 131	Railway structure (culvert)	Ballingarrane/ Kyletaun	0m	27+550– 28+450	No
CH 132	Railway structure (culvert)	Ballingarrane/ Kyletaun	0m	27+550– 28+450	No



### 14.3.8 Townland Boundaries

Seventy-four townland boundaries have been identified within the receiving environment, of which 54 are located within the boundary of the proposed road development (TB1–54). The townland is an Irish land unit of considerable longevity as many of the units are likely to correspond to much earlier land divisions. However, the term townland was not used to denote a unit of land until the Civil Survey of 1654. It bears no relation to the modern word 'town' but like the Irish word '*baile*' refers to a place. It is possible that the word is derived from the Old English "tun land" and meant 'the land forming an estate or manor' (Culleton 1999, 174).

Gaelic land ownership required a clear definition of the territories held by each sept and a need for strong, permanent fences around their territories. Boundaries following ridge tops, streams or bog are more likely to be older in date than those composed of straight lines (ibid., 179).

The vast majority of townlands are referred to in the 17th century, when land documentation records begin. Many of the townlands are mapped within the Down Survey of the 1650s, so called as all measurements were carefully 'laid downe' on paper at a scale of forty perches to one inch. Therefore, most are in the context of pre-17th century landscape organisation (McErlean 1983, 315).

In the 19th century, some demesnes, deer parks or large farms were given townland status during the Ordnance Survey and some imprecise townland boundaries in areas such as bogs or lakes, were given more precise definition (ibid.). Larger tracts of land were divided into a number of townlands, and named Upper, Middle or Lower, as well as Beg and More (small and large) and north, east, south and west (Culleton 1999, 179). By the time the first Ordnance Survey had been completed in the 1840's a total of 62,000 townlands were recorded in Ireland.

The proposed road development will traverse 54 townlands. Some of the boundaries follow natural watercourses, but many were defined during the 19th century and are marked with dry stone walls.

**Table 14.9 Townland Boundaries Crossed by the Proposed Road Development**

TB No.	Classification	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection
TB 1	Corragh / Ardaneer, Ardaneer stream	0m	1+150	No
TB 2	Ardaneer / Sroolane North, Robertstown stream	0m	2+170	No
TB 3	Sroolane North / Robertstown, Robertstown stream	0m	2+600	No
TB 4	Robertstown / Rincullia, local road	0m	3+630	No
TB 5	Rincullia / Craggs, Ahacronane stream	0m	4+450	No
TB 6	Craggs / Mulderricksfield, field boundary/hedge	0m	5+250	No
TB 7	Ballyclogh / Ballyellinan, Lismakeery stream	0m	10+100	No
TB 8	Mulderricksfield / Ballyclogh, field boundary/hedge	0m	6+210	No
TB 9	Ballyclogh / Ballycullen, Lismakeery stream	0m	10+050	No
TB 10	Ballyellinan / Ballycullen, Lismakeery stream	0m	10+300	No
TB 11	Ballycullen / Cloonreask, unnamed stream	0m	10+950	No

TB No.	Classification	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection
TB 12	Ballyclogh / Lismakeery, Lismakeery stream	0m	21+000	No
TB 13	Lismakeery / Baunreagh, Lismakeery stream	0m	21+950	No
TB 14	Baunreagh / Ballynacaheragh, local road	0m	22+550	No
TB 15	Ballynacaheragh / Milltown North, field boundary / hedge	0m	23+450 & 24+000	No
TB 16	Booaglass / Ballynacaheragh, River Deel	0m	24+050	No
TB 17	Booaglass/Bullaun/Nantinan, Cloghatrida stream	0m	24+500 & 24+950 & 25+100	No
TB 18	Feeagh / Nantinan, drain and hedge	0m	25+200 & 25+400	No
TB 19	Ardgoul South / Feeagh, field boundary / hedge	0m	25+950	No
TB 20	Graigeen / Ardgoul South, unnamed stream	0m	26+300	No
TB 21	Ballingarrane / Graigeen, Cloghatrida stream	0m	26+950	No
TB 22	Kyletaun / Ballingarrane, Cloghatrida stream	0m	28+200	No
TB 23	Rathkeale / Kyletaun, field boundary/hedge	0m	29+000	No
TB 24	Wolfesburgess East / Rathkeale, field boundary/hedge (southern end no longer extant)	0m	50+700	No
TB 25	Blossomhill / Wolfesburgess East, Carrignedina stream (southern end not extant)	0m	51+050	No
TB 26	Blossomhill / Rathkeale Commons, laneway and hedge at western end, eastern end no longer extant	0m	51+500	No
TB 27	Clogh West / Blossomhill, local road	0m	51+800	No
TB 28	Clogh West / Croagh Commons/ Amogan Beg, local road	0m	51+800	No
TB 29	Clogh West / Clogh East, field boundary / hedge	0m	53+000	No
TB 30	Clogh East / Ballycannon, field boundary / hedge	0m	53+400	No
TB 31	Ballycannon / Croagh, field boundary/hedge	0m	53+800	No
TB 32	Croagh / Graigue, field boundary/hedge	0m	55+900	No
TB 33	Graigue / Clonshire More, Clonshire River	0m	56+550	No
TB 34	Clonshire More / Gortnagrour, field boundary / hedge	0m	57+300	No
TB 35	Clonshire Beg / Gortnagrour, local road	0m	57+650	No
TB 36	Clonshire Beg / Rower More, Greanagh River	0m	58+150	No
TB 37	Rower More / Tuogh, field boundary/hedge	0m	58+500	No
TB 38	Tuogh / Kilknockan, Greanagh River	0m	59+250	No
TB 39	Curraghbeg / Kilknockan, field boundary / hedge	0m	60+100	No
TB 40	Curraghbridge / Curraghbeg / Islandea, local road	0m	60+500	No
TB 41	Ardshanbally / Islandea, Maigue River	0m	60+950	No
TB 42	Ardshanbally / Gortaganniff / Mondellihy, field boundary/hedge	0m	61+900	No
TB 43	Mondellihy / Gortaganniff, field boundary/hedge	0m	62+000	No

TB No.	Classification	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection
TB 44	Kilgobbin / Mondellihy, local road	0m	62+600	No
TB 45	Rineroe / Kilgobbin, local road	0m	63+750	No
TB 46	Monearla / Rineroe, local road	0m	64+100	No
TB 47	Monearla / Ballyloughnaan, Mondellihy stream	0m	64+500	No
TB 48	Ballyloughnaan / Ballycarrane, N21	0m	64+600	No
TB 49	Ballycarrane / Gorteen (two locations), N21	0m	65+000 & 65+200	No
TB 50	Ballycarrane / Ballybronoge South, N21	0m	65+400	No
TB 51	Ballybronoge South / Attyflin, N21	0m	66+400	No
TB 52	Attyflin / Fortetna, N21	0m	67+400	No
TB 53	Corrig / Durnish, Ardaneer stream	0m	1+000	No
TB 54	Cloonreask / Coolrahee, field boundary / hedge	0m	11+900	No

### 14.3.9 Placename Analysis

Townland and topographic names are an invaluable source of information on topography, landownership and land use within the landscape. They also provide information on history, archaeological monuments and folklore of an area. A place name may refer to a long-forgotten site and may indicate the possibility that the remains of certain sites may still survive below the ground surface. The Ordnance Survey surveyors recorded townland names in the 1830s and 1840s, when the entire country was mapped for the first time. Some of the townland names in the study area are of Irish origin and through time have been anglicised. The main references used for the placename analysis were Irish Local Names Explained by P.W Joyce (1870), the Placenames Database of Ireland and the Ordnance Survey Field Name Books. A description and possible explanation of each townland name impacted by the proposed road development are provided in the below table.

**Table 14.10 Placename Analysis**

Barony	Parish	Townland	Irish	Translation
Connello Lower	Askeaton	Ballynacaheragh	<i>Baile na Cathrach</i>	The town of the stone fort
		Cloonreask	<i>Cluain Riasc</i>	Pasture of (the) marshes
		Baunreagh	<i>An Bán Riabhach</i>	The streaked lea-ground
		Coolrahee	<i>Cuilraithní</i>	Corner of the bracken
Connello Lower	Cappagh	Knockdromin	<i>Cnoc Dromann</i>	Hill of (the) ridge
		Ballinvira	<i>Baile an Mheidhrigh</i>	The town of An Meidhreach (from the surname Ó Meidhir. Also referred to as the town of the fairy mansion)
Connello Lower	Clonshire	Clonshire More/Beg	<i>Cluain Siabhra Mhór/Bheag</i>	Pasture of (the) phantom
		Gortnagroun	<i>Gort na gCreabhar</i>	The field of the woodcocks
		Coolballyshane	<i>Cuil Bhaile Sheáin</i>	The corner of the town of Seán

