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## 13 Archaeological, Architectural and Cultural Heritage

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### 13.1 Introduction

This chapter of the EIAR consists of an appraisal of the proposed N6 Galway City Ring Road, hereafter referred to as the proposed road development, under the heading of archaeological, architectural and cultural heritage.

This chapter initially sets out the methodology followed in carrying out the appraisal (**Section 13.2**), describes the receiving environment (**Section 13.3**), and summarises the main characteristics of the proposed road development which are of relevance to the archaeological, architectural and cultural heritage (**Section 13.4**). The evaluation of impacts of the proposed road development on archaeological, architectural and cultural heritage are described (**Section 13.5**), measures are proposed to mitigate these impacts (**Section 13.6**), and residual impacts are described (**Section 13.7**). The chapter concludes with a summary (**Section 13.8**) and reference section (**Section 13.9**).

This chapter has utilised the information gathered during the constraints and route selections studies for proposed road development to inform the archaeological, architectural and cultural heritage impact appraisal. **Sections 4.11, 6.5.6 and 7.6.6** of the **Route Selection Report** examined the archaeological, architectural and cultural heritage constraints within the scheme study area and compared the potential of archaeological, architectural and cultural heritage impacts of the respective route options. These sections of the Route Selection Report contributed to the design of the proposed road development which this chapter appraises. It has also involved further detailed analysis of the archaeological, architectural and cultural heritage resources, including a full field inspection which is further discussed below.

### 13.2 Methodology

#### 13.2.1 Introduction

This study determines, as far as reasonably possible from existing records, the nature of the cultural heritage resource within the footprint of the proposed road development and in the vicinity of the proposed road development using appropriate methods of study. Desk-based assessment is defined as a programme of study of the historic environment within a specified area or site that addresses agreed research and/or conservation objectives. It consists of an analysis of existing written, graphic, photographic and electronic information in order to identify the likely heritage assets, their interests and significance and the character of the study

area, including appropriate consideration of the settings of heritage assets (IFA<sup>1</sup> 2012). This leads to the following:

- Determining the presence of known archaeological and built heritage sites that may be affected by the proposed road development
- Assessment of the likelihood of finding previously unrecorded archaeological remains during the construction programme
- Determining the impact upon the setting of known cultural heritage sites in the surrounding area (receiving environment)
- Suggested mitigation measures based upon the results of the above research

Research for the EIAR has been undertaken in two phases. The first phase comprised a paper survey of all available archaeological, architectural, historical and cartographic sources. The second phase involved a field inspection of the proposed road development.

The study involved detailed interrogation of the archaeological, historical and architectural nature of the receiving environment of the proposed road development. This included information from the Record of Monuments and Places of County Galway, the County and City Development Plans, the topographical files of the National Museum of Ireland and cartographic and documentary records. Aerial photographs of the study area were also consulted. Field inspections were carried out along the route of the proposed road development in December 2015 and July 2016 in an attempt to identify any known cultural heritage sites 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 c. 250m from the edge (proposed development boundary) of the proposed road development<sup>2</sup>. Measurements are taken from the proposed development boundary to the upstanding remains of a site or structure. Where there are no upstanding remains, the measurement is taken to the centre of the site as indicated within **Figures 13.1 to 13.14**.

### 13.2.2 Legislation and Guidelines

The study has been carried out in accordance with the Code of Practice that was agreed between the Transport Infrastructure Ireland (TII) and the Minister for Arts, Heritage, Gaeltacht and the Islands (now the Department of Culture, Heritage and the Gaeltacht, DoCHG) and EPA Guidelines and advice notes (2003 & 2017).

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

- National Monuments Act 1930 to 2014
- The Planning and Development Acts 2000 to 2017

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<sup>1</sup> Institution of Field Archaeologists

<sup>2</sup> NRA guidelines (page 57) recommend a minimum of 50m either side of the road centreline

- 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
- Frameworks and Principles for the Protection of the Archaeological Heritage, 1999, (formerly) Department of Arts, Heritage, Gaeltacht and Islands
- Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act, 2000 and the Local Government (Planning and Development) Act 2000
- Code of Practice for Archaeology agreed between the Minister for Arts, Heritage, Regional, Rural and Gaeltacht Affairs (now the Department of Culture, Heritage and the Gaeltacht) and Transport Infrastructure Ireland, July 2017
- Guidelines for the Assessment of Archaeological & Architectural Heritage Impacts of National Road Schemes, 2005, NRA

### **13.2.3 Data Sources and Consultations**

#### **13.2.3.1 Consultations**

Following the initial research, a number of statutory and voluntary bodies were consulted to gain further insight into the cultural background of the receiving environment and study area, as follows:

- Department of Culture, Heritage and the Gaeltacht – the Heritage Service, National Monuments and Historic Properties Section: Record of Monuments and Places; Sites and Monuments Record; Monuments in State Care Database; Preservation Orders; Register of Historic Monuments
- National Museum of Ireland, Irish Antiquities Division: topographical files of Ireland
- National Inventory of Architectural Heritage: County Galway
- Galway City and County Council: Planning Section
- Study Area and Baseline Data Collection

### 13.2.3.2 Paper Survey

This is a document search. The following sources were examined and a list of areas of archaeological, architectural and cultural heritage potential was compiled:

- Record of Monuments and Places for County Galway
- Sites and Monuments Record for County Galway
- Monuments in State Care Database
- Preservation Orders
- Register of Historic Monuments
- Topographical files of the National Museum of Ireland
- Cartographic and written sources relating to the study area
- Galway County Development Plan 2015 – 2021
- Galway City Development Plan 2011 – 2017 & 2017 – 2023
- Bearna Local Area Plan 2007 – 2017
- National Inventory of Architectural Heritage County Galway (Architectural & Garden Survey)
- Aerial photographs
- Excavations Bulletin (1970 – 2016)
- Place name analysis

**Record of Monuments and Places (RMP)** Section 12 (1) of the National Monuments Act (1994 amendment) 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. Sites recorded on the Record of Monuments and Places all receive statutory protection under the National Monuments Act. All recorded monuments are referred to as Archaeological Heritage (AH sites) within this appraisal.

**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 known to the National Monuments Section as ‘un-located sites’ and cannot be afforded legal protection. As a result, these are omitted from the Record of Monuments and Places. SMR sites are also listed on a website maintained by the DoCHG – [www.archaeology.ie](http://www.archaeology.ie). All Recorded Monuments 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 included.

**National Monuments in the State Care Database** is a list of all the National Monuments in the State guardianship or ownership. Each is assigned a National Monument number whether in guardianship or ownership and has a brief description of each monument.

A National Monument receives statutory protection and is described 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 and its receiving environment.

**Preservation Orders List** 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 four sites that possess 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.

**Register of Historic Monuments** was established under Section 5 of the 1987 amendment to the 1930 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 Places. All registered monuments are included in the Record of Monuments and Places.

**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 on the discovery of sites of archaeological significance.

**Cartographic sources** are important in tracing land use development within the proposed road development area 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 included 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) are referred to as AAPs within this assessment.

The cartographic sources consulted include:

- Down Survey Barony Map of Galway (1654 – 1656)
- Ordnance Survey 6” and 25” maps of Co. Galway (1841, 1895 – 1900, 1928 – 1929)

**Documentary sources** were consulted to compile background information on the archaeological, architectural and cultural heritage receiving environment of the proposed road development area.

**Development Plans** contain a catalogue of all the Protected Structures, archaeological sites and Architectural Conservation Areas within every county. The development plans for County Galway (2015 – 2021), Galway City (2011 – 2017 / 2017 – 2023) and the Bearna Local Area Plan (2007 – 2017) were examined as part of this assessment. All protected structures are referred to as Built Heritage sites (BH) as part of this assessment. There are no Architectural Conservation Areas located within the receiving environment of the proposed road development.

**The National Inventory of Architectural Heritage (NIAH)** is a government based organisation tasked with making a nationwide record of locally, regionally, nationally and internationally significant structures, which in turn provides county councils with a guide as to what structures to list within the Record of Protected Structures. 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 appraisal.

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

**Aerial photographic coverage** is an important source of information regarding the precise location of sites and their extent. It also provides information on the terrain and its likely potential for archaeology. Ordnance Survey aerial photographs (1995, 2000, 2005), Google Earth coverage (2003 – 2012) and Bing Maps were examined for this assessment. All sites identified during cartographic or aerial photographic assessment are identified as Cultural Heritage (CH) sites within this assessment. All

Areas of Archaeological Potential identified during the analysis are referred to as AAPs within this assessment.

**Excavations Bulletin** is a summary publication that has been produced every year since 1970. This summarises every archaeological excavation that has taken place in Ireland during that year up until 2010 and since 1987 has been edited by Isabel Bennett. This information is also available online ([www.excavations.ie](http://www.excavations.ie)) from 1970 – 2016. 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.

**Place Names** are an important part in understanding both the archaeology, history and cultural heritage of an area. Place names can be used for generations and in some cases have been found to have their root deep in the historical past. The main references used for the place name analysis is *Irish Local Names Explained* by P.W Joyce (1870) and the Place Names Database of Ireland.

### 13.2.3.3 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 the 30 of November to the 04 of December 2015 and during sunny conditions on the 26 of July 2016 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 (RMPs/ RPS/ NIAH)
- Visually investigating any suspect landscape anomalies to determine the possibility of their being anthropogenic in origin and of archaeological, architectural or cultural heritage significance

### 13.2.3.4 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.

As part of the assessment, a survey was carried out within one area of archaeological potential identified during the baseline assessment and field inspection. This area is located within the townland of Bushypark and the survey area including an area adjacent to a church and graveyard (BH 7) and a previously unknown platform in the landscape that may possess archaeological potential (CH 38).

The geophysical survey was carried out by Earthsound Archaeological Geophysics on behalf of IAC Ltd for Galway County Council and TII. It took place on the 17 and 18 of November 2016 under licence 16R0190.

### 13.2.4 Impact Evaluation Methodology

The quality and type of a potential impacts can vary to include the following (as per TII's Guidelines for the Assessment of Archaeological/Architectural Heritage Impacts of National Road Schemes (NRA, 2005, 25/54):

*Negative Impact: A change that will detract from or permanently remove an archaeological/architectural monument/structure 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 monument/structure.*

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

*Indirect Impact: Where a feature or site of archaeological/architectural heritage merit or its setting is located in close proximity to the footprint of a potential route alignment.*

*No Predicted Impact: Where the potential 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 sites/structures not subject to statutory protection.

Impact Definitions (as outlined in the TII's Guidelines for the Assessment of Archaeological/Architectural Heritage Impacts of National Road Schemes (NRA, 2005, 54/21), are included in **Table 13.1** and **13.2** below. These have been supplemented with the additional impact definitions as per the most recent EPA guidelines (2017).

**Table 13.1: Impact Definitions: Archaeology**

<b>Type of Impact</b>	<b>Definitions relating to sites of an archaeological nature</b>
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	Effects which, by its character, magnitude, duration or intensity significantly alters the majority 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 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	Effects which causes noticeable changes in the character of the environment but without noticeable consequences
Imperceptible	An impact capable of measurement but without noticeable consequences

**Table 13.2: Impact Definitions: Architecture**

<b>Type of Impact</b>	<b>Definitions relating to sites of an architectural nature</b>
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	Effects which, by its character, magnitude, duration or intensity significantly alters the majority of a sensitive aspect of the environment
Significant	An impact that, 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
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	Effects 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

## 13.3 Receiving Environment

### 13.3.1 Results and Analysis

#### 13.3.1.1 General

The proposed road development traverses the baronies, parishes and townlands listed in **Table 13.3** below. A detailed archaeological and historical background is provided in **Appendix A.13.1**.

**Table 13.3: Baronies, Parishes and Townlands**

Barony	Parish	Townland
Galway	Rahoon	Na hAille, Ballynahown East, Bushypark, An Cheapach, An Chloch Scoilte, Na Foráí Maola Thoir, Na Foráí Maola Thiar, Kentfield, Mincloon, An Baile Nua, Rahoon, Troiscaigh Thoir, Troiscaigh Thiar, Ballard West, Ballard East, Keeraun, Letteragh, Ballagh, Barnacranny, Dangan Upper, Dangan Lower
	St. Nicholas	An Caisleán Gearr, Cappanabornia, Parkmore, Ballybrit
Galway	Oranmore	Ballindooley, Mionlach, Pollkeen, Doughiska
Dunkellin		Breanloughaun, Coolagh

#### 13.3.1.2 Recorded Monuments (AH sites) within the Receiving Environment

A total of 41 Archaeological Heritage sites (AH) are recorded within the receiving environment of the proposed road development (**Table 13.4**). However, the existing Sites and Monuments Record (SMR) and Record of Monuments and Places (RMP) is 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, five redundant records are included within the 41 sites, which will be removed from the SMR. These sites have been classed by the DoCHG as being non-archaeological.

A further eight sites are proposed for removal due to their relatively recent date (AH 9, 10, 12, 17, 20, 27, 38, 39). Two sites will be removed from the Record as they are no longer extant having already been removed from the landscape due to quarrying (AH 18, 19). Two further sites will be removed from the record as they have been removed by modern development (AH 30, 31). One of the sites represents a series of probable prehistoric burnt mounds that have been excavated (AH 36). The entry is not proposed for removal from the record.