Barony	Parish	Townland	Irish	Translation
		Graigue	<i>An Ghráig</i>	Hamlet; cattle-steading
Connello Lower	Croagh	Amogan Beg	<i>Áth Mhongáin Beag</i>	The ford of Mongán
		Clogh West/East	<i>An Chloch Thiar/ Thoir</i>	The stone (structure)
		Ballycannon	<i>Baile Uí Chanann</i>	The town of Ó Canann
		Croagh	<i>Cróch</i>	A rick or stacked up hill
		Croagh Commons	<i>Coimín Chróich</i>	A rick or stacked up hill
Connello Lower	Lismakeery	Ballyclogh	<i>Baile na Cloiche</i>	The townland of the stone (structure)
		Ballycullen	<i>Baile Uí Choilín</i>	The townland of Ó Coilín
		Ballyellinan	<i>Baile Uí Oileannáin</i>	The townland of Ó hOileannáin
		Lismakeery	<i>Lios Mhic Thíre</i>	The enclosure of Mac Tíre
		Milltown North/South	<i>Baile an Mhuilinn Thuaidh/ Theas</i>	The townland of the mill
Connello Lower	Nantinan	Ardgoul North/South	<i>Ard Ghabhla Thuaidh/ Theas</i>	High place of (the) fork
		Boolaglass	<i>An Bhuaile Ghlas</i>	The green summer pasture
		Ballingarrane	<i>Baile an Gharráin</i>	The town of the grove
		Bullaun	<i>An Ballán</i>	The small patch / a round spring well in a rock
		Nantinan	<i>Neantanán</i>	Place of nettles
		Graigeen	<i>Gráigín</i>	Small hamlet
		Stoneville	<i>Fearann Rí</i>	Land of the king
		Feeagh	<i>Fíobhach</i>	Wooded place
Connello Lower	Rathkeale	Blossomhill	<i>Sceach na Bláithche</i>	The hawthorn of the buttermilk
		Kyletaun	<i>Coill tSeáin</i>	The wood of Seán
		Rathkeale	<i>Coimín Ráth Caola</i>	The rath of Caol(a) or the rath by the marshy stream
		Rathkeale Commons	<i>Ráth Caola</i>	The rath of Caol(a) or the rath by the marshy stream
		Wolfesburgess East	<i>Burgáiste an Bhulbhaigh Thoir</i>	Burgess of Woulfe
Coshma	Adare	Ardshanbally	<i>Ard an tSeanbhaile</i>	The high place of the old town
		Rower More	<i>Robhar Mór</i>	Meaning unclear - Robhar means red in ancient Irish
		Gortaganniff	<i>Gort an Ghainimh</i>	The field of the sand
		Islandea	<i>Oileán Uí Aodha</i>	The island of Ó hAodha
		Kilgobbin	<i>Cill Mhac Gobáin</i>	The church of the sons of Gobán
		Killeen	<i>An Cillín</i>	Little church
		Mondellihy	<i>Móin Deilithe</i>	Divided bogland
		Rineroe	<i>An Rinn Rua</i>	The red headland

Barony	Parish	Townland	Irish	Translation
		Adare	<i>Áth Dara</i>	Ford of Oak
		Ballygeale	<i>Bhaile an Ghéill</i>	The town of the hostage
		Monearla	<i>Móin an Iarla</i>	The bogland of the earl
Kenry	Adare	Kilknockan	<i>Coill an Chnocáin</i>	The wood of the hillock
		Curraghbeg	<i>An Currach Beag</i>	The small tract of wet land
		Curraghbridge	<i>Droichead na Corann</i>	The bridge of the weir
		Tuogh	<i>An Tuath</i>	The territory
Pubblebrien	Croom	Ballycarrane	<i>Baile Uí Chorráin</i>	The townland of Ó Corráin
		Gorteen	<i>An Goirtín</i>	The little field
		Ballyloughnaa	<i>Baile Uí Lachnáin</i>	The townland of Ó Lachnáin
Pubblebrien	Killonahan	Attyflin	<i>Áit Tí Flainn</i>	The house-site of Flann
		Ballybronoge North and South	<i>Baile na mBruthnóg Theas</i>	The town of the smelt-furnaces
		Fortetna	<i>Cathair na Tanátha</i>	The stone fort of the dairy
Shanid	Kilmoylan	Ballinknockane	<i>Baile an Chnocáin</i>	The townland of the hillock
Shanid	Robertstown	Corgrig	<i>An Chorrghráig / Curra réidh</i>	The noticeable hamlet / smooth weir
		Craggs	<i>An Chreag</i>	The rock
		Mulderricksfield	<i>Páirc Mholdraig</i>	Mulderricks field
		Rincullia	<i>Rinn Choille</i>	Point of (the) wood
		Robertstown	<i>Baile Riobaird</i>	The townland of Robert
		Durnish	<i>Dairinis</i>	Oak island
		Hazelfield	<i>Páirc an Choill</i>	The field of the hazel tree
		Inchagreenoge	<i>Inse Dhraighneog</i>	Wet meadow of blackthorns
		Knockardnacorlan	<i>Cnoc Ard na Cartlann</i>	The high hill of the mint
		Oorla	<i>Urla</i>	May be a form of 'urlann' meaning forecourt
Shanid	Shanagolden	Ardaneer	<i>Ard Inbhir / Ard Aniar</i>	High place of (the) river-mouth / the west height or hill
		Sroolane	<i>An Sruthlán / Sruilleán</i>	The small stream / the full stream
		Churchfield	<i>Pháirc an Teampaill</i>	The field of the Church

#### 14.3.10 Areas of Archaeological Potential

Townland boundaries can be of considerable antiquity, some pre-dating the Norman invasion, and can indicate areas of archaeological potential. Through the desk based research, a number of Areas of Archaeological Potential (AAP) have been identified

across the proposed road development (AAP 1–23), many representing the location of townland boundaries and rivers or streams which are deemed to have high archaeological potential. Particular geological areas are also considered to have higher archaeological potential, specifically areas of peat, alluvium and former lake shores.

**Table 14.11 Areas of Archaeological Potential Within the Boundary of the Proposed Road Development**

AAP No.	Classification	Townland	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection
AAP 1	Ardaneer stream (Also TB 1 and TB 54)	Corgrig / Ardaneer / Durnish	0m	1+050-1+150	No
AAP 2	Shanagolden stream (Also TB 2)	Ardaneer / Sroolane North	0m	2+050-2+250	No
AAP 3	Shanagolden stream (Also TB 3), presence of alluvium, EX 2 excavation of Bronze Age features	Sroolane North / Robertstown	0m	2+500-2+800	No
AAP 4	Ahacronane Stream (Also TB 5 & TB55), presence of alluvium	Rincullia / Craggs / Ballinknockane	0m	4+300-4+600	No
AAP 5	Wetland area & Lismakeery stream (also TBs 7, 9 and 10)	Ballyclogh / Ballyellinan / Ballycullen	0m	6+650-10+450	No
AAP 6	Unnamed stream (Also TB 11)	Ballycullen / Cloonreask	0m	10+850-11+000	No
AAP 7	Unnamed stream	Cloonreask	0m	11+600-11+700	No
AAP 8	Lismakeery stream (Also TB 12) and fen peat	Ballyclogh / Lismakeery	0m	20+850-21+100	No
AAP 9	Lismakeery stream (Also TB 13) and fen peat	Lismakeery / Baunreagh	0m	21+750-22+550	No
AAP 10	River Deel & margins, Cloghatrida stream (Also TB 16, 17)	Ballynacaheragh / Milltown North / Boolaglass / Nantinan / Bullaun	0m	23_850 – 25+000	No
AAP 11	Wetland (Also TB 18) and lake sediments	Nantinan / Feeagh	0m	25+000-25+550	No
AAP 12	Unnamed stream (Also TB 20), presence of alluvium, TB 19	Ardgoul South / Graigeen	0m	25+950-26+450	No
AAP 13	Cloghatrida stream (Also TB 21)	Graigeen / Ballingarrane	0m	26+750-27+100	No
AAP 14	Cloghatrida stream (Also TB 22) and lake sediments	Ballingarrane / Kyletaun	0m	28+200-28+500	No
AAP 15	Wetland and palaeo-lakeshore, Cloghatrida stream and TB23	Kyletaun / Rathkeale	0m	28+650-29+500	No
AAP 16	Carrignedina stream (Also TB 24-25). Lake sediments and fen peat	Wolfesburgess East / Blossomhill	0m	50+700-51+250	No
AAP 17	Clonshire River (Also TB 33), presence of alluvium	Graigue / Clonshire More	0m	56+400-56+700	No

AAP No.	Classification	Townland	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection
AAP 18	Greanagh River (A) (Also TB 36), presence of alluvium	Clonshire Beg / Rower More	0m	58+050-58+300	No
AAP 19	Greanagh River (B), alluvium & wetlands (canalised). Also TB 38 and TB 39	Tuogh / Kilknockan	0m	59+150-60+100	No
AAP 20	River Maigue & margins (Also TB 41), presence of alluvium	Islandea / Ardshanbally	0m	60+500-61+450	No
AAP 21	Kilglobbin stream	Mondellihy	0m	62+300-62+600	No
AAP 22	Mondellihy stream (Also TB 47-48)	Ballyloughnaan / Monearla	0m	64+450-64+600	No
AAP 23	Cut peat and TB 50	Ballycarrane / Ballybronoge South / Killeen / Ballygeale	0m	65+300-66+100	No

#### 14.3.11 Description of Predicted Impacts

Ground disturbance associated with the construction of the proposed road development, such as the removal of topsoil and the excavation of those lands made available, has the potential to directly and negatively impact on all sites listed in the following tables (Tables 4.12 to 14.18). Where known archaeological, built or cultural heritage assets are not listed in these tables, there will be no direct physical impacts during construction due to the asset's location outside of the construction boundary. Some known archaeological, built and cultural heritage assets are located within the lands made available, however there are no predicted direct impacts as a result of the design process which will allow for preservation in situ. These assets are also listed in the tables below. No indirect impact arising from vibration or dust associated with construction activities is anticipated.

Where geophysical survey has not identified archaeological remains at known recorded monuments, LiDAR or cultural heritage sites, this has not been taken as a definitive absence of archaeological features. Although the survey has been successful in identifying remains in many areas, various factors, including geology and depth of topsoil may preclude identification of remains. Therefore, a precautionary approach has been taken to the assessment of impacts on any such site.