Four of the recorded sites within the townland of Ballybrit are further protected with Preservation Orders and as such are deemed to be of national importance (AH 32 - 35).

Of the 41 sites, nine are also classed as Protected Structures within the Galway City Development Plan (2017 – 2023). As such, these sites are also subject to statutory protection under the Planning and Development Act, 2000, as amended (AH 4, 15, 16, 22, 23, 25, 29, 33, 41).

The detail relating to each AH site is included in **Appendix A.13.2** of this EIAR and marked on **Figures 13.1.1 to 13.1.14**.

**Table 13.4: Archaeological Heritage (AH) sites located within the receiving environment**

AH No.	RMP No.:	Townland:	Classification:	Approx. Ch.	Dist. from proposed road development	Statutory protection
AH 1 <sup>3</sup>	GA093-009	Na Foraf Maola Thiar	Redundant record: non-antiquity	0+500	9m east	None
AH 2	GA082-077	Rahoon	Bullaun Stone	6+850	0m	RMP
AH 3 <sup>4</sup>	GA082-040	Dangan Lower	Redundant record: non-antiquity	8+350	57m southeast	None
AH 4 <sup>5</sup>	GA094-047	Rahoon	House (Rahoon House) Also BH 18)	N59 Link Road South 3+350	153m southeast	RMP
AH 5	GA094-056	Rahoon	Designed Landscape Feature	Gort na Bró Road	61m southwest	RMP
AH 6	GA082-104	Bushypark	Enclosure	9+100	195m northwest	RMP
AH 7 <sup>6</sup>	GA082-032	Dangan Lower	Redundant record: non-antiquity	8+750	86m northeast	None
AH 8	GA082-039	Dangan Lower	Children's Burial Ground	8+850	60m northeast	RMP
AH 9 <sup>7</sup>	GA082-087	Mionlach	Settlement cluster	9+800	To the immediate north of the area proposed for habitat enhancement for bats. 573m northwest of proposed road development.	None

<sup>3</sup> Scheduled for removal from the RMP/SMR – 19/07/16

<sup>4</sup> Scheduled for removal from the RMP/SMR – 19/07/16

<sup>5</sup> Scheduled for removal from the RMP/SMR – 19/07/16

<sup>6</sup> Scheduled for removal from the RMP/SMR – 19/07/16

<sup>7</sup> Scheduled for removal from the RMP/SMR – 30/07/17

AH No.	RMP No.:	Townland:	Classification:	Approx. Ch.	Dist. from proposed road development	Statutory protection
AH 10 <sup>8</sup>	GA082-041	Dangan Lower	Well	8+650	173m east-southeast	None
AH 11	GA082-033	Dangan Lower	Barrow	8+700	198m southeast	RMP
AH 12 <sup>9</sup>	GA082-036	Dangan Lower	Site of House (Dangan House)	9+150	90m northwest	RMP
AH 13	GA082-085	Dangan Lower	Designed Landscape Feature	9+050	112m east-southeast	RMP
AH 14	GA082-038	Dangan Lower	Designed Landscape Feature	9+150	140m southeast	RMP
AH 15	GA082-037	Dangan Lower	Summer house (Also BH 9)	9+300	72m southeast	RMP
AH 16	GA082-064/001	Mionlach	House – 17 <sup>th</sup> century, Castle, unclassified (Also BH 10)	9+375	Adjacent to the area proposed for habitat enhancement for bats. 140m northwest of proposed road development	RMP
AH 17 <sup>10</sup>	GA082-100	Mionlach	Clearance cairn	9+500	Within the proposed for habitat enhancement for bats. 167m northwest of proposed road development	None
AH 18 <sup>11</sup>	GA082-031	Coolagh	Enclosure	11+350	0m	None
AH 19 <sup>12</sup>	GA082-095	Coolagh	Ringfort	11+400	0m	None
AH 20 <sup>13</sup>	GA082-003	Ballindooley	Quarry	12+025	81m north	RMP

<sup>8</sup> Scheduled for removal from the RMP/SMR – 19/07/16

<sup>9</sup> Scheduled for removal from the RMP/SMR – 19/07/16

(Note as of 21/06/17 no changes have occurred within the Record re schedules for exclusion and inclusion)

<sup>10</sup> Scheduled for removal from the RMP/SMR – 19/07/16

<sup>11</sup> Removed by quarrying - Scheduled for removal from the RMP/SMR – 19/07/16

<sup>12</sup> Removed by quarrying - Scheduled for removal from the RMP/SMR – 19/07/16

<sup>13</sup> Scheduled for removal from the RMP/SMR – 19/07/16

AH No.	RMP No.:	Townland:	Classification:	Approx. Ch.	Dist. from proposed road development	Statutory protection
AH 21 <sup>14</sup>	GA082-004	Ballindooley	Redundant record: non-antiquity	12+200	131m east-northeast	None
AH 22	GA082-060	Mionlach	Pillar stone (Also BH 23)	9+850	68m north of proposed habitat enhancement for bats. 530m northwest of proposed road development.	RMP
AH 23	GA082-023	An Caisleán Gearr	Chapel (site of) (Also BH 14)	13+075	80m north	RMP
AH 24 <sup>15</sup>	GA082-026	An Caisleán Gearr	Redundant record: non-antiquity	12+975	0m	None
AH 25	GA082-021	An Caisleán Gearr	Tower house (Also BH 13)	12+950	220m south	RMP
AH 26	GA082-022	An Caisleán Gearr	Children's burial ground	13+500	73m southwest	RMP
AH 27 <sup>16</sup>	GA082-072	Parkmore	Quarry	14+000	0m	None
AH 28	GA082-016	Ballybrit	Anomalous stone group	14+850	124m southwest	RMP
AH 29	GA082-011/001-2	Ballybrit	Cashel, souterrain, children's burial ground (Also BH 17)	15+150	40m southwest	RMP
AH 30 <sup>17</sup>	GA082-017	Ballybrit	Earthwork	City East Business Park Junction	0m	RMP
AH 31 <sup>18</sup>	GA082-015	Ballybrit	Designed landscape feature	City East Business Park Junction	57m south	None
AH 32	GA082-012002	Ballybrit	Deserted medieval settlement	14+500	226m northeast of the City East Business Park Junction	RMP/ Preservation Order

<sup>14</sup> Scheduled for removal from the RMP/SMR – 19/07/16

<sup>15</sup> Scheduled for removal from the RMP/SMR – 19/07/16

<sup>16</sup> Scheduled for removal from the RMP/SMR – 19/07/16

<sup>17</sup> Removed by development - Scheduled for removal from the RMP/SMR – 19/07/16

<sup>18</sup> Removed by development - Scheduled for removal from the RMP/SMR – 19/07/16

<b>AH No.</b>	<b>RMP No.:</b>	<b>Townland:</b>	<b>Classification:</b>	<b>Approx. Ch.</b>	<b>Dist. from proposed road development</b>	<b>Statutory protection</b>
AH 33	GA082-012001	Ballybrit	Tower house (Also BH 16)	14+500	250m northeast of the City East Business Park Junction	RMP/ Preservation Order
AH 34	GA082-014	Ballybrit	Enclosure	15+050	110m northeast of the City East Business Park Junction	RMP/ Preservation Order
AH 35	GA082-013/001	Ballybrit	Ringfort & house (unknown date)	15+050	165m northeast of the City East Business Park Junction	RMP/ Preservation Order
AH 36 <sup>19</sup>	GA082-043/001-4	Doughiska	Fulachta fia	16+400	0m	RMP
AH 37	GA082-044	Doughiska	Road	16+350	43m west southwest	RMP
AH 38 <sup>20</sup>	GA082-063	Mionlach	Designed landscape feature	9+550	Adjacent to proposed habitat enhancement for bats. 448m northwest of proposed road development.	None
AH 39 <sup>21</sup>	GA082-062	Mionlach	Designed landscape feature	9+650	Within proposed habitat enhancement for bats. 448m northwest of proposed road development	None
AH 40	GA082-061	Mionlach	Burial ground	9+600	Adjacent to proposed habitat enhancement for bats. 577m northwest of proposed road development.	RMP

<sup>19</sup> Fully excavated (Excavation Ref.: A024/1.1, E2052)

<sup>20</sup> Scheduled for removal from the RMP/SMR – 30/06/17

<sup>21</sup> Scheduled for removal from the RMP/SMR – 30/06/17

AH No.	RMP No.:	Townland:	Classification:	Approx. Ch.	Dist. from proposed road development	Statutory protection
AH 41	GA082-070	Mionlach	Gate house (Also BH 21)	9+750	50m east of proposed habitat enhancement for bats. 406m northwest of proposed road development.	RMP

Of the 41 AH sites that have been identified seven of the sites are recorded within the footprint of the proposed road development. However, two of the sites have already been removed by quarrying (AH 18, 19); one site has been removed by existing development (AH 31) and one area has already been subject to archaeological excavation (AH 36). AH 24 is listed as a non-antiquity and AH 27 is listed as a quarry and as such does not possess archaeological significance. AH 2 is listed as the site of a bullaun stone; however, no trace of the feature has been identified during the course of this assessment.

Two further sites are located within the proposed development boundary which is outside the footprint of the proposed road development but required for habitat planting in Mionlach. AH 39 is listed as a designed landscape feature and is not considered to possess archaeological significance as it is scheduled for removal from the SMR/RMP. Similarly, AH 17, which is listed as a clearance cairn within this proposed habitat planting area is also scheduled for removal. A further designed landscape feature is located immediately adjacent to the proposed habitat planting area (AH 38), along with a recorded burial ground, located to the immediate west of the proposed habitat planting area (AH 40). Menlo Castle (AH 16) is located c. 140m northwest of the proposed road development. However, the edge of the habitat planting area is located to the immediate east of the castle structure.

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

Information from the NMI topographical files listed a stone ard fragment (1987:184) and an iron axehead (1983:61) recovered from the townland of Dangan Lower. A number of lithic artefacts are listed under the townland of Mionlach, including seven stone axeheads of 'Shannon type' (KK131129, 2005C1:802, 1638:W307, 1637:W306, 1636:W305, 1635:W304, 1634:W30322); a collection of twenty blades of various geologies (1280:W5) and a chert blade (2005C1:801). A 'beehive' type quern top and base (2011:252) have also been recovered from the townland of An Caisleán Gearr. Details relating to the finds are listed in **Appendix A.13.3**.

<sup>22</sup> Polished stone axeheads of Neolithic date

### 13.3.1.4 Protected Structures (BH sites) within the Receiving Environment

A review of the Galway City Development Plan and Galway County Development Plan, has shown that a total of 27 Protected Structures (BH sites) are recorded within the study area of the proposed road development (**Table 13.5**). Six of the structures are also listed within the National Inventory of Architectural Heritage (NIAH) (see **Section 13.3.1.6**).

Of the 27 structures, nine are also classed as Recorded Monuments (BH 9, 10, 13, 14, 16, 17, 18, 21, 23). As such, these sites are also subject to statutory protection under the National Monuments Act.

The detail relating to each BH site is included in **Appendix A.13.4** of this EIAR and marked on **Figures 13.1.01 to 13.1.14**.

**Table 13.5: Built Heritage (BH) sites located within the receiving environment**

BH No.:	RPS No.:	Townland:	Classification:	Approx. Ch.	Dist. from proposed road development	NIAH
BH 1	6302	Mincloon	Thatched cottage	6+150	53m northwest	No
BH 2	6301	Mincloon	Thatched cottage	6+400	183m southeast	No
BH 3 <sup>23</sup>	2001	Barnacranny	Gate pillars	8+450	Adjacent	No
BH 4	2901	Barnacranny	Thatched cottage	8+450	6m southwest	Yes
BH 5	1504	Kentfield	Bushypark House	N59 Link Road North 0+000	60m northeast	Yes
BH 6	1503	Ballagh	Thatched Cottage	N59 Link Road North 0+050	124m northwest	No
BH 7	1501/02	Ballagh	Church	N59 Link Road North 0+060	20m southeast	Yes
BH 8 <sup>24</sup>	3003	Ballagh	Remains of stone fort	8+950	184m east-northeast	No
BH 9	3001	Dangan Lower	Summer house (Also AH 15)	9+300	72m southeast	No
BH 10	5702	Mionlach	Menlo Castle (Also AH 16)	9+350	140m northwest of proposed road development	Yes
BH 11	2402	Coolagh	Thatched cottage	10+750	63m northwest of the proposed	No

<sup>23</sup> No evidence of gate pillars at this location

<sup>24</sup> No evidence of this site type at this location

<b>BH No.:</b>	<b>RPS No.:</b>	<b>Townland:</b>	<b>Classification:</b>	<b>Approx. Ch.</b>	<b>Dist. from proposed road development</b>	<b>NIAH</b>
					development at Lackagh Quarry	
BH 12	1703	An Caisleán Gearr	Thatched cottage	12+875	0m	Yes
BH 13	1701	An Caisleán Gearr	Tower House (Also AH 25)	12+950	220m south	No
BH 14	1702	An Caisleán Gearr	Chapel, site of (Also AH 23)	13+100	80m north	No
BH 15	7601	Parkmore	Two ruined cottages	13+800	99m southwest	No
BH 16	701	Ballybrit	Tower House (Also AH 33)	14+500	250m northeast of the City East Business Park Junction	No
BH 17	702	Ballybrit	Cashel (Also AH 29)	15+150	40m southwest	No
BH 18	8301	Rahoon	Rahoon House (Also AH 4)	N59 Link Road South 3+350	153m southeast	No
BH 19	8301	Rahoon	Entrance to Rahoon House	N59 Link Road South 3+300	188m southeast	Yes
BH 20	1705	An Caisleán Gearr	Free standing stone cross	13+450	162m southwest	No
BH 21	5703	Mionlach	Gate house (Also AH 41)	9+750	406m northwest of proposed road development. 50m east of area proposed for habitat planting	Yes
BH 22	5710	Mionlach	Thatched cottage	9+800	522m northwest of proposed road development. 53m north of area proposed for habitat planting	Yes
BH 23	5704	Mionlach	Pillar stone (Also AH 22)	9+850	530m northwest of proposed road development 68m north of area proposed for habitat planting	No
BH 24	5709	Mionlach	Thatched cottage	9+850	586m northwest of proposed road development.	Yes

BH No.:	RPS No.:	Townland:	Classification:	Approx. Ch.	Dist. from proposed road development	NIAH
					97m north of area proposed for habitat planting	
BH 25	5708	Mionlach	Thatched cottage	9+000	596m northwest of proposed road development. 163m north of area proposed for habitat planting	Yes
BH 26	5707	Mionlach	Thatched cottage	9+950	645m northwest of proposed road development. 191m north of area proposed for habitat planting	Yes
BH 27	5711	Mionlach	Thatched cottage	9+950	319m northwest of proposed road development. 200m northeast of area proposed for habitat planting	Yes

Of the 27 Protected Structures, one is located within the footprint of the proposed road development. This consists of a single storey thatched cottage within the townland of An Caisleán Gearr (BH 12). The structures identified at Mionlach (BH 21-27) are located within the receiving environment of the area proposed for habitat planting rather than the proposed road development.