In some areas previous disturbance, such as from development, will have impacted on the archaeological resource. Archaeological investigations which have taken place in advance of other developments are illustrated on Figures 14.1–14.23 and listed in Appendix 14.14.

At the operational stage of the proposed road development there is the potential to impact on archaeological, built and cultural heritage sites, due to physical changes to the receiving environment resulting in changes to their setting. Detail on how impacts may occur is provided in Appendix 14.12.

This represents the recommended assessment of significance and impact descriptions for the purposes of informing the overall assessment of the likely impact on the archaeological, architectural and cultural heritage.

## 14.4 Construction Impacts

### 14.4.1 Construction Impacts: Archaeological Heritage Assets

**Table 14.12 Construction Impacts to Archaeological Heritage Assets**

AH No.	RMP No.	Townland	Classification	Approx. Ch	Dist. from Proposed Road Development	Statutory Protection	Potential Impact Type	Potential Impact Level
AH 4	LI010-070	Robertstown	Ringfort - rath.	3+200	0m	Yes	No predicted Impact	Neutral
AH 7	LI010-074	Rincullia	Enclosure.	4+050	0m	Yes	Direct negative	Profound negative
AH 8	LI010-081	Craggs	Ringfort - rath.	4+650	0m	Yes	Direct negative	Profound negative
AH 24	LI020-005	Milltown North	Enclosure.	24+050	0m	Yes	No predicted Impact	Neutral
AH 35	LI020-115	Wolfesburgess east	Redundant record	50+750	0m	No	No predicted Impact	Neutral
AH 38	LI020-152	Rathkeale	Redundant record	50+650	0m	No	No predicted Impact	Neutral
AH 39	LI021-005	Tuogh	Ringfort - rath.	58+750	0m	Yes	Direct negative	Very significant negative
AH 40	LI021-010	Ardshanbally	Enclosure. Removed by railway	61+350	0m	Yes	No predicted Impact	Neutral
AH 58	LI021-144	Ardshanbally	Enclosure	61+850	0m	Yes	Direct negative	Profound negative
AH 60	LI021-146	Kilgobbin	Enclosure	62+700	0m	Yes	Direct negative	Profound negative
AH 62	LI021-147002	Kilgobbin	Enclosure	62+850	0m	Yes	Direct negative	Profound negative
AH 64	LI021-149	Ardshanbally	Enclosure - possible	61+300	0m	Yes	Direct negative	Significant negative
AH 67	LI021-167	Ballybronoge South	Ring-ditch	66+300	0m	No	No predicted Impact	Neutral
AH 70	LI021-179	Kilgobbin	Excavation - miscellaneous.	63+300	0m	No	No predicted Impact	Neutral
AH 71	LI021-180	Gorteen	Kiln - corn-drying	65+050	0m	No	No predicted Impact	Neutral
AH 72	LI021-181001	Ballycarrane	Fulacht fia	64+700	0m	No	No predicted Impact	Neutral
AH 73	LI021-181002	Ballycarrane	Fulacht fia	64+700	0m	No	No predicted Impact	Neutral



AH No.	RMP No.	Townland	Classification	Approx. Ch	Dist. from Proposed Road Development	Statutory Protection	Potential Impact Type	Potential Impact Level
AH 75	LI020-163001	Baunreagh	Fulacht fia	22+450	0m	No	Direct	Very significant negative
AH 76	LI020-163002	Baunreagh	Excavation - miscellaneous.	22+450	0m	No	No predicted Impact	Neutral
AH 80	LI010-140	Rincullia	Excavation - miscellaneous	3+900	0m	No	No predicted Impact	Neutral
AH 81	LI010-141001	Rincullia	Burnt mound	4+300	0 m	No	No predicted Impact	Neutral
AH 82	LI010-141002	Rincullia	Pit	4+300	0m	No	No predicted Impact	Neutral
AH 83	LI010-141003	Rincullia	Road - gravel / stone trackway - peatland	4+300	0m	No	No predicted Impact	Neutral
AH 101	LI021-185	Ballybronoge South	Hearth	66+300	0m	No	No predicted Impact	Neutral
AH 105	LI021-183	Attyflin	Fulacht fia	66+775	0m	No	No predicted Impact	Neutral
AH 106	LI021-178	Attyflin	Fulacht fia	66+775	0m	No	No predicted Impact	Neutral
AH 107	LI012-138	Attyflin	Designed landscape feature	66+750	0m	No	No predicted Impact	Neutral
AH 109	LI021-186	Attyflin	Fulacht fia	67+250	0m	No	No predicted Impact	Neutral
AH 111	LI012-098	Attyflin	Fulacht fia	67+325	0m	No	No predicted Impact	Neutral
AH 112	LI012-139	Attyflin	Excavation miscellaneous	67+350	0m	No	No predicted Impact	Neutral
AH 113	LI012-137	Attyflin	Fulacht fia	67+350	0m	No	No predicted Impact	Neutral

Summary of Impacts to archaeological heritage assets as recorded by the RMP and SMR

- Profound Negative: 5 sites;
- Very Significant Negative: 2 site;
- Significant Negative: 1 sites;
- Slight Negative: 0 site;
- Total 8 sites

### 14.4.2 Construction Impacts: LiDAR Assets

**Table 14.13 Construction Impacts to Heritage Sites Identified During LiDAR Survey**

LI No.	LiDAR Report Site No	Townland	Classification	Dist. from Boundary of Proposed Road Development	Approx. Ch	Statutory Protection	Potential Impact Type	Potential Impact Level
LI 4	1.5	Durnish	Oval raised area, possibly modified natural platform. with some linear features	0m	1+000	No	Direct negative	Significant negative
LI 7	5.4	Ardaneer	Extensive field system	0m	1+650	No	Direct negative	Significant negative
LI 9	6.2	Sroolane North	Low profile ringfort, apparently truncated to west, No evidence of feature on geophysical survey	0m	2+250	No	Direct negative	Significant negative
LI 13	11.1	Ballycullen	Possible oval enclosure. Possible fulacht fia and two L shaped features	0m	10+450	No	No predicted Impact	Neutral
LI 16	12.2	Cloonreask	Possible settlement cluster defined by two rectangular enclosures and a third possibly truncated. Possible structure or burnt deposit and possible metalled surface also identified.	0m	11+400	No	Direct negative	Significant negative
LI 17	14.3	Robertstown	Probable ringfort, 40m x 35 m. Geophysical survey indicates it is bivallate, with a dense concentration of internal and external associated features'	0m	3+000	No	Direct negative	Significant negative
LI 18	14.4	Robertstown	Pair to LI 17. Enclosure, c. 41.5m diameter, confirmed by geophysical survey. Evidence for associated internal and external features'	0m	3+000	No	Direct negative	Profound negative
LI 22	15.3	Robertstown	Extensive field system associated with at least one early medieval enclosure.	0m	3+550	No	Direct negative	Significant negative
LI 25	16.3	Rinculla	Large D-shaped enclosure	0m	3+950	No	No predicted Impact	Neutral
LI 29	17.4	Mulderricksfield	Low profile rectangular enclosure. No evidence of feature on geophysical survey	0m	5+500	No	Direct negative	Significant negative

LI No.	LiDAR Report Site No	Townland	Classification	Dist. from Boundary of Proposed Road Development	Approx. Ch	Statutory Protection	Potential Impact Type	Potential Impact Level
LI 30	17.5	Craggs	Flattened terrace with possible associated field system. Geophysical survey identified ditches, pits and a rectangular feature of possible archaeological origin'.	0m	5+500	No	Direct negative	Significant negative
LI 34	18.2	Ballyclogh (ED Askeaton West)	Possible enclosure / farmstead. May be part of a ringfort.	0m	6+250	No	Direct negative	Profound negative
LI 36	18.5	Ballyclogh (ED Askeaton West)	Probably field boundaries extending into road boundary	0m	6+650	No	Direct negative	Significant negative
LI 40	19.4	Ballyclogh (ED Askeaton West)	Small enclosure, probable ringfort	0m	20+150	No	Direct negative	Profound negative
LI 56	38.1	Kilknockan	Possible enclosure partially within road boundary	0m	59+700	No	Direct negative	Significant negative
LI 57	38.2	Kilknockan	Moated site partly within road boundary.	0m	59+850	No	Direct negative	Very significant negative
LI 58	39.1	Islandea	Possible row of settlement plots.	0m	60+350	No	Direct negative	Significant negative
LI 62	49.3	Tuogh (ED Adare North)	Enclosure (not seen in geophysical survey) and associated field system.	0m	59+050	No	Direct negative	Significant negative
LI 63	49.4	Tuogh (ED Adare North)	Mound, 10 m diameter. Rectilinear enclosure with numerous pits and post holes.	0m	59+100	No	Direct negative	Profound negative
LI 64	53.2	Graigeen	Extensive field system with enclosure elements extending from the west into the road boundary.	0m	26+800	No	Direct negative	Significant negative
LI 67	55.1	Gortnagrour	Trapezoidal area defined by depression, 38.5 x 24.5m, identified on LiDAR. Geophysical survey indicates this is a banked enclosure. Located just outside road boundary but possible associated features within road boundary	0m	57+480	No	Direct negative	Significant negative
LI 74	61.2	Croagh	Possible farmstead. Geophysical survey revealed a limekiln and possible ditches.	0m	55+600	No	Direct negative	Very significant negative

LI No.	LiDAR Report Site No	Townland	Classification	Dist. from Boundary of Proposed Road Development	Approx. Ch	Statutory Protection	Potential Impact Type	Potential Impact Level
LI 75	61.3	Croagh	Circular enclosure, c. 34m diameter, identified on LiDAR and confirmed by geophysical survey. Evidence for internal and external associated features'	0m	55+550	No	Direct negative	Profound negative
LI 76	61.4	Croagh	Oval enclosure, c. 28.5 x 24m, identified on LiDAR and confirmed by geophysical survey. Evidence for internal and external associated features'	0m	55+550	No	Direct negative	Profound negative
LI 81	66.4	Clogh West	Depression/possible quarry (19.4m diameter) identified on LiDAR. No evidence of this in geophysical survey, h.	0m	52+650	No	Direct negative	Not significant
LI 83	2.1	Durnish	Possible ringfort, c. 34m diameter, identified on LiDAR. No evidence for this site was identified by geophysical survey'.	0m	1+200	No	Direct negative	Significant negative

Summary of Impacts to other archaeological heritage assets:

- Profound Negative: 6 sites;
  - Very Significant Negative: 2 site;
  - Significant Negative: 15 sites;
  - Not significant: 1 site;
  - Neutral: 2 sites;
- Total 26 sites

### 14.4.3 Construction Impacts to Archaeological Features Identified During Geophysical Survey

The following table lists the possible archaeological features identified during the geophysical survey which will be directly impacted by the construction of the proposed road development. Only those archaeological sites and potential features which are not listed in Table 14.12 and Table 14.13 are detailed in the table below.