### 13.3.1.5 National Inventory of Architectural Heritage structures (BH sites) within the Receiving Environment

A review of the National Inventory of Architectural Heritage (NIAH) has shown that there are 13 NIAH structures located within the receiving environment of the proposed road development (**Table 13.6**). All of these structures are listed as protected in the Galway City Development Plan. In addition, two of the buildings are also Recorded Monuments (Menlo Castle BH 10/AH 16 and Menlo Castle Gate house BH 21/AH 41).

Inclusion within the NIAH does not confer statutory protection. However, as the buildings are listed within the Record of Protected Structures, these buildings are subject to statutory protection under the Planning and Development Act (2000).

The detail relating to each BH site is included in **Appendix A.13.4** of this EIAR and marked on **Figures 13.1.01 to 13.1.14**.

**Table 13.6: National Inventory of Architectural Heritage (BH) sites located within the receiving environment**

BH No.	NIAH No.	Townland	Classification	Approx. Ch.	Dist. from proposed road development	RPS
BH 4	30408205	Barnacranny	Thatched cottage	8+450	6m southwest	Yes
BH 5	30408203	Bushypark	Bushypark House	N59 Link Road North 0+000	60m northeast	Yes
BH 7	30408204	Ballagh	Church	N59 Link Road North 0+060	20m southeast	Yes
BH 10	30408220	Mionlach	Menlo Castle (Also AH 16)	9+350	Adjacent to the area proposed for habitat planting. 140m northwest of proposed road development	Yes
BH 12	30408211	An Caisleán Gearr	Thatched cottage	12+875	0m	Yes
BH 19	30311001	Rahoon	Entrance to Rahoon House	N59 Link Road South 3+300	188m southeast	Yes
BH 20	30408212	An Caisleán Gearr	Free standing stone cross	13+450	162m southwest	Yes
BH 21	30408219	Mionlach	Gate house (Also AH 41)	9+750	406m northwest of proposed road development. 50m east of area proposed for habitat planting	Yes
BH 22	30408216	Mionlach	Thatched cottage	9+800	522m northwest of proposed road development. 53m north of area proposed for habitat planting	Yes
BH 24	30408215	Mionlach	Thatched cottage	9+850	586m northwest of proposed road development. 97m north of area proposed for habitat planting	Yes
BH 25	30408214	Mionlach	Thatched cottage	9+000	596m northwest of proposed road development	Yes

BH No.	NIAH No.	Townland	Classification	Approx. Ch.	Dist. from proposed road development	RPS
					163m north of area proposed for habitat planting	
BH 26	30408213	Mionlach	Thatched cottage	9+950	645m northwest of proposed road development. 191m north of area proposed for habitat planting	Yes
BH 27	30408217	Mionlach	Thatched cottage	9+950	319m northwest of proposed road development. 200m northeast of area proposed for habitat planting	Yes

### 13.3.1.6 Architectural Conservation Areas (ACAs) within the Receiving Environment

A review of the Galway City Development Plan and Galway County Development Plan, has shown that there are no ACAs located within the receiving environment of the proposed road development. The closest ACA, Bearna Village and environs, is located over 940m to the southeast of the proposed road development.

### 13.3.1.7 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 nine designed landscapes have been identified within the receiving environment of the proposed road development (**Table 13.7**). Of these, four are associated with a principal structure that is listed as protected within the Galway City Development Plan. 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 18<sup>th</sup> 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 clumps of deciduous and specimen trees.

The identified designed landscapes are listed in **Table 13.7** and described in more detail in **Appendix A.13.5** of this EIAR and shown on **Figures 13.1** to **13.14**.

**Table 13.7: Designed Landscapes (DL) located within the receiving environment**

DL No.:	Townland:	Description:
DL 1	Bearna, Cluain na nGabhar, Gort na Leice, An Roisín, An Seanbhaile Dubh, Baile an Mhóinín Thoir	Barna House and demesne. Marked as a substantial demesne on the first edition OS map covering several townlands. NIAH garden survey lists it as ‘Main features unrecognisable – peripheral features visible’ <sup>25</sup> . Barna House is a protected structure. The northwest corner of the demesne is located c. 143m southeast of the proposed road development.
DL 2	Rahoon	Rahoon House and demesne. The house and a large demesne landscape are marked on the first edition OS map. The principal structure does survive today and is a protected structure (BH 18), but is surrounded by modern residential development. As such, the demesne has almost completely lost its original character. NIAH garden survey lists it as ‘Virtually no recognisable features’ <sup>26</sup> . A proposed link road will run through the northwest corner of the original demesne.
DL 3	Kentfield	Glenlo Abbey demesne. The house is named as ‘Glenlough’ on the first edition OS map and occupies a large demesne landscape. The early 20 <sup>th</sup> Century map shows it renamed as ‘Glenlo Abbey’. The NIAH garden survey records it as ‘Main features unrecognisable – peripheral features visible’ <sup>27</sup> . The principal structure is not a protected structure. The southeast corner of the demesne is located to the immediate north of the proposed road development where it extends along the N59 Moycullen Road.
DL 4	Bushypark	Bushypark House demesne. Marked on the first edition OS map as a modest demesne. The NIAH garden survey lists it as ‘Main features substantially present – peripheral features unrecognisable’ <sup>28</sup> . The principal structure is still extant (BH 5) and is listed as a protected structure. The proposed link road will terminate to the immediate southwest of the demesne and associated drainage infrastructure will extent through the eastern portion of the demesne.
DL 5	Barnacranny	Lake View House and demesne. Shown on the first edition OS map but not shaded. Not included within the NIAH garden survey. The house is still extant today but the garden has been

<sup>25</sup> NIAH Garden Ref.: GA-45-M-248237<sup>26</sup> NIAH Garden Ref.: GA-45-M-273253<sup>27</sup> NIAH Garden Ref.: GA-45-M-267283<sup>28</sup> NIAH Garden Ref.: GA-45-M-272278

DL No.:	Townland:	Description:
		<p>impacted upon by modern residential development (CH 39).</p> <p>The north-eastern side of the demesne is located to the immediate south of the proposed road development where it extends along the N59 Moycullen Road.</p>
DL 6	Dangan Upper	<p>Ashley Park demesne. This house is marked within a demesne landscape on the first edition OS map.</p> <p>The NIAH garden survey records it as ‘possessing virtually no recognisable features’<sup>29</sup>. Whilst the principal structure remains extant today (CH 40, the remainder of the landscape has been covered with residential development.</p> <p>The north-eastern side of the demesne is located to the immediate south of the proposed road development where it extends along the N59 Moycullen Road.</p>
DL 7	Dangan Lower	<p>Dangan Cottage, Dangan House, Dangan Nunnery, Mary Ville demesnes.</p> <p>The first edition OS map shows a large demesne landscape containing a number of large structures although the boundaries between them are not clear.</p> <p>The NIAH garden survey only includes an entry for Dangan House (which actually refers to Dangan Cottage). It reports ‘virtually no recognisable features remain’<sup>30</sup>.</p> <p>The proposed road development travels in a north-east direction through the original demesne lands.</p>
DL 8	Mionlach	<p>Menlo Castle Demesne. The NIAH garden survey records it as ‘Main features unrecognisable – peripheral features visible’<sup>31</sup>. Today the principal structure survives in ruins on the site (BH 10) and there has been a small amount of modern development in the northern part of the demesne.</p> <p>For the most part it remains as green fields, although has been subject to division to suit farming requirements. Some woodland survives within the former demesne, but only a small percentage when compared to the historic mapping.</p> <p>The principal structure and its entrance are both protected structures.</p> <p>The proposed road development travels in a north-east direction through the original demesne lands. The western part of the original demesne is located within an area of proposed for habitat enhancement.</p>
DL 9	Ballybrit	<p>Ballybrit House demesne. Today the demesne is completely covered by development and a road and as such nothing survives. The NIAH garden survey</p>

<sup>29</sup> NIAH Garden Ref.: GA-45-M-283271

<sup>30</sup> NIAH Garden Ref.: GA-45-M-284274

<sup>31</sup> NIAH Garden Ref.: GA-45-M-284278

DL No.:	Townland:	Description:
		lists the area as possessing 'virtually no recognisable features' <sup>32</sup> . A short section of proposed existing infrastructure upgrade is located in the northeast corner of the original demesne landscape location.

### 13.3.1.8 Summary of Previous Archaeological Investigations within the Receiving Environment

A review of the Excavations Bulletin (1970 – 2016) has revealed that a number of archaeological investigations have been carried out within the receiving environment of the proposed road development. These are summarised below in **Table 13.8**.

**Table 13.8: Summary of Previous Archaeological Fieldwork carried out within the receiving environment**

Excavations Bulletin Ref.:	Licence Ref.:	Townland:	Description:
2001:497	01E0992	Coolagh/ An Caisleán Garr/ Ballybrit/ Parkmore/ Cappanabornia/ Glenanail/ Ballybaan Beg,	Nothing of archaeological significance was identified during the course of monitoring 4.1km of pipeline construction.
2002:0724	02E1327	Dangan Lower	Archaeological testing adjacent to a recorded ring barrow (AH 11) revealed no features of archaeological significance.
2005:579 & 2006:779	Ministerial Dir.: A024/1.3 & A024/5 E2435	Coolagh	Archaeological testing and full excavation was carried out prior to the development of the existing N6. A possible cashel (53m x 60m) was identified in the townland of Coolagh within the footprint of the proposed road development (although an associated annex wall was noted to the south of the proposed development boundary). A secure date for the site was not obtained due to the lack of stratified finds. However, a red bead and fragments of lignite bracelet as well as two possible lime kilns were noted within the interior along with the oval foundations of a stone structure. It is possible the site represents an earlier medieval cashel. The site is located to the immediate east of the eastern end of the proposed road development where it extends along the existing N6.

<sup>32</sup> NIAH Garden Ref.: GA-46-M-333272

<b>Excavations Bulletin Ref.:</b>	<b>Licence Ref.:</b>	<b>Townland:</b>	<b>Description:</b>
2000:0368	00E0144	Ballinfoyle, Glenanail, An Caisleán Gearr	Monitoring of the Terryland drainage scheme in the landscape to the north of the existing N6 failed to identify any features of archaeological significance.
2005:592 2006:790	A024/1.1 E2052	Doughiska	A series of burnt mounds were found during testing and then excavated immediately adjacent to the current proposed road development (AH 36), as part of an earlier phase of construction associated with the existing N6. Only one shallow pit was found with the remains. Presumed to be prehistoric in date.
2008:540	E3588	Doughiska	During monitoring associated with the construction of the existing N6, a well was identified c. 100m SSW of the current proposed road development. It was deemed to be post medieval in date.
2012:279	12E0055	Na hAille, An Cheapach	Nothing of archaeological significance discovered during monitoring associated with an 110kv electricity line.
1997:194	97E0341	An Caisleán Gearr	Archaeological testing to the immediate west of AH 25/BH 13 failed to identify any features of archaeological significance.
1998:237	98E0498	An Caisleán Gearr	In 1998 archaeological testing was carried out at the site of a souterrain, which was identified in 1967 c.100m south of the current proposed road development. Reports of the time (1968) also indicated the discovery of a number of skeletons. However, testing in 1998 in the area failed to identify any archaeology – it is possible that previously identified archaeological remains were removed during the intervening years during land clearance.
N/a	14R0089	Ballybrit	As part of the constraints and route selection stage of the proposed road development, a geophysical survey was carried out at the centre of Galway Racecourse at Ballybrit in 2014. Both magnetometry & targeted electromagnetic induction (quadrature) survey were carried out. The survey indicated that widespread disturbance had taken place across the site. Some potential archaeological anomalies were noted in small areas across the site, but no responses were noted as being definitively archaeological.