**Table 14.14 New Archaeological Sites Identified Through Geophysical Survey**

Site Code	Townland	Potential Archaeology	Dist. from Proposed Road Development	Chainage	Potential Impact Type	Potential Impact Level
M-17	Ballycullen	A possible semi-circular enclosing feature and a number of linear features of possible archaeological origin.	0m	10+750–10+900	Direct negative	Very significant negative
M-19 ER-8	Lismakeery	Possible oval enclosure (13 x 11.5m) with central pit within road boundary; also numerous linear features and pits of possible archaeological origin'	0m	21+350–21+750	Direct negative	Very significant negative
M-20	Ballynacaheragh	Enclosure (85m diameter) with associated internal features; largely within road boundary. Concentration of possible linear features and pits to the east, some of which may relate to 19th century settlement and farming'	0m	22+600–22+800	Direct negative	Very Significant negative
M-21 ER-17	Ballynacaheragh	Possible enclosure (53m diameter) partly within road boundary. Curvilinear and linear features both internally and externally which don't form a consistent pattern but may be of archaeological origin and associated with the enclosure.	0m	23+050–23+550	Direct negative	Very Significant negative
M-22a	Booaglass	Two possible ring ditches (14m and 11m diameter) and a number of other pits of possible archaeological origin. Linear features, some of likely agricultural origin.	0m	24+050–24+350	Direct negative	Very Significant negative
M-24	Graigeen	Possible curving ditches as well as other linear features and two pits or postholes	0m	26+650–26+950	Direct negative	Significant negative
M-26 ER-19	Kyletuan	Extensive possible habitation site containing numerous pits, post holes and slot trenches. All enclosed by surrounding ditches. Possible large enclosure (91 x 74m) with a potential kiln and external structure AAP 14 - Wetland	0m	28+250–28+650	Direct negative	Very Significant negative

Site Code	Townland	Potential Archaeology	Dist. from Proposed Road Development	Chainage	Potential Impact Type	Potential Impact Level
M-27	Kyletuan	Probable double-banked enclosure (28m diameter); numerous curvilinear and linear features of possible archaeological origin, some of which form a relict post-medieval field system. Double ditched feature which terminates in a circular feature. AAP 15 - Wetland	0m	28+650 – 29+450 and 49+050-50+150	Direct negative	Very Significant negative
M-28	Wolfesburgess East / Blossomhill	Possible ditch and 4 pits or postholes, 2 possible gullies or ditches. AAP 16 - Wetland	0m	50+950–51+300	Direct negative	Significant negative
M-31 ER-25	Clogh West	2 possible sub-rectangular features directly north of LI 82. Limited linear features at the eastern end of the survey area. Curvilinear compacted feature which may relate to a relict field boundary. Two areas of disturbed soil or dug features.	0m	52+550–53+000	Direct negative	Significant negative
M-32 ER-20	Ballycannon	Possible habitation site with dense concentration of possible pits/postholes, ditches, curvilinear and linear features'	0m	53+850–54+300	Direct negative	Very Significant negative
M-34 ER-21	Graigue	Linear features, possible ditches or trackway. A range of linear and curvilinear features of unknown origin, little to no pattern in distribution	0m	56+150–56+500	Direct negative	Significant negative
M-38a	Kilknockan	Two curvilinear features of possible archaeological origin and one pit.	0m	59+300–59+600	Direct negative	Significant negative
M-41	Ardshanbally	A number of possible circular ditched features, some with internal pits of possible archaeological origin. Other linear features throughout the area, some double linears, possible former field boundaries.	0m	61+200–61+700	Direct negative	Significant negative
M-43	Mondellihy	Possible enclosure (31m diameter) identified northwest of AH 41/42, with evidence for internal pits and external curvilinear features'	0m	61+950–62+350	Direct negative	Very Significant negative
M-44	Kilgobbin	Possible enclosure (39m diameter) with internal pits/postholes; cut by railway line. Numerous external pits, ditches and curvilinear features. Circular anomaly to east (12m diameter) with internal pits/postholes. Possible sub-rectangular structure (12 x 8m) at eastern end of survey area	0m	62+650–63+300	Direct negative	Profound negative

Summary of Impacts to archaeological heritage assets identified during geophysical survey:

- Profound Negative: 1 sites;
- Very Significant Negative: 9 sites;
- Significant Negative: 6 sites;
- Total 16 sites

#### 14.4.4 Construction Impacts: Architectural Heritage Assets

**Table 14.15 Construction Impacts to Architectural Heritage Assets**

BH No.	RPS; NIAH No.	Townland	Classification	Dist. from proposed road development	Approx. chainage	Statutory protection	Potential Impact Type	Potential Impact Level
BH 1	21831013	Rathkeale	Palatine Heritage Centre	0m	0+000	No	No predicted Impact	Neutral
BH 26	74	Ballycogh	'Concrete Pill Box (3)'	0m	6+350	Yes	No predicted Impact	Neutral
BH 35	N/A	Adare	Adare Manor Architectural Conservation Area	Adjacent to South	61+800–62+200	Yes	No predicted Impact	Neutral
BH 36	811	Adare	Adare Manor demesne wall	Adjacent to South	61+800–62+200	Yes	No predicted Impact	Neutral

Summary of Construction Impacts to built-heritage assets:

- Profound Negative: 0 site;
- Very Significant Negative: 0 sites;
- Significant Negative: 0 sites
- Neutral: 4 sites
- Total 4 sites



#### 14.4.5 Construction Impacts: Designed Landscapes

**Table 14.16 Construction Impacts to Designed Landscape**

DL No.	Classification	Townland	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection	Potential Impact Type	Potential Impact Level
DL 1	Ballyclogh demesne	Ballyclogh	0m	20+400	House in RPS	Direct negative	Significant negative
DL 5	Stoneville House demesne	Graigeen/Stoneville	0m	26+650–27+050	House in RPS	Direct negative	Moderate negative
DL 8	Curraghbridge House demesne	Curraghbridge	0m	60+250–60+400	House in RPS	Direct negative	Moderate negative
DL 10	Ballycarrane House demesne	Ballycarrane	Adjacent	64+600–65+000	No	No predicted Impact	Neutral
DL 11	Ballybronoge South (unnamed)	Ballybronoge	Adjacent	65+500–66+400	No	No predicted Impact	Neutral
DL 13	Monearla Cottage	Monearla	Adjacent	64+100–64+800	No	No predicted Impact	Neutral
DL 16	Corrig House Demesne	Corrig	0m	1+000	No	Direct negative	Not significant
DL 17	Mondellihy House Demesne	Mondellihy	0m	61+950-63+500	House in RPS	Direct negative	Imperceptible

Summary of Impacts to Designed Landscapes:

- Significant Negative: 1 sites;
- Moderate negative: 2 sites;
- Not significant: 1 site;
- Imperceptible: 1 site;
- Neutral: 3 site;
- Total: 8 sites

#### 14.4.6 Construction Impacts: Cultural Heritage Assets

**Table 14.17 Impacts to Cultural Heritage Sites**

CH No.	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection	Potential Impact Type	Potential Impact Level
CH 4	Ardaneer	Relic field system	0m	1+600–1+750	No	Direct negative	Significant negative
CH 5	Robertstown	Relic field system	0m	2+650–2+800	No	Direct negative	Significant negative
CH 6	Robertstown	Possible large-scale circular enclosure	0m	3+450–3+600	No	Direct negative	Significant negative
CH 8	Rincullia	Relic field system and linears and pit features found through geophysical survey	0m	3+850–4+350	No	Direct negative	Significant negative
CH 10	Mulderricksfield	Site of vernacular buildings	0m	5+550	No	Direct negative	Significant negative
CH 11	Mulderricksfield	Possible circular enclosure	0m	5+550	No	Direct negative	Significant negative
CH 15	Ballyclogh	Site of vernacular buildings	0m	20+150	No	Direct negative	Significant negative
CH 16	Ballycullen	Site of vernacular building	0m	10+450	No	No predicted impact	Neutral
CH 23	Ballynacaheragh	Site of vernacular building	0m	22+550	No	Direct negative	Significant negative
CH 37	Ballingarrane/ Kyletaun	Former railway	0m	27+550– 28+450	No	Direct negative	Moderate negative
CH 39	Ballingarrane	Vernacular structure in ruins	0m	27+650	No	Direct negative	Moderate negative
CH 46	Croagh	Site of limekiln	0m	55+600	No	Direct negative	Significant negative
CH 49	Graigue	Clonshire Bridge	0m	56+500	No	No predicted Impact	Neutral
CH 55	Tuogh	Site of vernacular building	0m	58+550	No	Direct negative	Significant negative
CH 61	Curraghbridge	Site of vernacular building	0m	60+250	No	Direct negative	Significant negative
CH 62	Ardshanbally	Site of quay	0m	61+000	No	Direct negative	Significant negative
CH 63	Ardshanbally	Site of vernacular building	0m	61+100	No	Direct negative	Significant negative