### 13.3.1.9 Aerial Photographic Analysis

Analysis of a number of aerial photographic data sets was carried out as part of this appraisal. These included:

- Google Earth vertical aerial photographs, 2003, 2005, 2006, 2007, 2009, 2011, 2012
- Ordnance Survey Ireland vertical aerial photographs, 1995, 2000, 2005
- Bing.com vertical aerial photographs (Digital Globe), 2012

One site of archaeological potential was identified within the townland of Mionlach. This consists of a discrete circular anomaly visible within the Digital Globe data set (CH 46). The anomaly corresponds to a circular feature depicted on the 25-inch OS mapping (1895 – 1900). This feature may relate to the demesne landscape (DL 8) associated with Menlo Castle (AH 11/ BH 2).

### 13.3.1.10 Results of Field Inspection

The field inspection sought to assess the route of the proposed road development, its previous and current land use, the topography and to confirm the presence of any areas or sites of archaeological potential. During the course of the field investigation the full extent of the route of the proposed road development, and, where practicable, its immediate surrounding environs were inspected for known or previously unknown archaeological sites. The inspection was carried out in windy and wet conditions between the 30 of November to the 04 of December 2015 and during sunny conditions on the 26 of July 2016.

The route of the proposed road development traverses approximately 16.8km of ground which describes a generally northeast- southwest arcing corridor from the townland of An Baile Nua west of Bearna to Coolagh to the east of Galway City. The proposed road development traverses, for the most part, undeveloped, agricultural land. Extended areas of the route of the proposed road development are overgrown with gorse and bramble. The proposed road development is divided into two distinct sections by the River Corrib at Dangan/Menlough. This watercourse also represents the boundary of a clear geological divide between the western and eastern sections of the proposed road development. To the west of the N59 Moycullen Road, the underlying geology is granite and the landscape is characterised by a pattern of irregularly shaped, undulating enclosed fields delineated by drystone granite walls. Stretches of exhausted blanket bog are also common and many fields, particularly in the vicinity of Bearna have been left fallow and are entirely overgrown and inaccessible. To the east of the River Corrib, the underlying geology is limestone and the landscape is characterised by a pattern of larger, generally rectangular fields of improved bog pasture. The notable exceptions to this pattern were encountered within the overgrown demesne landscape of Menlough which comprises small overgrown fields covered in dense hazel and ivy growth and in the vicinity of the limestone quarry in Coolough, Lackagh Quarry, where extended areas of bare limestone pavement were observed.

A full record of the field inspection, including a summary of those areas that were not accessible, is included in **Appendix 13.6** of this EIAR. Photographs illustrating

a variety of sites are included in **Appendix 13.7** and the route of the proposed road development and various sites are shown on **Figures 13.1.01 to 13.1.14**.

### 13.3.1.11 Previously Unrecorded Sites/ Structures of Cultural Heritage Merit

A number of previously unrecorded sites and structures of archaeological and architectural heritage merit have been identified during the course of this appraisal through the analysis of historic mapping, aerial photographs and field inspections. In order to reflect the fact that these sites are not subject to statutory protection, they have been listed as Cultural Heritage sites (CH). These are included in **Table 13.9** and shown on **Figures 13.1.01 to 13.1.14**.

**Table 13.9: Previously Unrecorded sites of Cultural Heritage merit located within the receiving environment**

CH No.	Townland:	Description:	Approx. Ch.	Dist. from proposed road development
CH 1	Na Foráí Maola Thiar	Site of vernacular structures marked on 1841 first edition map. No longer extant	0+150	15m west
CH 2	Na Foráí Maola Thiar	Site of vernacular structures marked on 1841 first edition OS map. No longer extant	0+130	0m
CH 3	Na Foráí Maola Thiar	Single storey vernacular cottage marked on the 1895 – 1900 25” OS map	0+175	145m east
CH 4	Na Foráí Maola Thiar	Sub-circular stone enclosure (Also AH 1 redundant record)	0+500	7m east
CH 5	Na Foráí Maola Thiar	Site of ruined vernacular structures marked on the 1841 first edition OS map	0+450	72m east
CH 6	Troscaigh Thiar	Single storey vernacular cottage marked on the 1895 – 1900 25” OS map	1+550	77m north-northwest
CH 7	Na Foráí Maola Thoir	Single storey vernacular cottage marked on the 1841 first edition OS map	1+500	10m south
CH 8	Troscaigh Thiar	Walled laneway marked on the 1841 first edition OS map	1+950	0m
CH 9	Troscaigh Thiar	Possible famine bridge	1+650	119m northeast
CH 10	Troscaigh Thiar	Site of a post medieval sheep fold. No longer extant	2+110	0m
CH 11	Troscaigh Thiar	Single storey vernacular cottage marked on the 1895 – 1900 25” OS map	2+250	17m west

CH No.	Townland:	Description:	Approx. Ch.	Dist. from proposed road development
CH 12	Troscaigh Thiar	Ruins of a vernacular building marked on the 1895 – 1900 25” OS map	2+150	140m west
CH 13	Troscaigh Thoir	Vernacular cottage and associated farm buildings. Some marked on the 1841 first edition OS map	2+400	33m south
CH 14	An Chloch Scoilte	Vernacular cottage. Marked on the 1895 – 1900 25” OS map	2+700	102m northwest
CH 15	An Chloch Scoilte	Ruins of a vernacular cottage. Marked on the 1895 – 1900 25” OS map.	2+800	210m north
CH 16	An Chloch Scoilte	The ruinous remains of the post medieval settlement of An Chloch Scoilte. The first edition OS map shows 18 structures in this area. By the time of the 1895-1900 25” OS map only six structures remain with a further two shown in ruins. Today four ruined structures survive along with one cottage that is still inhabited	2+900	191m north
CH 17	Troscaigh Thoir	Vernacular cottage, now extended. Marked on the 1895 –1900 25” OS map	3+075	146m south-southeast
CH 18	An Chloch Scoilte	Vernacular cottage, now extended. Marked on the 1895 –1900 25” OS map	3+260	0m
CH 19	An Cheapach	Vernacular cottage and associated farm building. Marked on the 1841 first edition OS map	4+350	116m north-northwest
CH 20	An Cheapach	Vernacular cottage and outbuildings. Marked on the 1895 – 1900 25” OS map	4+340	10m south
CH 21	An Cheapach	Site of vernacular structures marked on the 1841 first edition OS map. No longer appears to be extant	4+520	14m north
CH 22	An Cheapach	Group of ruined vernacular structures marked on the 1841 first edition OS map	4+450	20m east
CH 23	An Cheapach	Vernacular cottage marked on the 1895 – 1900 25” OS map. Now derelict but is upstanding and retains its pitched slate roof	4+600	6m southeast
CH 24	Ballynahown East	Ruins of a vernacular cottage marked on the 1841 first edition OS map	4+900	35m southeast

<b>CH No.</b>	<b>Townland:</b>	<b>Description:</b>	<b>Approx. Ch.</b>	<b>Dist. from proposed road development</b>
CH 25	Keeraun	Vernacular farm yard marked on the 1841 first edition OS map and the 1895 – 1900 25” OS map	5+500	24m northwest
CH 26	Keeraun	Vernacular cottage marked on the 1895 – 1900 25” OS map. Extended to the east with several concrete structures with corrugated roofs but the main cottage is now derelict	5+650	0m
CH 27	Keeraun	Vernacular cottage marked on the 1895 – 1900 25” OS map	5+700	23m west-northwest
CH 28	Keeraun	Vernacular cottage marked on the 1895 – 1900 25” OS map	5+900	217m north-northeast
CH 29	Mincloon	Site of vernacular structures marked on 1841 first edition OS map. No longer extant	6+300	0m
CH 30	Mincloon	Vernacular house and farmstead, marked on the 1895 – 1900 25” OS map	6+450	13m west
CH 31	Mincloon	A number of vernacular outbuildings marked on the 1895-1900 second edition OS map	6+500	75m east-southeast
CH 32	Mincloon	A stone outbuilding marked on the 1915 – 20 third edition OS map	6+500	0m
CH 33	Rahoon	Very well-built stone-walled laneway, marked on the 1841 first edition OS map	6+975	0m
CH 34	Rahoon	Site of vernacular structures marked on 1841 first edition OS map. No longer extant	7+280	0m
CH 35	Rahoon	Leitriff House. Two-storey farm house with four bays. Named and extended on 1895 – 1900 25” OS map	7+350	88m southeast
CH 36	Letteragh	A very well-built stone-walled laneway, marked on the 1841 first edition OS map	7+410	0m
CH 37	Dangan Upper	Well-built cairns from stone clearance. Not marked on the OS maps	7+600	0m
CH 38	Ballagh	Possible square enclosure. Not marked on the OS maps	N59 Link Road North 0+150	0m
CH 39	Barnacranny	Lake View House. Recently renovated two storey house.	8+350	39m southeast

CH No.	Townland:	Description:	Approx. Ch.	Dist. from proposed road development
		Marked on the 1841 first edition OS map		
CH 40	Dangan Upper	Ashley Park. Single storey house marked on the 1841 first edition OS map	8+700	19m southeast
CH 41	Dangan Lower	Mary Ville. Single storey house over rear basement with outbuildings. Marked on the 1895 – 1900 25” OS map	8+950	15m east
CH 42	Dangan Lower	Ruined stone outbuilding that is marked on the 1895 – 1900 25” OS map	8+725	8m southeast
CH 43	Dangan Lower	Site of Dangan Cottage. Marked on the 1841 first edition OS map, in ruins by the 1895 – 1900 25” OS map	8+800	27m southeast
CH 44	Dagan Lower	Site of walled garden and outbuildings associated with Dangan House (Nunnery). Shown the 1841 first edition OS map	9+100	38m northwest
CH 45	Mionlach	Possible boating inlet off the River Corrib. Shown on the 1895 – 1900 25” OS map but not annotated	9+450	33m southeast
CH 46	Mionlach	Possible circular enclosure identified during AP analysis and marked as a possible feature on the 1895-1900 25” OS map	9+600	28m southeast of alignment (within proposed habitat enhancement for bats)
CH 47	Mionlach	Possible vernacular animal shelter. Not marked on the historic mapping (2006 EIS)	9+700	34m northwest
CH 48	Mionlach	Possible consumption wall (2006 EIS)	9+600	24m northeast
CH 49	Mionlach	Possible prehistoric tomb (2006 EIS)	9+850	0m
CH 50	Mionlach	Possible circular feature (2006 EIS)	10+375	56m south
CH 51	Mionlach	Possible boulder of archaeological potential (2006 EIS)	10+500	0m
CH 52	Mionlach	Site of vernacular structures marked on the 1841 first edition OS map. No longer appear to be extant	10+600	0m
CH 53	An Caisleán Gearr	Ruins of a vernacular structures marked on the 1841 first edition OS map	13+225	97m south-southeast

CH No.	Townland:	Description:	Approx. Ch.	Dist. from proposed road development
CH 54	An Caisleán Gearr	Vernacular cottage marked on the 1895 – 1900 25" OS map	13+775	39m north
CH 55	Parkmore	Site of vernacular structures marked on 1895 – 1900 25" OS map. No longer extant	13+925	0m
CH 56	Parkmore	Site of vernacular structures marked on 1895 – 1900 25" map. No longer extant	14+120	0m
CH 57	Parkmore	Possible mass path. Sections of which are shown within historic mapping but not annotated	14+200	0m
CH 58	Coolagh	Site of vernacular structures, including a school, marked on the 1841 first edition OS map and the 1895 – 1900 25" OS map. No longer extant	15+850	0m
CH 59	Breanloughaun	Vernacular outbuilding. Marked on the 1895 – 1900 25" OS map	15+800	150m east-northeast
CH 60	Coolagh	Two storey vernacular farm house and associated outbuilding. Marked within the 25" OS map	16+400	169m northeast
CH 61	Coolagh	Renovated vernacular cottage and outbuilding. Marked on the 1895 – 1900 25" OS map	16+550	260m northeast
CH 62	Coolagh	Group of vernacular buildings comprising two single storey cottages, a two storey house and several outbuildings. One of the cottages is marked on the first edition OS map of 1841 and the remaining structures are shown on the 1895 – 1900 25" OS map. The structures are all upstanding but vary in condition	16+625	188m northwest
CH 63	Bushypark	Ruins of a vernacular structure shown on the 1895 – 1900 25" map	N59 Link Road North 0+000	3m northeast
CH 64	Letteragh	Vernacular cottage, now extended. Marked on the 1895 – 1900 25" OS map	N59 Link Road South 1+575	113m southeast
CH 65	Letteragh	Ruins of a vernacular cottage marked on the 1895 – 1900 25" OS map	N59 Link Road South 1+600	229m east-southeast
CH 66	Rahoon	Vernacular house, recently renovated. Marked on the 1895 – 1900 25" OS map	N59 Link Road	159m west-northwest

CH No.	Townland:	Description:	Approx. Ch.	Dist. from proposed road development
			South 2+050	
CH 67	Dangan Lower	Dangan House. A mid-19th century house in good condition. Likely under construction during compilation of the first edition OS map, as the structure is present but not labelled. By the time of the 1895 – 1900 25” OS map it is shown with outbuildings and annotated as ‘Dangan House’	9+100	199m southeast
CH 68	Bushypark	Disused railway	Pipeline wayleave	0m
CH 69	Bushypark	Potential mass rock	Pipeline wayleave	30m west-northwest
CH 70	Bushpark / Dangan Lower	Railway culvert	Pipeline wayleave	To the immediate east
CH 71	Mincloon	Walled trackway	6+200	0m
CH 72	Mionlach	Walled trackway	9+800	0m

### 13.3.1.12 Areas of Archaeological Potential (AAPs)

A number of areas of archaeological potential have been identified during the course of this appraisal through the analysis of historic mapping, aerial photographs and field inspections. These consist of features or areas within the receiving environment that often attract human activity, such as watercourses. The areas are described in **Table 13.10**.

**Table 13.10: Areas of Archaeological Potential located within the receiving environment**

AAP No.:	Townland:	Description:	Approx. Ch.	Dist. from proposed road development
AAP 1	Na Foráí Maola Thiar/ Cnoc na Gréine	Liberty Stream (TB 2)	0+430 - 0+650	0m
AAP 2	Troscaigh Thoir/ An Chloch Scoilte	Trusky Stream (TB 6)	2+650 - 2+950	0m
AAP 3	Na hAille/ An Cheapach	Barna Stream (TB 10)	3+850 - 4+150	0m
AAP 4	Ballynahown East	Stream (TB 12)	4+800 - 5+200	0m
AAP 5	Rahoon	Stream and boggy hollow	6+800 - 6+900	0m
AAP 6	Rahoon	Small stream	7+300 - 7+375	0m

AAP 7	Barnacranny	Small stream	7+500 - 7+675	0m
AAP 8	Barnacranny	Boggy, waterlogged marginal lands	N59 Link Road North 0+500 to 0+850	0m
AAP 9	Dangan Lower/ Mionlach	River Corrib (TB 22)	9+175 - 9+525	0m
AAP 10	An Caisleán Gearr	Boggy pasture – margins of <i>Lough an Dúlaigh</i>	12+200 - 12+450	0m
AAP 11	An Caisleán Gearr	Boggy hollow (AH 24)	12+975 - 13+075	0m
AAP 12	Bushypark	Site of 'Loughaunnafraska'	Pipeline wayleave	0m

### 13.3.1.13 Townland Boundaries

The proposed road development traverses a total of 33 townlands, three parishes and two baronies as listed in **Table 13.3**.

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<sup>33</sup> and a need for strong, permanent fences around their territories. It is possible that 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 17<sup>th</sup> 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<sup>34</sup> to one inch. Therefore, most are in the context of pre-17<sup>th</sup> Century landscape organisation (McErlean 1983, 315).

In the 19<sup>th</sup> 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 tracks 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 a total of 62,000 townlands were recorded in Ireland.

The proposed road development will traverse 31 townlands. Some of the boundaries follow natural watercourses, but many were defined properly in the 19<sup>th</sup> Century

<sup>33</sup> A sept is a group or clan

<sup>34</sup> 1 perch = 5.0292m

and are marked with dry stone walls. The development of road infrastructure and the expansion of Galway City has already impacted upon the landscape and in some circumstances the townland boundaries are no longer extant.

**Table 13.11: Townland Boundaries crossed by the proposed road development**

TB No.:	Townland:	Description:	Approx. Ch.	Dist. from proposed road development
TB 1	An Baile Nua/ Na Foráí Maola Thiar	Sea Road (R336)	0+000	0m
TB 2	Na Foráí Maola Thiar/ Cnoc na Gréine	Liberty Stream (Also AAP 1)	0+450 – 0+650	0m
TB 3	Na Foráí Maola Thiar/ Na Foráí Maola Thoir	Local Road	1+100	0m
TB 4	Na Foráí Maola Thoir/ Troascaigh Thiar	Local Road	1+550	0m
TB 5	Troascaigh Thiar/ Troascaigh Thoir	Hedgerow & modern fence	2+425	0m
TB 6	Troascaigh Thoir/ An Chloch Scoilte	Former site of townland boundary including a portion of stream (AAP 2)	2+650 - 2+850	0m
TB 7	Troascaigh Thoir/ An Chloch Scoilte/ Ballard West	Stone wall	2+975 - 3+200	0m
TB 8	Ballard West/ Ballard East/ An Chloch Scoilte	Local road. Boundary between Ballard West and East not extant	3+250 - 3+350	0m
TB 9	Ballard East/ Na hAille	Stone wall	3+490	0m
TB 10	Na hAille/ An Cheapach	Barna Stream (AAP 3)	4+100	0m
TB 11	An Cheapach/ Ballynahown East	Stone walled laneway	4+700 – 4+800	0m
TB 12	Ballynahown East/ Keeraun	Stream (AAP 4) and field boundary (boundary completely overgrown)	4+800 – 5+250	0m
TB 13	Keeraun/ Ballyburke	Stone wall and hedgerow	5+660 – 5+725	0m
TB 14	Ballyburke/ Mincloon	Stone wall	6+050	0m
TB 15	Mincloon/ Ragoon	Stone wall	6+800	0m
TB 16	Ragoon/ Letteragh	Stone wall, sections of which have been removed	7+400	0m
TB 17	Letteragh/ Barnacranny	Stone wall	7+550	0m

TB 18	Barnacranny/ Dangan Upper	Stone wall	7+740	0m
TB 19	Barnacranny/ Dangan Upper	No access granted	8+200	0m
TB 20	Dangan Upper/ Dangan Lower/ Kentfield/ Ballagh/ Bushypark	N59 Moycullen Road (crossed at 2 points)	8+525	0m
TB 21	Barnacranny/ Ballagh	Stone wall and ditch	N59 Link Road North 0+550	0m
TB 22	Dangan Lower/ Menlough	River Corrib (AAP 9)	9+350	0m
TB 23	Mionlach /Ballindooley	Stone wall	10+725	0m
TB 24	Coolagh/ Ballindooley/ An Caisleán Gearr	Quarried away	11+600	0m
TB 25	Ballindooley/ An Caisleán Gearr	Stone wall and hedgerow	11+600 – 12+250	0m
TB 26	An Caisleán Gearr/ Parkmore	Tuam Road	13+900	0m
TB 27	An Caisleán Gearr/ Cappanabornia	Hedgerow	13+840	0m
TB 28	Cappanabornia/ Parkmore	Tuam Road	13+840	0m
TB 29	Parkmore/ Pollkeen	Stone wall	14+350	0m
TB 30	Parkmore/ Ballybrit	Removed	14+750	0m
TB 31	Ballybrit/ Doughiska	Removed	15+600	0m
TB 32	Doughiska/ Coolagh/ Breanloughaun	Stone wall and road	15+750 – 16+800	0m
TB 33	Rahoon/ Letteragh	Stone wall	N59 Link Road South 1+620	0m

### 13.3.1.14 Analysis of placenames within the receiving environment

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 place name analysis is *Irish Local Names Explained* by P.W Joyce (1870) and the Place Names Database of Ireland. A description and possible explanation of each townland name in the environs of the proposed road development are provided in the below table.

**Table 13.12: Townland Names within the study area**

Name (English)	Name (Irish)	Derivation	Possible Meaning
New Village	An Sráidbhaile Nua	N/a	Likely to relate to establishment of Bearna Village
Forramoyle East & West	Na Foráí Maola Thoir & Thiar	<i>Fauran-maola</i>	Spring on the flat topped hillock
Trusky West & East	Troscaigh Thiar & Thoir	<i>Triucha</i>	A cantred or district
Cloghscolita	An Chloch Scoilte	<i>Chloch-scoilte</i>	The split stone
Ballard West & East	An Baile Ard Thiar & Thoir	<i>Baile-ard</i>	The high town
Aille	An Aill	<i>Aill</i>	The cliff
Cappagh	An Cheapach	<i>Ceapach</i>	Plot of tillage land
Ballynahown East	Baile na hAbhann Thoir	<i>Baile-na-hAbhann</i>	Town of the river
Keeraun	An Caorán	<i>Caorán</i>	Moorland
Mincloon	Mionchluain	<i>Meen-cluain</i>	The small or fine meadow
Rahoon	Ráthún	<i>Rath-ún</i>	The fort
Letteragh	Leitreach	<i>Leitreach</i>	The hillside
Ballagh	An Bealach	<i>Bealach</i>	The way/pass
Kentfield	Baile an Cheantaigh	N/a	Likely to relate to the name of a landowner
Bushypark	Páirc na Sceach	<i>Bohy-pairc</i>	Field of the hut or tent
Dangan Lower & Upper	An Daingean Íochtair & Uachtair	<i>Daingean</i>	A fortress
Barnacranny	Barr na Crannaí	<i>Barr-na-crann</i>	Top of the tree
Menlough	Mionlach	<i>Meen-lach</i>	The small or smooth lake
Castlegar	An Caisleán Gearr	<i>Caisleán-Gearr</i>	The short castle
Ballindooley	Baile an Dúlaigh	<i>Baile-an-Dúlaigh</i>	Town/Homestead of Dúlaigh
Cappanabornia	Ceapach na Boirne	<i>Ceapach-na-boirne</i>	Land of the burren (area of rocky land)
Parkmore	An Pháirc Mhór	<i>Pháirc-mór</i>	The large field

Name (English)	Name (Irish)	Derivation	Possible Meaning
Ballybrit	Baile an Bhriotaigh	<i>Baile-an-Bhriotaigh</i>	The town of the Britons
Pollkeen	An Poll Caoin	<i>Poll-caoin</i>	The pleasant hole
Doughiska	Dabhach Uisce	<i>Dabhach-uisce</i>	The water tank
Breanloughaun	An Bréanlochán	<i>Bréan-lochán</i>	The foul lake
Coolagh	An Chuailleach	<i>Cualacha</i>	Corner field

### 13.3.1.15 Results of Geophysical Survey

As part of the assessment, a geophysical survey was carried out within one area of potential identified during the baseline assessment and field inspection. This area is located within the townland of Bushypark and the survey area included an area adjacent to a church and graveyard (BH 7) and a previously unknown platform in the landscape that may possess archaeological potential (CH 38).

The geophysical survey was carried out by Earthsound Archaeological Geophysics on behalf of IAC Ltd for Galway County Council and TII. It took place on the 17 and 18 of November 2016 under licence 16R0190. Magnetometer and EM Apparent Electrical Resistance surveys were conducted.

The survey revealed a number of possible ditches across the survey area. Many of these are linear in formation and are likely to form boundary features. The resistance survey suggests that some may have a bank or wall feature associated with them. A series of relict field boundaries were also detected.

Possible archaeological evidence includes a number of possible burning or industrial sites, a sub-rectangular ditch and ditches. Further anomalies are likely to be associated with soil or geological conditions on site and / or near surface geological outcrops. No anomalies were detected which appear to be associated with Bushypark Church and no evidence can be seen to suggest that the associated graveyard extends into the survey area. The full report has been included as **Appendix 13.12**.

## 13.4 Characteristics of the Proposed Development

### 13.4.1 Construction Phase

A detailed description of the proposed road development and construction activities are provided in **Chapter 5, Description of Proposed Road Development** and **Chapter 7, Construction Activities**. The characteristics of the proposed road development at construction stage, in relation to archaeology, architectural and cultural heritage, will involve the excavation of those lands made available (within the proposed development boundary) in order to facilitate the construction of the proposed road development. Physical changes to the existing ground level, including water courses, has the potential to impact on archaeological, built heritage and cultural heritage sites. The potential impacts related to such characteristics are provided in **Section 13.5** and detail on how impacts may occur is provided in **Appendix A.13.10**.

### 13.4.2 Operational Phase

At the operational stage of the proposed road development there is the potential to impact on the settings of archaeological, built and cultural heritage sites, due to physical changes to the receiving environment. The potential impacts related to such characteristics are provided in **Section 13.5** and detail on how impacts may occur is provided in **Appendix A.13.10**.

## 13.5 Evaluation of Impacts

### 13.5.1 Introduction

The evaluation of the potential impacts on archaeology, architectural and cultural heritage was undertaken in accordance with the criteria set out in **Section 13.2.4**. A summary of all sites, structures, potential impacts and proposed mitigation is included in **Tables 13.21 to 13.26** in **Section 13.8**.

### 13.5.2 Do-Nothing Impact

If the proposed road development were not to proceed, there would be no adverse impact on the archaeological, architectural and cultural heritage resource.

### 13.5.3 Potential Construction Impacts

Ground disturbances associated with the construction of the proposed road development, such as the removal of topsoil and the excavation of those lands made available have the potential to directly and negatively impact on the following sites (**Table 13.13**). No indirect impacts arising from vibration or dust associated with construction activities are anticipated.

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.