CH No.	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection	Potential Impact Type	Potential Impact Level
CH 64	Ardshanbally	Site of limekiln	0m	61+200	No	Direct negative	Significant negative
CH 67	Mondellihy	Vernacular building	0m	62+600	No	Direct negative	Significant negative
CH 75	Ballycarrane	Site of railway	0m	65+300	No	No predicted Impact	Neutral
CH 76	Ardaneer	Quarry	0m	1+200	No	Direct negative	Not significant
CH 78	Mulderricksfield	Site of vernacular structure	0m	5+750	No	Direct negative	Significant negative
CH 82	Ballycullen	Site of vernacular structure	0m	10+900	No	Direct negative	Significant negative
CH 84	Ballyclogh	Disused sand pit	0m	20+850	No	Direct negative	Not significant
CH 87	Ballynacaheragh	Site of vernacular structures	0m	22+650	No	Direct negative	Significant negative
CH 88	Ballynacaheragh	Disused gravel pit	0m	23+000	No	Direct negative	Not significant
CH 89	Ardgoul South	Site of vernacular structures	0m	26+600	No	Direct negative	Significant negative
CH 90	Ardgoul South	Site of vernacular structure	0m	26+650	No	Direct negative	Significant negative
CH 91	Ballingarrane	Site of vernacular structures	0m	27+200	No	Direct negative	Significant negative
CH 92	Ballingarrane	Site of vernacular structure	0m	27+650	No	No predicted impact	Neutral
CH 93	Blossomhill	Site of vernacular structure	0m	51+350	No	Direct negative	Significant negative
CH 95	Blossomhill	Site of vernacular structure	0m	51+350	No	Direct negative	Significant negative
CH 97	Tuogh	Site of vernacular structure	0m	58+850	No	Direct negative	Significant negative
CH 98	Curraghbeg	Site of vernacular building	0m	60+300	No	Direct negative	Significant negative
CH 99	Ardshanbally	Site of disused gravel pit	0m	61+200	No	Direct negative	Not significant
CH 100	Gortaganniff	Vernacular farm structures	0m	62+025	No	Direct negative	Significant negative
CH 101	Kilgobbin	Site of vernacular structures with gardens	0m	63+350	No	Direct negative	Significant negative
CH 102	Ardaneer	Gate post / standing stone	0m	2+000	No	Direct negative	Significant negative

CH No.	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection	Potential Impact Type	Potential Impact Level
CH 103	Mulderricksfield	Pillbox	0m	5+500	No	Direct negative	Profound negative
CH 104	Ballyclogh	Pillbox	0m	20+700	No	No Impact	Neutral
CH 108	Corgrig	Site of vernacular structure	0m	0+025	No	Direct negative	Significant negative
CH 115	Ballyclogh	Vernacular structure	0m	20+650	No	Direct negative	Significant negative
CH 116	Graigeen	Site of vernacular structure	0m	26+750	No	Direct negative	Significant negative
CH 121	Croagh	Site of small structure	0m	55+600	No	Direct negative	Significant negative
CH 125	Ballingarrane	Curving linear feature	0m	27+800	No	Direct negative	Very significant negative
CH 126	Baunreagh	Site of vernacular structure	0m	22+550	No	Direct negative	Significant negative
CH 131	Ballingarrane/ Kyletaun	Railway structure (culvert)	0m	27+550– 28+450	No	No Impact	Neutral
CH 132	Ballingarrane/ Kyletaun	Railway structure (culvert)	0m	27+550– 28+450	No	Direct negative	Significant negative

Summary of Impacts to cultural heritage assets:

- Profound Negative: 1 sites;
- Very Significant Negative: 1 sites;
- Significant Negative: 34 sites;
- Moderate negative: 2 sites;
- Not significant: 4 sites;
- Neutral: 6 sites.
- Total 48 sites

#### 14.4.7 Construction Impacts: Areas of Archaeological Potential

Ground disturbances associated with the proposed road development have the potential to have a moderate, significant or profound direct and negative impact on as yet undiscovered archaeological features, deposits or artefacts that have the potential to survive beneath the current ground surface or water level within the AAPs listed below.

**Table 14.18 Impacts to Areas of Archaeological Potential**

AAP No.	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection	Potential Impact Type	Potential Impact Level
AAP 1	Corigrig / Ardaneer / Durnish	Ardaneer stream (Also TB 1 and TB 54)	0m	1+050-1+150	No	Direct negative	Moderate to profound negative
AAP 2	Ardaneer / Sroolane North	Shanagolden stream (Also TB 2)	0m	2+050-2+250	No	Direct negative	Moderate to profound negative
AAP 3	Sroolane North / Robertstown	Shanagolden stream (Also TB 3), presence of alluvium, EX 2 excavation of Bronze Age features	0m	2+500-2+800	No	Direct negative	Moderate to profound negative
AAP 4	Rincullia / Craggs / Ballinknockane	Ahacronane Stream (Also TB 5 & TB55), presence of alluvium	0m	4+300-4+600	No	Direct negative	Moderate to profound negative
AAP 5	Ballyclogh / Ballyellinan / Ballycullen	Wetland area & Lismakeery stream (also TBs 7, 9 and 10)	0m	6+650-10+450	No	Direct negative	Moderate to profound negative
AAP 6	Ballycullen / Cloonreask	Unnamed stream (Also TB 11)	0m	10+850-11+000	No	Direct negative	Moderate to profound negative
AAP 7	Cloonreask	Unnamed stream	0m	11+600-11+700	No	Direct negative	Moderate to profound negative
AAP 8	Ballyclogh / Lismakeery	Lismakeery stream (Also TB 12) and fen peat	0m	20+850-21+100	No	Direct negative	Moderate to profound negative
AAP 9	Lismakeery / Baunreagh	Lismakeery stream (Also TB 13) and fen peat	0m	21+750-22+550	No	Direct negative	Moderate to profound negative
AAP 10	Ballynacaheragh / Milltown North / Boolaglass / Nantinan / Bullaun	River Deel & margins, stream (Also TB 16 and 17)	0m	23_850-25+000	No	Direct negative	Moderate to profound negative
AAP 11	Nantinan / Feeagh	Wetland (Also TB 18) and lake sediments	0m	25+000-25+550	No	Direct negative	Moderate to profound negative

AAP No.	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection	Potential Impact Type	Potential Impact Level
AAP 12	Ardgoul South / Graigeen	Unnamed stream (Also TB 20), presence of alluvium, TB 19	0m	25+950–26+450	No	Direct negative	Moderate to profound negative
AAP 13	Graigeen / Ballingarrane	Cloghatrida stream (Also TB 21)	0m	26+750-27+100	No	Direct negative	Moderate to profound negative
AAP 14	Ballingarrane / Kyletaun	Cloghatrida stream (Also TB 22) and lake sediments	0m	28+200-28+500	No	Direct negative	Moderate to profound negative
AAP 15	Kyletaun / Rathkeale	Wetland and palaeo-lakeshore, Cloghatrida stream and TB23	0m	28+650–29+500	No	Direct negative	Moderate to profound negative
AAP 16	Wolfesburgess East / Blossomhill	Carrignedina stream (Also TB 24–25). Lake sediments and fen peat	0m	50+700–51+250	No	Direct negative	Moderate to profound negative
AAP 17	Graigie / Clonshire More	Clonshire River (Also TB 33), presence of alluvium	0m	56+400-56+700	No	Direct negative	Moderate to profound negative
AAP 18	Clonshire Beg / Rower More	Greanagh River (A) (Also TB 36), presence of alluvium	0m	58+050-58+300	No	Direct negative	Moderate to profound negative
AAP 19	Tuogh / Kilknockan	Greanagh River (B), alluvium & wetlands (canalised). Also TB 38 and TB 39	0m	59+150-60+100	No	Direct negative	Moderate to profound negative
AAP 20	Islandea / Ardshanbally	River Maigue & margins (Also TB 41), presence of alluvium	0m	60+500-61+450	No	Direct negative	Moderate to profound negative
AAP 21	Mondellihy	Kilglobbin stream	0m	62+300-62+600	No	Direct negative	Moderate to profound negative
AAP 22	Ballyloughnaa / Monearla	Mondellihy stream (Also TB 47-48)	0m	64+450-64+600	No	Direct negative	Moderate to profound negative
AAP 23	Ballycarrane / Ballybronoge South / Killeen / Ballygeale	Cut peat and TB 50	0m	65+300-66+100	No	Direct negative	Moderate to profound negative

Summary of Impacts to sites of archaeological potential:

- Moderate to Profound Negative: 23 sites

#### **14.4.8 Townland Boundaries**

Ground disturbances associated with the proposed road development have the potential to have a moderate direct negative impact on sections of 54 townland boundaries which are located within the boundary of the proposed road development (see Table 14.9).

#### **14.4.9 General**

Ground disturbances associated with the proposed road development have the potential to have a moderate to profound direct and negative impact on previously unidentified archaeological features, deposits or artefacts that have the potential to survive beneath the current ground surface with no surface expression. This includes features identified as potentially of archaeological origin in the geophysical survey.