**Table 13.13: Archaeological Heritage (AH): Potential Construction Impacts**

Impact Significance						
Profound	Very Significant	Significant	Moderate	Slight	Not Significant	Imperceptible
<b>AH 2</b> Bullaun Stone	-	-	<b>AH 27</b> Quarry	-	-	-

**Table 13.14: Built Heritage (BH): Potential Construction Impacts**

Impact Significance						
Profound	Very Significant	Significant	Moderate	Slight	Not Significant	Imperceptible
<b>BH 12</b> Thatched cottage	-	-	-	-	-	-

**Table 13.15: Designed Landscapes (DL): Potential Construction Impacts**

Impact Significance						
Profound	Very Significant	Significant	Moderate	Slight	Not Significant	Imperceptible
-	-	<b>DL 8</b> Menlo Castle demesne	<b>DL 7</b> Dangan Lower demesnes <b>DL 4</b> Bushypark House demesne	-	-	<b>DL 2</b> Ragoon House demesne

**Table 13.16: Cultural Heritage (CH): Potential Construction Impacts**

Impact Significance						
Profound	Very Significant	Significant	Moderate	Slight	Not Significant	Imperceptible
-	-	<b>CH 2</b> Site of vernacular buildings <b>CH 18</b> Vernacular cottage <b>CH 26</b> Vernacular cottage	<b>CH 8</b> Walled laneway <b>CH 10</b> Site of sheep fold <b>CH 32</b> Stone outbuilding <b>CH 33</b> Walled laneway <b>CH 36</b> Walled laneway	-	-	-

Impact Significance						
Profound	Very Significant	Significant	Moderate	Slight	Not Significant	Imperceptible
		<b>CH 29</b> Site of vernacular buildings <b>CH 34</b> Site of vernacular building <b>CH 38</b> Possible square enclosure <b>CH 49</b> Possible prehistoric tomb <b>CH 52</b> Site of vernacular buildings <b>CH 55</b> Site of vernacular buildings <b>CH 56</b> Site of vernacular buildings <b>CH 57</b> Possible mass path <b>CH 58</b> Site of vernacular buildings	<b>CH 37</b> Clearance cairns <b>CH 51</b> Possible boulder of arch. Significance <b>CH 71</b> Walled track <b>CH 72</b> Walled track <b>CH 68</b> Disused railway <b>CH 70</b> Railway Culvert			

### ***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 designated AAPs 1-12.

### ***Townland Boundaries***

Ground disturbances associated with the proposed road development have the potential to have a moderate direct and negative impact on sections of the 33 townland boundaries located within the proposed development boundary of the proposed road development.

## General

Ground disturbances associated with the proposed road development have the potential to have a moderate, significant or profound direct and negative impact on archaeological features, deposits or artefacts that have the potential to survive beneath the current ground surface with no surface expression.

### 13.5.4 Potential Operational Impacts

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

**Table 13.17: Archaeological Heritage (AH): Potential Operation Impacts**

Impact Significance						
Profound	Very Significant	Significant	Moderate	Slight	Not Significant	Imperceptible
-	-	<b>AH 15</b> Summer house <b>AH 16</b> Menlo Castle	<b>AH 29</b> Cashel etc.	<b>AH 11</b> Barrow <b>AH 12</b> Site of House <b>AH 23</b> Site of chapel <b>AH 26</b> Children's burial ground	-	<b>AH 8</b> Children's burial ground <b>AH 14</b> Designed landscape feature

**Table 13.18: Built Heritage (BH): Potential Operation Impacts**

Impact Significance						
Profound	Very Significant	Significant	Moderate	Slight	Not Significant	Imperceptible
-	-	<b>BH 9</b> Summer house <b>BH 10</b> Menlo Castle	<b>BH 1</b> Thatched cottage <b>BH 7</b> Church <b>BH 17</b> Cashel etc.	<b>BH 2</b> Thatched cottage <b>BH 5</b> Bushypark House <b>BH 14</b> Site of chapel	-	<b>BH 15</b> Two ruined cottages

**Table 13.19: Designed Landscapes (DL): Potential Operation Impacts**

Impact Significance						
Profound	Very Significant	Significant	Moderate	Slight	Not Significant	Imperceptible
-	-	<b>DL 8</b> Menlo Castle demesne	<b>DL 7</b> Dangan Lower demesnes	<b>DL 4</b> Bushypark House demesne	-	<b>DL 2</b> Ragoon House demesne

**Table 13.20: Cultural Heritage (CH): Potential Operation Impacts**

Impact Significance						
Profound	Very Significant	Significant	Moderate	Slight	Not Significant	Imperceptible
-	-	<b>CH 20</b> Vernacular buildings <b>CH 23</b> Vernacular cottage	<b>CH 4</b> Sub-circular enclosure <b>CH 25</b> Vernacular buildings <b>CH 30</b> Vernacular complex <b>CH 35</b> Leitriff House <b>CH 42</b> Stone outbuilding <b>CH 54</b> Vernacular Cottage	<b>CH 7</b> Vernacular cottage <b>CH 19</b> Vernacular buildings <b>CH 21</b> Site of vernacular buildings <b>CH 22</b> Ruined vernacular buildings <b>CH 24</b> Ruined vernacular building <b>CH 39</b> Lakeview House <b>CH 45</b> Possible boat inlet <b>CH 47</b> Vernacular animal shelter <b>CH 50</b> Possible circular feature <b>CH 53</b> Ruined vernacular buildings <b>CH 60</b> Vernacular complex <b>CH 61</b> Vernacular cottage <b>CH 62</b> Vernacular complex <b>CH 67</b> Dangan House <b>CH 69</b> Potential mass rock	-	<b>CH 1</b> Site of vernacular buildings <b>CH 3</b> Vernacular cottage <b>CH 5</b> Site of vernacular buildings <b>CH 6</b> Vernacular cottage <b>CH 27</b> Vernacular cottage <b>CH 31</b> Vernacular buildings <b>CH 48</b> Possible consumption wall <b>CH 64</b> Vernacular cottage

No indirect impacts during the operational phase on Areas of Archaeological Potential or Townland Boundaries have been identified.

### 13.5.5 Neutral/No Predicted Impacts

There are no predicted direct or indirect impacts for the following sites: AH 1, AH 3, AH 7, AH 9, AH 18, AH 19, AH 21, AH 22/ BH 23, AH 24, AH 30, AH 31, AH 36, AH 38, AH 39, AH 41/BH 21, AH 40, BH 22, BH 24, BH 25, BH 26, BH 27, DL 9, CH 43, CH 44, CH 46.

The potential impact has been deemed as neutral for the following sites: AH 4, AH 5, AH 6, AH 10, AH 13, AH 17, AH 20, AH 25, AH 28, AH 32, AH 33, AH 34, AH 35, AH 37.

BH 3, BH 4, BH 6, BH 8, BH 11, BH 13, BH 16, BH 18, BH 19, BH 20.

DL 1, DL 3, DL 5, DL 6.

CH 9, CH 11, CH 12, CH 14, CH 15, CH 16, CH 17, CH 28, CH 40, CH 41, CH 59, CH 63, CH 65, CH 66.

## 13.6 Mitigation Measures

### 13.6.1 Introduction

The proposed mitigation measures for the archaeological, architectural and cultural heritage are outlined below and detailed in **Appendix A.13.11**. A summary of all sites, structures, potential impacts and proposed mitigation is included in **Tables 13.21 to 13.26** in **Section 13.8**.

### 13.6.2 Construction Phase

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

- A programme of archaeological test trenching will be carried out within the footprint of the proposed road development prior to construction going ahead. This will target the sites and areas of archaeological and cultural heritage potential as outlined in **Section 13.5.3** as well as previously undisturbed areas within the proposed development boundary.
- Test trenching will be carried out under Ministerial Directions in consultation with the Department of Culture, Heritage and the Gaeltacht and a TII Project Archaeologist. Full provision will be made available for the excavation of any archaeological features and/or deposits that may be identified, if that is deemed the most appropriate manner in which to proceed.
- Prior to demolition, the thatched cottage BH 12 will be subject to a full measured, written and photographic survey. This will be carried out by a suitably qualified person or team under Ministerial Directions in consultation with the Department of Culture, Heritage and the Gaeltacht and a TII Project Archaeologist.

- Excavation of all previously recorded archaeological sites – where these fall, in whole or in part, within the footprint of the development – will be carried out under Ministerial Direction in consultation with the Department of Culture, Heritage and the Gaeltacht and a TII Project Archaeologist
- The demesne landscape associated with Menlo Castle (DL 8), at Dangan Lower (DL7) and at Bushypark House (DL4) will be subject to a detailed photographic and written record prior to the construction of the proposed road development. This will be carried out by a suitably qualified person or team under Ministerial Directions in consultation with the Department of Culture, Heritage and the Gaeltacht and a TII Project Archaeologist.
- All Cultural Heritage (CH) sites listed in **Table 13.17** that include built heritage remains will be subject to a detailed written and photographic survey (to include test trenching where appropriate). This shall be carried out under Ministerial Directions in consultation with the Department of Culture, Heritage and the Gaeltacht and a TII Project Archaeologist. Full provision will be made available for the excavation of any archaeological features and/or deposits that may be identified, if that is deemed the most appropriate manner in which to proceed.
- Archaeological wade or underwater assessments will be carried out at any natural water courses (AAPs) to be impacted upon by the proposed road development by disturbance to their banks or beds. This shall be carried out under Ministerial Directions in consultation with the Department of Culture, Heritage and the Gaeltacht and a TII Project Archaeologist. Full provision will be made available for the excavation of any archaeological features and/or deposits that may be identified, if that is deemed the most appropriate manner in which to proceed.
- Any 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 shall be carried out under Ministerial Directions in consultation with the Department of Culture, Heritage and the Gaeltacht and a TII Project Archaeologist. Full provision will be made available for the excavation of any archaeological features and/or deposits that may be identified, if that is deemed the most appropriate manner in which to proceed.

### 13.6.3 Operational Phase

The proposed mitigation measures for the operational phase are listed below. These measures are proposed to mitigate the indirect impacts of the operational phase of the proposed road development on these features. It is noted that these measures will be carried out during or prior to the construction phase.

- AH 15, 16, 29, 11, 12, 23 and 26 will be subject to a detailed photographic and written landscape record to preserve their current setting prior to the construction and operation of the proposed road development. This shall be carried out by a suitably qualified person or team under Ministerial Directions in consultation with the Department of Culture, Heritage and the Gaeltacht and a TII Project Archaeologist.

- BH 1, 7, 9, 10 and 17 will be subject to a detailed photographic and written landscape record to preserve their current setting prior to the construction and operation of the proposed road development. This shall be carried out by a suitably qualified person or team under Ministerial Directions in consultation with the Department of Culture, Heritage and the Gaeltacht and a TII Project Archaeologist.
- CH 20, 23, 8, 25, 30, 35, 42 and 54 will be subject to a detailed photographic and written landscape record to preserve their current setting prior to the construction of the proposed road development. This shall be carried out by a suitably qualified person or team under Ministerial Directions in consultation with the Department of Culture, Heritage and the Gaeltacht and a TII Project Archaeologist.

## 13.7 Residual Impacts

### 13.7.1 Introduction

### 13.7.2 Construction Phase

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.

### 13.7.3 Operational Phase

Whilst the proposed mitigation measures will record the current context of those sites which will be indirectly impacted, they will not fully remove the residual impact of the proposed road development on the setting of the following sites:

- AH 15/ BH 19 Menlo Castle – post mitigation the operation of the proposed road development will have an indirect moderate negative impact on the castle
- AH 16/ BH 10 Summer House – post mitigation the operation of the proposed road development will have an indirect moderate negative impact on the castle

### 13.7.4 Cumulative Impacts

Cumulative impacts are defined as the combination of many minor impacts creating one, larger, more significant impact (NRA, 2009 and EPA 2017). Cumulative impacts consider existing stresses on the natural environment as well as developments that are underway and in planning.

The cumulative impacts of the proposed road development on archaeology, architecture and cultural heritage with the following projects and plans have been assessed:

- N59 Maam Cross to Oughterard Road Project
- M17 Galway to Tuam Road Project

- N18 Oranmore to Gort Road Project
- N17 Tuam Bypass
- M6 Motorway
- Proposed Galway Harbour Port Extension
- Galway Transport Strategy (GTS), which includes the following:
  - Investigate prospective sites to the east of the city for Park and Ride
  - Bearna Greenway
  - Galway to Oughterard (part of the Galway to Clifden) Greenway
  - Galway City to Oranmore (part of the Galway to Dublin) Cycleway
- Galway City Development Plan 2017 – 2023
- Galway County Development Plan 2015 – 2021

No proposed developments have been identified that will result in a significant negative cumulative impact with the addition the proposed road development upon the archaeological, architectural and cultural heritage resource.

The proposed Galway to Oughterard (part of the Galway to Clifden) Greenway will see the reopening of the railway line and potentially the repair of railway heritage features. The proposed road development will impact on a portion of the original railway line route where it passes through Dangan Lower. Sections of the railway line have been removed over the years due to differing activities, meaning that the proposed road development will result in a slight negative cumulative impact on the route of the original railway line. The proposed Galway to Oughterard Greenway scheme will have a positive impact on the cultural heritage of the area, which will help to offset the potential negative cumulative impact associated with the proposed road development. No negative residual impacts have been identified in association with the route of the former railway.

## 13.8 Summary

A summary of all sites, structures, potential impacts and proposed mitigation is included in **Tables 13.21 to 13.26** below.

One recorded monument (AH 2), which is listed as a Bullaun Stone will be profoundly and directly impacted upon as shown on **Figure 13.1.05**. However, it should be noted that the feature was not located during a field inspection and could not be previously located during a survey carried out by the Archaeological Survey of Ireland. The proposed road development will also have a moderate impact on the site of a quarry (AH 27). This site is post medieval in date and possesses little archaeological significance.

Ground disturbances associated with the proposed road development in general have the potential to have a moderate, significant or profound direct and negative impact on archaeological features, deposits or artefacts that have the potential to survive beneath the current ground surface with no surface expression.

One protected structure (BH 12) will be profoundly and directly impacted upon. This building, which consists of a single storey thatched structure, will be demolished (following a full architectural survey by suitably qualified staff) prior to the construction of the proposed road development.

The demesne landscape associated with Menlo Castle (DL 8) will be subject to a direct significant impact. The direct impact on the demesne landscape at Dangan Lower (DL 7) and at Bushypark House (DL 4) it is defined as moderate. Due to the developed nature of the environs at Rahoon House (DL 2) the impact, whilst direct, is imperceptible.

A total of 12 significant direct impacts on previously unrecorded sites or structures of cultural heritage significance were identified, along with nine moderate direct impacts.

A total of 12 Areas of Archaeological Potential have been identified during the course of this assessment. They are characterised by areas containing boggy ground and water courses, which are known to have attracted human activity in the past. Ground disturbances associated with the proposed road development have the potential to have a moderate, significant or profound direct and negative impact on archaeological features, deposits or artefacts that have the potential to survive beneath the current ground surface or water level within the designated AAPs.

A total of 33 Townland Boundaries will be crossed by the proposed road development. The impact upon these boundaries has been defined as direct and moderate in nature due to the relatively small percentage of a feature to be impacted upon.

As part of the proposed road development, an area of land within the townland of Menlough will be given over for the purpose of enhancing the habitat for bats – a population of which reside in the area, see **Chapter 8, Biodiversity** for further details. A number of sites outside of the receiving environment of the actual footprint of the proposed road development have been identified within this area, including Recorded Monuments and Protected Structures (AH 9, AH 22, AH 38-41, BH 21, BH 22-27). No predicted impacts are anticipated upon these sites as a result of the proposed habitat enhancement at Menlough.

A programme of archaeological testing, archaeological underwater or wade surveys, building surveys and townland boundary surveys have been recommended in order to mitigate the identified impacted during construction upon the archaeological, architectural and cultural heritage resource. All of the proposed surveys will be carried out by the appropriately qualified personnel under Ministerial Directions and in consultation with the Department of Culture, Heritage and Gaeltacht and a TII Project Archaeologist.

Predicted indirect operational impacts include significant negative impacts on the ruined summer house at Dangan Lower (AH 15/ BH 9) and Menlo Castle (AH 16/ BH 10). Moderate negative impacts are predicted at a recorded cashel site (AH 29/ BH 17). A thatched cottage (BH 1) and church (BH 7) will also be subject to indirect, moderate impacts.

The Designed Landscapes will all be subject to the same level of impacts during operation as during construction due to the impacts on setting. Similarly, two cultural heritage sites will experience significant indirect impacts and seven will experience moderate indirect impacts. No AAPs or Townland Boundaries will be indirectly impacted upon.

It should be noted that there are no predicted impacts at ten AH sites, one DL and three CH sites.

The impact has been deemed as neutral for 14 AH sites; ten BH sites; four DLs and 14 CH sites.

A programme of surveys has been recommended in order to record the current landscape context of sites and structures to be indirectly significantly or moderately impacted upon. These will be carried out by a suitably qualified person or team under Ministerial Directions in consultation with the Department of Culture, Heritage and the Gaeltacht and a TII Project Archaeologist.

**Table 13.21: Archaeological Heritage (AH): Summary of sites, impacts and mitigation**

AH No.	RMP No.	Townland	Classification	Approx. Ch.	Dist. from proposed road development	Statutory protection	Potential Impact type	Potential Impact level	Mitigation
AH 1	GA093-009	Na Foráí Maola Thiar	Redundant record: non-antiquity	0+500	9m east	None	No Impact	N/a	None required
AH 2	GA082-077	Rahoon	Bullaun Stone	6+850	0m	RMP	Direct	Profound negative	Archaeological testing in advance of construction
AH 3	GA082-040	Dangan Lower	Redundant record: non-antiquity	8+350	57m southeast	None	No Impact	N/a	None required
AH 4	GA094-047	Rahoon	House (Rahoon House) Also BH 18)	N59 Link Road South 3+350	153m southeast	RMP	Neutral	N/a	None required
AH 5	GA094-056	Rahoon	Designed Landscape Feature	Gort na Bró Road	61m southwest	RMP	Neutral	N/a	None required
AH 6	GA082-104	Bushypark	Enclosure	9+100	195m northwest	RMP	Neutral	N/a	None required
AH 7	GA082-032	Dangan Lower	Redundant record: non-antiquity	8+750	86m northeast	None	No Impact	N/a	None required
AH 8	GA082-039	Dangan Lower	Children's Burial Ground	8+850	60m northeast	RMP	Indirect	Imperceptible negative	None required

AH No.	RMP No.	Townland	Classification	Approx. Ch.	Dist. from proposed road development	Statutory protection	Potential Impact type	Potential Impact level	Mitigation
AH 9	GA082-087	Mionlach	Settlement cluster	9+800	To the immediate north of proposed habitat enhancement for bats. 573m northwest of proposed road development.	None	No Impact	N/a	None required
AH 10	GA082-041	Dangan Lower	Well	8+650	173m east-southeast	None	Neutral	N/a	None required
AH 11	GA082-033	Dangan Lower	Barrow	8+700	198m southeast	RMP	Indirect	Slight negative	Written and photographic landscape record prior to construction
AH 12	GA082-036	Dangan Lower	Site of House (Dangan House)	9+150	90m northwest	RMP	Indirect	Slight negative	Written and photographic landscape record prior to construction
AH 13	GA082-085	Dangan Lower	Designed Landscape Feature	9+050	112m east-southeast	RMP	Neutral	N/a	None required
AH 14	GA082-038	Dangan Lower	Designed Landscape Feature	9+150	140m southeast	RMP	Indirect	Imperceptible negative	None required
AH 15	GA082-037	Dangan Lower	Summer house (Also BH 9)	9+300	72m southeast	RMP	Indirect	Significant negative	Written and photographic landscape record prior to construction

AH No.	RMP No.	Townland	Classification	Approx. Ch.	Dist. from proposed road development	Statutory protection	Potential Impact type	Potential Impact level	Mitigation
AH 16	GA082-064/001	Mionlach	House – 17 <sup>th</sup> Century, Castle, unclassified (Also BH 10)	9+375	Adjacent to proposed habitat enhancement for bats. 140m northwest of proposed road development	RMP	Indirect	Significant negative	Written and photographic landscape record prior to construction
AH 17	GA082-100	Mionlach	Clearance cairn	9+500	Within proposed habitat enhancement for bats. 167m northwest of proposed road development	None	Neutral	N/a	None required
AH 18	GA082-031	Coolagh	Enclosure	11+350	0m	None	No Impact	N/a	None required
AH 19	GA082-095	Coolagh	Ringfort	11+400	0m	None	No Impact	N/a	None required
AH 20	GA082-003	Ballindooley	Quarry	12+025	81 m north	RMP	Neutral	N/a	None required

AH No.	RMP No.	Townland	Classification	Approx. Ch.	Dist. from proposed road development	Statutory protection	Potential Impact type	Potential Impact level	Mitigation
AH 21	GA082-004	Ballindooley	Redundant record: non-antiquity	12+200	131m east-northeast	None	No Impact	N/a	None required
AH 22	GA082-060	Mionlach	Pillar stone (Also BH 23)	9+850	68m north of proposed habitat. 530m northwest of proposed road development.	RMP	No Impact	N/a	None required
AH 23	GA082-023	An Caisleán Gearr	Chapel (site of) (Also BH 14)	13+075	80m north	RMP	Indirect	Slight negative	Written and photographic landscape record prior to construction
AH 24	GA082-026	An Caisleán Gearr	Redundant record: non-antiquity	12+975	0m	None	No Impact	N/a	None required
AH 25	GA082-021	An Caisleán Gearr	Tower house (Also BH 13)	12+950	220m south	RMP	Neutral	N/a	None required
AH 26	GA082-022	An Caisleán Gearr	Children's burial ground	13+500	73m southwest	RMP	Indirect	Slight negative	Written and photographic landscape record prior to construction
AH 27	GA082-072	Parkmore	Quarry	14+000	0m	None	Direct	Moderate negative	Archaeological testing in advance of construction
AH 28	GA082-016	Ballybrit	Anomalous stone group	14+850	124m southwest	RMP	Neutral	N/a	None required
AH 29	GA082-011/001-2	Ballybrit	Cashel, souterrain,	15+150	40m southwest	RMP	Indirect	Moderate negative	Written and photographic landscape record prior to construction

AH No.	RMP No.	Townland	Classification	Approx. Ch.	Dist. from proposed road development	Statutory protection	Potential Impact type	Potential Impact level	Mitigation
			children's burial ground (Also BH 17)						
AH 30	GA082-017	Ballybrit	Earthwork	City East Business Park Junction.	0m	RMP	No Impact	N/a	None required
AH 31	GA082-015	Ballybrit	Designed landscape feature	City East Business Park Junction.	57m south	None	No Impact	N/a	None required
AH 32	GA082-012002	Ballybrit	Deserted medieval settlement	14+500	226m northeast of the City East Business Park Junction	RMP/ Preservation Order	Neutral	N/a	None required
AH 33	GA082-012001	Ballybrit	Tower house (Also BH 16)	14+500	250m northeast of the City East Business Park Junction	RMP/ Preservation Order	Neutral	N/a	None required
AH 34	GA082-014	Ballybrit	Enclosure	15+050	110m northeast of the City East	RMP/ Preservation Order	Neutral	N/a	None required

AH No.	RMP No.	Townland	Classification	Approx. Ch.	Dist. from proposed road development	Statutory protection	Potential Impact type	Potential Impact level	Mitigation
					Business Park Junction				
AH 35	GA082-013/001	Ballybrit	Ringfort & house (unknown date)	15+050	165m northeast of the City East Business Park Junction	RMP/ Preservation Order	Neutral	N/a	None required
AH 36	GA082-043/001-4	Doughiska	Fulachta fia	16+400	0m	RMP	No Impact	N/a	None required
AH 37	GA082-044	Doughiska	Road	16+350	43m west southwest	RMP	Neutral	N/a	None required
AH 38	GA082-063	Mionlach	Designed landscape feature	9+550	Adjacent to proposed habitat enhancement for bats. 448m northwest of proposed road development.	None	No Impact	N/a	None required
AH 39	GA082-062	Mionlach	Designed landscape feature	9+650	Within proposed habitat	None	No Impact	N/a	None required

AH No.	RMP No.	Townland	Classification	Approx. Ch.	Dist. from proposed road development	Statutory protection	Potential Impact type	Potential Impact level	Mitigation
					enhancement for bats. 448m northwest of proposed road development.				
AH 40	GA082-061	Mionlach	Burial ground	9+600	Adjacent to proposed habitat enhancement for bats. 577m northwest of proposed road development.	RMP	No Impact	N/a	None required
AH 41	GA082-070	Mionlach	Gate house (Also BH 21)	9+750	50m east of proposed habitat enhancement for bats. 406m northwest of proposed road development.	RMP	No Impact	N/a	None required

**Table 13.22: Built Heritage (BH): Summary of sites, impacts and mitigation**

BH No.	RPS No.	Townland	Classification	Approx. Ch.	Dist. from proposed road development	NIAH	Statutory protection	Impact type	Potential Impact level	Mitigation
BH 1	6302	Mincloon	Thatched cottage	6+150	53m northwest	No	Yes	Indirect	Moderate negative	Written and photographic landscape record prior to construction
BH 2	6301	Mincloon	Thatched cottage	6+400	183m southeast	No	Yes	Indirect	Slight negative	Written and photographic landscape record prior to construction
BH 3 <sup>35</sup>	2001	Barnacranny	Gate pillars	8+450	Adjacent	No	Yes	Neutral	N/a	None required
BH 4	2901	Barnacranny	Thatched cottage	8+450	6m southwest	Yes	Yes	Neutral	N/a	None required
BH 5	1504	Kentfield	Bushypark House	N59 Link Road North 0+000	60m northeast	Yes	Yes	Indirect	Slight negative	Written and photographic landscape record prior to construction

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<sup>35</sup> No evidence of gate pillars at this location