## 14.5 Operational Impacts

### 14.5.1 Operational Impact to Archaeological Heritage

The operation of the proposed road development has the potential to indirectly and negatively impact on the following sites.

**Table 14.19 Operational Impacts: Archaeological Heritage**

AH No.	RMP No.	Townland	Classification	Approx. Ch	Dist. from Proposed Road Development	Statutory Protection	Potential Impact Type	Potential Impact Level
AH 2	LI010-012	Ardaneer	Ringfort - rath	1+900	70m W	Yes	Indirect negative	Slight negative
AH 4	LI010-070	Robertstown	Ringfort - rath	3+200	0m	Yes	Indirect negative	Moderate negative
AH 6	LI010-073	Rincullia	Ringfort - rath	3+850	165m N	Yes	Indirect negative	Not significant
AH 9	LI010-087	Craggs	Enclosure	5+200	25m S	Yes	Indirect negative	Slight negative
AH 10	LI010-090	Mulderricksfeld	Ringfort - cashel	5+600	105m S	Yes	Indirect negative	Not significant
AH 16	LI019-058	Ballyclogh (ED Askeaton West)	Ringfort - rath	20+650	125m W	Yes	Indirect negative	Slight negative
AH 19	LI019-064	Lismakeery	Ringfort - rath.	21+550	75m S	Yes	Indirect negative	Moderate negative
AH 21	LI020-002	Ballynacaheragh	Enclosure.	22+750	40m S	Yes	Indirect negative	Slight negative
AH 22	LI020-004001	Milltown North	Ringfort - cashel	23+950	250m W	Yes	Indirect negative	Not significant
AH 23	LI020-004002	Milltown North	Castle - tower house	23+950	250m W	Yes	Indirect negative	Not significant
AH 24	LI020-005	Milltown North	Enclosure.	24+050	0m	Yes	Indirect negative	Slight negative
AH 26	LI020-053	Feeagh	Ringfort - rath	25+700	175m SW	Yes	Indirect negative	Imperceptible
AH 29	LI020-057	Graigeen	Ringfort - cashel	26+900	156m W	Yes	Indirect negative	Slight negative
AH 31	LI020-087	Graigue (ED Croagh)	Enclosure.	55+900	40m N	Yes	Indirect negative	Not significant
AH 32	LI020-088	Graigue (ED Croagh)	Ringfort - rath	55+900	165m N	Yes	Indirect negative	Slight negative



AH No.	RMP No.	Townland	Classification	Approx. Ch	Dist. from Proposed Road Development	Statutory Protection	Potential Impact Type	Potential Impact Level
AH 33	LI020-095	Clonshire More	Ringfort - rath	57+150	62m S	Yes	Indirect negative	Slight negative
AH 34	LI020-113	Kyletaun	Crannog.	29+050	114m W	Yes	Indirect negative	Slight negative
AH 41	LI021-011001	Mondellihy	Enclosure	62+250	50m S	Yes	Indirect negative	Moderate negative
AH 42	LI021-011002	Mondellihy	Enclosure	62+250	13m S	Yes	Indirect negative	Moderate negative
AH 57	LI021-143	Ardshanbally	Enclosure	61+700	40m N	Yes	Indirect negative	Slight negative
AH 59	LI021-145	Mondellihy	Enclosure	62+400	50m S	Yes	Indirect negative	Slight negative
AH 61	LI021-147001	Kilgobbin	Earthwork	62+850	22m S	Yes	Indirect negative	Slight negative
AH 64	LI021-149	Ardshanbally	Enclosure	61+300	0m	No	Indirect negative	Moderate negative
AH 65	LI021-151001	Ardshanbally	Enclosure	61+050	125m S	Yes	Indirect negative	Imperceptible
AH 66	LI021-151002	Ardshanbally	Enclosure	61+100	117m SE	Yes	Indirect negative	Imperceptible
AH 69	LI020-159	Clonshire More	Castle - hall-house	56+450	60m E	Yes	Indirect; Permanent	Moderate negative
AH 84	LI010-144	Robertstown	Enclosure	2+700	79m NE	Yes	Indirect negative	Not significant
AH 90	LI020-003	Milltown North	Ringfort	23+750	219m SW	Yes	Indirect negative	Not significant
AH 93	LI010-069002	Robertstown	Graveyard	2+300	235m NE	Yes	Indirect negative	Not significant
AH 117	LI021-032001	Adare	Historic town Adare	61+850	1m S	Yes	Indirect positive	Significant positive
AH 118	LI029-147	Blossomhill (ED Rathkeale Rural)	Enclosure	51+450	11m W	No	Indirect negative	Not significant

There are no predicted operational impacts to the following archaeological assets: AH1, 3, 5, 11–15, 17–18, 20, 25, 27–28, 30, 36–38, 43–56, 63–64, 68, 74–83, 85–89, 91–92, 94–100, 102–104, 108, 110, 114–116 and 119–122.

Summary of operational impacts to archaeological assets:

- Profound Negative: 0 sites;
- Very Significant Negative: 0 sites;
- Significant Positive: 1 site;
- Significant Negative: 0 sites;
- Moderate negative: 2 sites;
- Slight negative: 12 sites;
- Not significant: 9 sites;
- Imperceptible: 3 sites;
- Total 31 sites

## 14.5.2 Operational Impacts: LiDAR Assets

**Table 14.20 Operational Impacts: Sites identified by LiDAR**

LI No.	LiDAR Report Feature No	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection	Potential Impact Type	Potential Impact Level
LI 10	6.4	Ardaneer	Possible ringfort	75m SW	1+700	No	Indirect negative	Slight negative
LI 13	11.1	Ballycullen	Possible oval enclosure, 36m NW–SE, 22m SW–NE. Enclosing feature marked on OS maps and possible ditch or gully.	0m	10+450	No	Indirect negative	Slight negative
LI 14	11.2	Ballycullen	Possible ringfort	24m N	10+800	No	Indirect negative	Slight negative
LI 20	15.1	Robertstown	Probable ringfort	106m S	3+300	No	Indirect negative	Imperceptible
LI 21	15.2	Robertstown	Possible ringfort	11m N	3+450	No	Indirect negative	Not significant
LI 23	15.4	Robertstown	Possible ringfort	14m S	3+550	No	Indirect negative	Not significant
LI 24	16.2	Rincullia	Small cashel	162m S	4+300	No	Indirect negative	Imperceptible
LI 28	17.3	Mulderricksfield	Substantial possible ringfort	135m N	5+600	No	Indirect negative	Slight negative
LI 37	19.1	Ballyclogh (ED Askeaton West)	Series of rectangular plots along road; possible deserted medieval settlement	60m W	20+300	No	Indirect negative	Moderate negative
LI 38	19.2	Ballyclogh (ED Askeaton West)	Possible ringfort or demesne feature	60m W	20+350	No	Indirect negative	Moderate negative
LI 53	35.3	Boolaglass	Tree-covered mound	37m W	24+200	No	Indirect negative	Slight negative
LI 54	35.4	Boolaglass	Ringfort	95m E	24+700	No	Indirect negative	Slight negative
LI 55	35.5	Bullaun	Small, crescentic mound located adjacent to river	112m SW	25+600	No	Indirect negative	Not significant
LI 59	40.1	Ardshanbally	Small enclosure, probable ringfort.	37m S	61+250	No	Indirect negative	Moderate negative
LI 69	57.2	Ballingarrane	Possible oval enclosure	41m W	27+400	No	Indirect negative	Moderate negative
LI 70	58.1	Ballingarrane	Group of rectangular plots aligned along field boundary. Possible medieval settlement plots	98m E	28+100	No	Indirect negative	Slight negative

LI No.	LiDAR Report Feature No	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection	Potential Impact Type	Potential Impact Level
LI 79	65.1	Wolfesburgess East	Low profile circular enclosure	150m N	50+950	No	Indirect negative	Not significant
LI 80	66.3	Clogh West	Small circular enclosure, probable ringfort	130m N	52+750	No	Indirect negative	Not significant
LI 84	1.6	Durnish	Long, curving bank, possible forming SW portion of a large enclosure	50m N	1+150	No	Indirect negative	Not significant
LI 93	2.3	Ardaneer	Settlement cluster with well-defined rectangular enclosure and small enclosure, also possible hollow ways.	215m NE	1+450	No	Indirect negative	Not significant

There are no predicted operational impacts to the following LiDAR sites: LI 1–3, 5–6, 8, 11–12, 15, 19, 26–27, 31–33, 35, 39, 41–52, 60–61, 65–68, 71–73, 77–78, 83, and 86–97.

Summary of operational impacts to archaeological assets:

- Profound Negative: 0 sites;
- Very Significant Negative: 0 sites;
- Significant Negative: 0 sites;
- Moderate negative: 5 sites;
- Slight negative: 7 sites;
- Not significant: 6 sites;
- Imperceptible: 2 sites;
- Total: 20 sites

### 14.5.3 Operational Impacts: Architectural Heritage

**Table 14.21 Operational Impacts to Architectural Heritage**

BH No.	RPS; NIAH No.	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection	Potential Impact Type	Potential Impact Level
BH 1	21831013	Rathkeale	Palatine Heritage Centre	0m	0+000	No	Indirect negative	Imperceptible
BH 2	839; 21824059	Ardshanbally	Shanbally House	155m SW	61+700	Yes	Indirect negative	Slight negative
BH 3	21902034	Graigue	Castle Farm House	4m W	56+200	No	Indirect negative	Significant negative
BH 4	298; 21902035	Croagh	Smithfield House	153m S	55+250	Yes	Indirect negative	Moderate negative
BH 5	21826001	Cloonreask	Saint Mary's Roman Catholic Church	160m S	11+950	No	Indirect negative	Imperceptible
BH 6	838; 21824058	Ardshanbally	Ardshanbally House	165m SW	61+700	Yes	Indirect negative	Slight negative
BH 7	301; 21902104	Curraghbridge	O'Neill's thatched building	237m N	60+000	Yes	Indirect negative	Imperceptible
BH 8	21902105	Tuogh	Coolah Bridge	112m SE	59+100	No	Indirect negative	Slight negative
BH 9	21902135	Tuogh	Cregaun House	4m N	59+050	No	Indirect negative	Significant negative
BH 11	21902106	Clonshire Beg	Gate lodge to Clonshire Lodge (main house outside of receiving environment)	138m SE	57+550	No	Indirect negative	Not significant
BH 14	21902101	Tuogh	Tuogh Bridge	250m N	58+150	No	Indirect negative	Slight negative
BH 17	668; 21901005	Robertstown	Saint Roberts's Roman Catholic Church	37m E	2+700	Yes	Indirect negative	Significant negative
BH 20	21901916	Ballycullen	Ballycullen House	106m E	20+600	No	Indirect negative	Significant negative
BH 23	872/21824001	Islandea	Good Lattice Bridge	185m SE	60+850	Yes	Indirect negative	Not significant
BH 24	21902114	Rineroe	Fort Union	5m SE	63+050	No	Indirect negative	Not significant
BH 25	73	Ballyclogh	Concrete Pillbox (1)	22m S	7+100	Yes	Indirect negative	Significant negative

BH No.	RPS; NIAH No.	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection	Potential Impact Type	Potential Impact Level
BH 26	74	Ballyclogh	'Concrete Pill Box (3)'	0m	6+350	Yes	Indirect negative	Very significant negative
BH 27	75	Ballyclogh	Concrete Pillbox (2)	125m S	6+450	Yes	Indirect negative	Moderate negative
BH 29	69	Ballycannon	Duneeven House	22m S	54+350	Yes	Indirect negative	Significant negative
BH 32	18	Ardaneer	Ardaneer Cottage	198m W	2+000	Yes	Indirect negative	Slight negative
BH 34	266	Clonshire More	Hall House	65m S	56+450	Yes	Indirect negative	Significant negative
BH 35	ACA	Adare	Adare Village	Adjacent to S	61+800-62+000	Yes	Indirect positive	Significant positive
BH 36	811	Adare	Adare Manor Demesne wall	Adjacent to S	61+800 to 62+200	Yes	Indirect negative	Not significant
BH 43	667/	Robertstown	Graveyard wall of medieval Church	241m NE	2+550	Yes	Indirect negative	Not significant
BH 47	21902005	Ardgoul South	Wellmount House	230m W	25+900	No	Indirect negative	Not significant

There are no predicted operational impacts to the following built heritage assets: BH 10, 12–13, 15–16, 18–19, 21–22, 28, 30–31, 33, 37–42, 44–46, and 48–49. Summary of operational impacts to archaeological assets:

- Profound Negative: 0 sites;
- Very Significant Negative: 1 sites;
- Significant Negative: 7 sites;
- Significant positive: 1 site;
- Moderate negative: 2 sites;
- Slight negative: 5 sites;
- Not significant: 6 sites;
- Imperceptible: 3 sites;
- Total 25 sites

#### 14.5.4 Operational impacts: Designed Landscapes

**Table 14.22 Operational Impacts to Designed Landscapes**

BH No.	RPS; NIAH No.	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection	Potential Impact Type	Potential Impact Level
DL 1	LI-64-R-311484	Ballyclogh	Ballyclogh House demesne	0m	20+400	House in RPS	Indirect negative	Moderate negative
DL 2	LI-64-R-318488	Ballycullen	Ballycullen House demesne	Adjacent to E	20+400 – 21+400	House proposed for the RPS	Indirect negative	Moderate negative
DL 3	LI-64-R-350455	Ardgoul South	Wellmount House demesne	86m W	26+150	No	Indirect negative	Slight negative
DL 5	LI-64-R-353438	Graigeen / Stoneville	Stoneville House demesne	0m	26+650 – 27+050	House in RPS	Indirect negative	Moderate negative
DL 6	LI-65-r-415437	Croagh	Smithfield House demesne	Adjacent to S	55+100 – 55+500	House in RPS	Indirect negative	Moderate negative
DL 7	LI-65-R-435452	Clonshire Beg	Clonshire Lodge demesne	Adjacent to S	57+500 - 58+000	House in RPS	Indirect negative	Not significant
DL 8	LI-65-R-452475	Curraghbridge	Curraghbridge House demesne	0m	60+250 - 60+400	House in RPS	Indirect negative	Not significant
DL 9	LI-65-R-473461	Adare	Adare Manor demesne	Adjacent to S	59+500 – 62+300	Demesne walls are Protected Structures, ACA, House and range of other buildings in RPS	Indirect negative	Slight negative
DL 12	LI-65-R-414367	Croagh	Grove House	155m S	55+100 - 55+450	No	Indirect negative	Not significant
DL 16	N / A	Corgrig	Corgrig House demesne	0m	1+000	No	Indirect negative	Imperceptible
DL 17	LI-65-R-474483	Mondellihy	Mondellihy House	0m	61+950–63+500	House in RPS	Indirect negative	Imperceptible

There are no predicted impacts to the following designed landscapes: DL 4, 10–11, 13–15, and 18.

Summary of operational impacts to archaeological assets:

- Profound Negative: 0 sites;
- Very Significant Negative: 0 sites;
- Significant Negative: 0 sites;
- Moderate negative: 4 sites;
- Slight negative; 2 sites;
- Not significant: 3 sites;
- Imperceptible: 2 sites;
- Total 11 sites



### 14.5.5 Operational impacts: Cultural Heritage

**Table 14.23 Operational Impacts to Cultural Heritage**

CH No.	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection	Predicted Impact Type	Predicted Impact Level
CH 1	Ardaneer	Vernacular buildings	78m NE	1+650	No	Indirect negative	Slight negative
CH 2	Churchfield	Vernacular buildings	175m E	2+100	No	Indirect negative	Imperceptible
CH 3	Sroolane North	Vernacular buildings	142m E	2+200	No	Indirect negative	Slight negative
CH 7	Rincullia	Vernacular buildings	139m N	4+000	No	Indirect negative	Imperceptible
CH 9	Mulderricksfield	Vernacular building	77m N	5+400	No	Indirect negative	Slight negative
CH 14	Ballyclogh	Possible circular enclosure	50m S	20+200	No	Indirect negative	Moderate negative
CH 18	Cloonreask	Railway	0m	11+300	No	Indirect negative	Slight negative
CH 19	Cloonreask	Cloonreask House	155m W	11+400	No	Indirect negative	Slight negative
CH 20	Coolrahee	Vernacular buildings	25m N	11+900	No	Indirect negative	Slight negative
CH 22	Ballycullen	House	104m SE	20+450	No	Indirect negative	Slight negative
CH 29	Bullaun	Vernacular buildings & limekiln	13m W	24+800	No	Indirect negative	Moderate negative
CH 31	Ardgoul South	Limekiln, in ruins	165m W	26+050	No	Indirect negative	Slight negative
CH 35	Ballingarrane	Former School House	117m E	26+850	No	Indirect negative	Slight negative
CH 37	Ballingarrane/ Kyletaun	Former railway	0m	27+550– 28+450	No	Indirect negative	Significant negative
CH 38	Kyletaun	Vernacular buildings & Limekiln, in ruins	180m E	28+700	No	Indirect negative	Not significant
CH 40	Ballingarrane	Vernacular buildings	80m W	27+650	No	Indirect negative	Slight negative
CH 42	Wolfesburgess East	Vernacular buildings	15m N	50+950	No	Indirect negative	Moderate negative
CH 43	Blossomhill	Vernacular buildings	24m S	51+350	No	Indirect negative	Moderate negative
CH 44	Croagh	Vernacular buildings	28m N	54+450	No	Indirect negative	Slight negative
CH 45	Croagh	Vernacular buildings	65m NW	55+600	No	Indirect negative	Moderate negative

CH No.	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection	Predicted Impact Type	Predicted Impact Level
CH 47	Croagh	Vernacular building	140m SE	55+750	No	Indirect negative	Slight negative
CH 49	Graigue	Clonshire Bridge	0m	56+500	No	Indirect negative	Significant negative
CH 51	Clonshire Beg	Gate lodge, in ruins (also BH 11)	135m S	57+550	No	Indirect negative	Not significant
CH 56	Tuogh	Vernacular buildings	54m N	58+850	No	Indirect negative	Slight negative
CH 60	Kilknockan	Vernacular buildings	143m S	59+800	No	Indirect negative	Slight negative
CH 65	Ardshanbally	Level crossing	0m	61+200	No	Indirect negative	Slight negative
CH 66	Ardshanbally	Railway	0m	61+200	No	Indirect negative	Slight negative
CH 68	Kilgobbin	Level crossing & cottage	15m N	62+650	No	Indirect negative	Moderate negative
CH 69	Kilgobbin	House & outbuildings	60m N	62+950	No	Indirect negative	Slight negative
CH 72	Rineroe	Vernacular building	26m S	64+100	No	Indirect negative	Not significant
CH 85	Lismakeery	Vernacular structures	50m S	21+450	No	Indirect negative	Slight negative
CH 104	Ballyclogh	Pillbox	0m	20+700	No	Indirect negative	Very significant negative
CH 106	Cloonreask	Pillbox	85m S	11+000	No	Indirect negative	Slight negative
CH 107	Mulderricksfield	Pill box	144m N	6+550	No	Indirect negative	Slight negative
CH 109	Ardaneer	Ardaneer cottage	205m W	2+000	Yes Protected Structure (BH 32)	Indirect negative	Slight negative
CH 112	Rincullia	Vernacular structures	85m N	4+150	No	Indirect negative	Slight negative
CH 113	Ballyellinan	Vernacular structures	135m NW	10+400	No	Indirect negative	Slight negative
CH 119	Blossomhill	Vernacular structure	24m	50+600	No	Indirect negative	Slight negative
CH 120	Ballycannon	Site of RC Chapel	31m S	54+400	No	Indirect negative	Moderate negative
CH 123	Ballycullen	Pillbox	200m S	10+550	No	Indirect negative	Slight negative
CH 124	Ballycullen	Pillbox	180m E	10+300	No	Indirect negative	Slight negative
CH 127	Clonshire Beg	Railway	0m	58+000	No	Indirect negative	Slight negative

CH No.	Townland	Classification	Dist. from Proposed Road Development	Approx. Ch	Statutory Protection	Predicted Impact Type	Predicted Impact Level
CH 131	Ballingarrane/ Kyletaun	Railway structure (culvert)	0m	27+550– 28+450	No	Indirect negative	Significant Negative

There are no predicted impacts to the following cultural heritage assets: CH 12–13, 17, 21, 24–28, 30, 32–34, 36, 41, 48, 50, 52–54, 57–59, 70–71, 73–74, 77, 79–81, 83, 86, 94, 96, 105, 108, 110–111, 114, 117–118, 122, and 126, 128–130.

Summary of operational impacts to archaeological assets:

- Profound Negative: 0 sites;
- Very Significant Negative: 1 sites;
- Significant Negative: 3 sites;
- Moderate negative: 7 sites;
- Slight negative; 27 sites;
- Not significant: 3 sites;
- Imperceptible: 2 sites;
- Total 43 sites

## 14.6 Mitigation and Monitoring Measures

The proposed mitigation measures for the archaeological, architectural and cultural heritage are outlined below and detailed in Appendix 14.12.

The proposed mitigation measures for the construction phase are as follows:

### 14.6.1 Mitigation and Monitoring for Archaeology

- Exclusion zones have been defined around a number of recorded monuments and archaeological sites identified during the LiDAR survey which are located within the lands required for construction, in order to allow preservation in situ of all or part of the monuments. These consist of the following assets: AH 4, 24, 64 and LI 13 and 25. As the full extent of AH 64 is currently unknown, there is a potential significant impact to part of the monument during construction.
- Measured survey of upstanding archaeological monuments directly impacted by the proposed road development following removal of vegetation if necessary – including all upstanding ringforts, raths, enclosures. These consist of the following assets: AH 7 and 39.
- A full written and photographic record will be made of the setting of following assets in order to mitigate operational impacts: AH 2, 4, 9, 16, 19, 21, 24, 29, 32, 33, 34, 41, 42, 57, 59, 61, 64, 69 and LI 10, 14, 28, 37, 38, 53, 54, 59, 69, 70.
- A programme of archaeological test excavations will be carried out within the lands made available (LMA) for construction of the proposed road development prior to any construction going ahead. This will target the sites and areas of archaeological and cultural heritage potential (including all AAPs), as well as all known archaeological sites (AH), LiDAR sites (LI), and newly identified archaeological sites resulting from geophysical survey (M/E), as well as previously undisturbed areas within the boundary of the proposed road development.
- Test excavations will be carried out in accordance with Ministerial Directions issued to Limerick City and County Council under Sect. 14A(2) of the National Monuments Acts (1930 – 2014) by the Minister for Culture, Heritage and the Gaeltacht and a TII Project Archaeologist. Full provision will be made available for the excavation leading to preservation by record of any archaeological features and / or deposits that may be identified, if that is deemed the most appropriate manner in which to proceed.

### 14.6.2 Mitigation & Monitoring for Architecture

- Pillboxes BH 25 and CH 104 will be preserved in situ during construction, however both will be subject to a full measured, written and photographic survey to record their form and setting. Pillbox CH 103 will be removed during construction, options for the relocation of the asset to the south, outside of the cutting, will be explored and the asset will be assessed by a conservation engineer, in consultation with a structural engineer, in order to confirm the viability of this option. Whether relocation is possible or not, a full measured, written and photographic survey will be undertaken to record its form and setting. Surveys will be carried out by a suitably qualified person or team in accordance with Ministerial Directions issued to Limerick City and County Council under Sect. 14A(2) of the National Monuments Acts (1930 – 2014) by the Minister for Culture, Heritage and the Gaeltacht and a TII Project Archaeologist.
- BH 1 is located only very slightly within the lands made available for construction. During construction, care will be taken not to impact the structure. Should the

structure need to be fenced off, this will be undertaken prior to and maintained throughout construction.

- A full written and photographic record will be made of the setting of the following assets in order to mitigate operational impacts: BH 2, 3, 4, 6, 8, 9, 14, 17, 20, 25, 26, 27, 29, 32, and 34.
- DL 1, 2, 3, 5, 6, 8, and 9 will be subject to a detailed photographic and written record prior to the construction of the proposed road development in order to mitigate construction and operational impacts. This will be carried out by a suitably qualified person or team in accordance with Ministerial Directions issued to Limerick City and County Council under Sect. 14A(2) of the National Monuments Acts (1930 – 2014) by the Minister for Culture, Heritage and the Gaeltacht and a TII Project Archaeologist.

### 14.6.3 Mitigation & Monitoring for Cultural Heritage

- Exclusion zones have been defined around a number of cultural heritage assets located within the lands required for construction in order to allow preservation in situ. These consist of the following assets: CH 16, 92 and 104.
- Railway culvert CH 131 will be preserved in situ; however, the railway structure will be subject to a full measured, written and photographic survey to record its form and setting prior to construction. All CH sites directly impacted by the proposed road development that include built heritage remains will be subject to a detailed written and photographic survey (to include measured survey and test trenching where appropriate). This includes CH 67, 100, 102, 115, and 132. Culvert CH 132 will also be subject to a measured survey and stone from this asset will be retained for future use. This shall be carried out in accordance with Ministerial Directions issued to Limerick City and County Council under Sect. 14A(2) of the National Monuments Acts (1930 – 2014) by the Minister for Culture, Heritage and the Gaeltacht and a TII Project Archaeologist. Full provision will be made available for the excavation leading to preservation by record of any archaeological features and / or deposits that may be identified, if that is deemed the most appropriate manner in which to proceed.
- A full written and photographic record will be made of the setting of the following assets in order to mitigate operational impacts: CH 1, 3, 9, 14, 18, 19, 20, 22, 29, 31, 35, 37, 40, 42, 43, 44, 45, 47, 49, 56, 60, 65, 68, 69, 85, 106, 107, 109, 112, 113, 119, 120, 123, 124 and 127.
- Archaeological wade or underwater assessments will be carried out at any natural water courses to be impacted upon by the proposed road development by disturbance to their banks or beds. This includes those at:
  - Ardaneer stream (AAP 1/ TB 1 and 54);
  - Shanagolden stream (AAP 2/TB 2; AAP 3/ TB 3);
  - Ahacronane stream (AAP 5/ TB 7, 9 and 10);
  - Unnamed stream where it crosses AAP6/ TB 11;
  - Unnamed stream at AAP 7;
  - Lismakeery stream (AAP 9 / TB 13);
  - Unnamed steam at AAP 10 (TGB 17);
  - Unnamed stream at AAP 12 (TB 20);
  - Cloghatrida stream at AAP 13 (TB 21);
  - Knockaunavad stream at AAP 15;
  - Carrignamedina stream at AAP 16 (TB 24-25); and

- Kilglobbin stream at AAP 21.

This shall be carried out in accordance with Ministerial Directions issued to Limerick City and County Council under Sect. 14A(2) of the National Monuments Acts (1930 – 2014) by the Minister for Culture, Heritage and the Gaeltacht and a TII Project Archaeologist. Full provision will be made available for the excavation leading to preservation by record of any archaeological features and / or deposits that may be identified, if that is deemed the most appropriate manner in which to proceed.

- Any currently surviving section of Townland Boundary to be impacted upon will be subject to a detailed written and photographic survey (to include test trenching where appropriate). This includes all townland boundaries listed in Table 14.9 save for TB 48–52 which has been previously impacted by the construction of the N21. This shall be carried out in accordance with Ministerial Directions in issued to Limerick City and County Council under Sect. 14A(2) of the National Monuments Acts (1930 – 2014) by the Minister for Culture, Heritage and the Gaeltacht and a TII Project Archaeologist. Full provision will be made available for the excavation leading to preservation by record of any archaeological features and / or deposits that may be identified, if that is deemed the most appropriate manner in which to proceed.

## 14.7 Residual Impacts

Once the recommended mitigation measures have been applied, there will be no residual impact on the archaeological, architectural or cultural heritage resource as a result of the construction of the proposed road development.

The mitigation measures proposed to mitigate the impact of the proposed road development on the setting of heritage assets during the operational phase of the road aims to reduce the impact wherever possible.

## 14.8 Difficulties Encountered

Not all land was accessible for field inspection or geophysical survey therefore not all areas were assessed by these methods and additional previously unknown archaeological remains may be located in these areas. However, all areas will be subject to comprehensive testing prior to construction in order to identify any previously unrecorded archaeological remains and allow for appropriate mitigation strategies to be formulated.

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