BH No.	RPS No.	Townland	Classification	Approx. Ch.	Dist. from proposed road development	NIAH	Statutory protection	Impact type	Potential Impact level	Mitigation
BH 6	1503	Ballagh	Thatched Cottage	N59 Link Road North 0+050	124m northwest	No	Yes	Neutral	N/a	None required
BH 7	1501/02	Ballagh	Church	N59 Link Road North 0+060	20m southeast	Yes	Yes	Indirect	Moderate negative	Written and photographic landscape record prior to construction
BH 8 <sup>36</sup>	3003	Ballagh	Remains of stone fort	8+950	184m east-northeast	No	Yes	Neutral	N/a	None required
BH 9	3001	Dangan Lower	Summer house (Also AH 15)	9+300	72m southeast	No	Yes	Indirect	Significant negative	Written and photographic landscape record prior to construction
BH 10	5702	Mionlach	Menlo Castle (Also AH 16)	9+350	140m northwest of proposed road development	Yes	Yes	Indirect	Significant negative	Written and photographic landscape record prior to construction

<sup>36</sup> No evidence of this site type at this location

BH No.	RPS No.	Townland	Classification	Approx. Ch.	Dist. from proposed road development	NIAH	Statutory protection	Impact type	Potential Impact level	Mitigation
BH 11	2402	Coolagh	Thatched cottage	10+750	63m northwest of the proposed development at Lackagh Quarry	No	Yes	Neutral	N/a	None required
BH 12	1703	An Caisleán Gearr	Thatched cottage	12+875	0m	Yes	Yes	Direct	Profound negative <sup>6</sup>	Full measured survey, written and photographic record prior to construction
BH 13	1701	An Caisleán Gearr	Tower House (Also AH 25)	12+950	220m south	No	Yes	Neutral	N/a	None required
BH 14	1702	An Caisleán Gearr	Chapel, site of (Also AH 23)	13+100	80m north	No	Yes	Indirect	Slight negative	Written and photographic landscape record prior to construction
BH 15	7601	Parkmore	Two ruined cottages	13+800	99m southwest	No	Yes	Indirect	Imperceptible negative	None required
BH 16	701	Ballybrit	Tower House (Also AH 33)	14+500	250m northeast of the City East Business	No	Yes	Neutral	N/a	None required

BH No.	RPS No.	Townland	Classification	Approx. Ch.	Dist. from proposed road development	NIAH	Statutory protection	Impact type	Potential Impact level	Mitigation
					Park Junction					
BH 17	702	Ballybrit	Cashel (Also AH 29)	15+150	40m southwest	No	Yes	Indirect	Moderate negative	Written and photographic landscape record prior to construction
BH 18	8301	Rahoon	Rahoon House (Also AH 4)	N59 Link Road South 3+350	153m southeast	No	Yes	Neutral	N/a	None required
BH 19	8301	Rahoon	Entrance to Rahoon House	N59 Link Road South 3+300	188m southeast	Yes	Yes	Neutral	N/a	None required
BH 20	1705	An Caisleán Gearr	Free standing stone cross	13+450	162m southwest	No	Yes	Neutral	N/a	None required
BH 21	5703	Mionlach	Gate house (Also AH 41)	9+750	406m northwest of proposed road development. 50m east of area	Yes	Yes	No Impact	N/a	None required

BH No.	RPS No.	Townland	Classification	Approx. Ch.	Dist. from proposed road development	NIAH	Statutory protection	Impact type	Potential Impact level	Mitigation
					proposed for habitat planting.					
BH 22	5710	Mionlach	Thatched cottage	9+800	522m northwest of proposed road development. 53m north of area proposed for habitat planting.	Yes	Yes	No Impact	N/a	None required
BH 23	5704	Mionlach	Pillar stone (Also AH 22)	9+850	530m northwest of proposed road development. 68m north of area proposed for habitat planting.	No	Yes	No Impact	N/a	None required
BH 24	5709	Mionlach	Thatched cottage	9+850	586m northwest of proposed road development.	Yes	Yes	No Impact	N/a	None required

BH No.	RPS No.	Townland	Classification	Approx. Ch.	Dist. from proposed road development	NIAH	Statutory protection	Impact type	Potential Impact level	Mitigation
					97m north of area proposed for habitat planting.					
BH 25	5708	Mionlach	Thatched cottage	9+000	596m northwest of proposed road development. 163m north of area proposed for habitat planting.	Yes	Yes	No Impact	N/a	None required
BH 26	5707	Mionlach	Thatched cottage	9+950	645m northwest of proposed road development. 191m north of area proposed for habitat planting.	Yes	Yes	No Impact	N/a	None required
BH 27	5711	Mionlach	Thatched cottage	9+950	319m northwest of proposed	Yes	Yes	No Impact	N/a	None required

BH No.	RPS No.	Townland	Classification	Approx. Ch.	Dist. from proposed road development	NIAH	Statutory protection	Impact type	Potential Impact level	Mitigation
					road development. 200m northeast of area proposed for habitat planting.					

**Table 13.23: Designed Landscapes (DL): Summary of sites, impacts and mitigation**

DL No.	Townland:	Detail:	Dist. from proposed road development	Impact type	Potential Impact level	Mitigation
DL 1	Bearna, Cluain na nGabhar, Gort na Leice, An Roisín, An Seanbhaile Dubh, Baile an Mhóinín Thoir	Barna House demesne. NIAH garden survey lists it as ‘Main features unrecognisable – peripheral features visible’ <sup>37</sup> . Barna House is a protected structure.	The northwest corner of the demesne is located c. 143m to the southeast	Neutral	N/a	None required
DL 2	Rahoon	Rahoon House demesne. NIAH garden survey lists it as ‘Virtually no recognisable features’ <sup>38</sup> . The main house is a protected structure (BH 18).	Proposed link road will run through the northwest corner of the original demesne	Direct	Imperceptible negative	None required
DL 3	Kentfield	Glenlo Abbey demesne. The NIAH garden survey records it as ‘Main features unrecognisable – peripheral features visible’ <sup>39</sup> . The main house is not a protected structure.	The southeast corner of the demesne is located to the immediate north of the proposed road development where it extends along the N59 Moycullen Road	Neutral	N/a	None required

<sup>37</sup> NIAH Garden Ref.: GA-45-M-248237<sup>38</sup> NIAH Garden Ref.: GA-45-M-273253<sup>39</sup> NIAH Garden Ref.: GA-45-M-267283

DL No.	Townland:	Detail:	Dist. from proposed road development	Impact type	Potential Impact level	Mitigation
DL 4	Bushypark	Bushypark House demesne. The NIAH garden survey lists it as 'Main features substantially present – peripheral features unrecognisable' <sup>40</sup> . The principal structure is still extant (BH 5) and is listed as a protected structure.	The proposed link road will terminate to the immediate southwest of the demesne and associated drainage infrastructure will extent through the eastern portion of the demesne	Direct	Moderate negative	Written and photographic landscape record prior to construction
DL 5	Barnacranny	Lake View House demesne. Not included within the NIAH garden survey. The house is still extant today (CH 39).	The north-eastern side of the demesne is located to the immediate south of the proposed road development where it extends along the N59 Moycullen Road	Neutral	N/a	None required
DL 6	Dangan Upper	Ashley Park demesne. The NIAH garden survey records it as 'possessing virtually no recognisable features' <sup>41</sup> . The principal structure remains extant today (CH 40)	The north-eastern side of the demesne is located to the immediate south of the proposed road development where it extends along the N59 Moycullen Road.	Neutral	N/a	None required
DL 7	Dangan Lower	Dangan Cottage, Dangan House, Dangan Nunnery, Mary Ville demesnes.	The proposed road development travels in a north-east direction	Direct	Moderate negative	Written and photographic landscape record prior to construction

<sup>40</sup> NIAH Garden Ref.: GA-45-M-272278

<sup>41</sup> NIAH Garden Ref.: GA-45-M-283271

DL No.	Townland:	Detail:	Dist. from proposed road development	Impact type	Potential Impact level	Mitigation
		The NIAH garden survey only includes an entry for Dangan House (which actually refers to Dangan Cottage). It reports 'virtually no recognisable features remain' <sup>42</sup> .	through the original demesne lands.			
DL 8	Mionlach	Menlo Castle Demesne. NIAH garden survey records it as 'Main features unrecognisable – peripheral features visible' <sup>43</sup> . Today the principal structure survives in ruins on the site (BH 10). The principal structure and its entrance are both protected structures.	The proposed road development travels in a north-east direction through the original demesne lands. The western part of the original demesne is located within an area of proposed for habitat enhancement.	Direct	Significant negative	Written and photographic landscape record prior to construction
DL 9	Ballybrit	Ballybrit House demesne. The NIAH garden survey lists the area as possessing 'virtually no recognisable features' <sup>44</sup> .	A short section of proposed existing infrastructure upgrade in located in the northeast corner of the original demesne landscape location.	No impact	N/a	None required

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<sup>42</sup> NIAH Garden Ref.: GA-45-M-284274

<sup>43</sup> NIAH Garden Ref.: GA-45-M-284278

<sup>44</sup> NIAH Garden Ref.: GA-46-M-333272

**Table 13.24: Cultural Heritage (CH): Summary of sites, impacts and mitigation**

CH No.	Townland	Description	Approx. Ch.	Dist. from proposed road development	Impact type	Potential Impact level	Mitigation
CH 1	Na Foraf Maola Thiar	Site of vernacular structures. No longer extant.	0+150	15m west	Indirect	Imperceptible negative	None required
CH 2	Na Foraf Maola Thiar	Site of vernacular structures. No longer extant.	0+130	0m	Direct	Significant negative	Archaeological testing prior to construction
CH 3	Na Foraf Maola Thiar	Single storey vernacular cottage.	0+175	145m east	Indirect	Imperceptible negative	None required
CH 4	Na Foraf Maola Thiar	Sub-circular stone enclosure (Also AH 1 redundant record).	0+500	7m east	Indirect	Moderate negative	Written and photographic landscape record prior to construction
CH 5	Na Foraf Maola Thiar	Site of ruined vernacular structures.	0+450	72m east	Indirect	Imperceptible negative	None required
CH 6	Troscaigh Thiar	Single storey vernacular cottage.	1+550	77m north-northwest	Indirect	Imperceptible negative	None required
CH 7	Na Foraf Maola Thoir	Single storey vernacular cottage.	1+500	10m south	Indirect	Slight negative	Written and photographic landscape record prior to construction
CH 8	Troscaigh Thiar	Walled laneway.	1+950	0m	Direct	Moderate negative	Written and photographic record prior to construction
CH 9	Troscaigh Thiar	Possible famine bridge.	1+650	119m northeast	Neutral	N/a	None required.

CH No.	Townland	Description	Approx. Ch.	Dist. from proposed road development	Impact type	Potential Impact level	Mitigation
CH 10	Troscaigh Thiar	Site of a post medieval sheep fold. No longer extant.	2+110	0m	Direct	Moderate negative	Archaeological testing prior to construction
CH 11	Troscaigh Thiar	Single storey vernacular cottage.	2+250	17m west	Neutral	N/a	None required.
CH 12	Troscaigh Thiar	Ruins of a vernacular building.	2+150	140m west	Neutral	N/a	None required.
CH 13	Troscaigh Thoir	Vernacular cottage and associated farm buildings.	2+400	33m south			
CH 14	An Chloch Scoilte	Vernacular cottage.	2+700	102m northwest	Neutral	N/a	None required.
CH 15	An Chloch Scoilte	Ruins of a vernacular cottage.	2+800	210m north	Neutral	N/a	None required.
CH 16	An Chloch Scoilte	The ruinous remains of the post medieval settlement of An Chloch Scoilte.	2+900	191m north	Neutral	N/a	None required.
CH 17	Troscaigh Thoir	Vernacular cottage, now extended.	3+075	146m south-southeast	Neutral	N/a	None required.
CH 18	An Chloch Scoilte	Vernacular cottage, now extended.	3+260	0m	Direct	Significant negative	Written and photographic record prior to construction
CH 19	An Cheapach	Vernacular cottage and associated farm building.	4+350	116m north-northwest	Indirect	Slight negative	Written and photographic landscape record prior to construction

CH No.	Townland	Description	Approx. Ch.	Dist. from proposed road development	Impact type	Potential Impact level	Mitigation
CH 20	An Cheapach	Vernacular cottage and outbuildings.	4+340	10m south	Indirect	Significant negative	Written and photographic record prior to construction
CH 21	An Cheapach	Site of vernacular structures. No longer appears to be extant.	4+520	14m north	Indirect	Slight negative	Written and photographic landscape record prior to construction
CH 22	An Cheapach	Group of ruined vernacular structures.	4+450	20m east	Indirect	Slight negative	Written and photographic landscape record prior to construction
CH 23	An Cheapach	Vernacular cottage. Now derelict.	4+600	6m southeast	Indirect	Significant negative	Written and photographic record prior to construction
CH 24	Ballynahown East	Ruins of a vernacular cottage.	4+900	35m southeast	Indirect	Slight negative	Written and photographic landscape record prior to construction
CH 25	Keeraun	Vernacular farm yard.	5+500	24m northwest	Indirect	Moderate negative	Written and photographic landscape record prior to construction
CH 26	Keeraun	Vernacular cottage, now derelict.	5+650	0m	Direct	Significant negative	Written and photographic record prior to construction
CH 27	Keeraun	Vernacular cottage.	5+700	23m west-northwest	Indirect	Imperceptible negative	None required
CH 28	Keeraun	Vernacular cottage.	5+900	217m north-northeast	Neutral	N/a	None required.

CH No.	Townland	Description	Approx. Ch.	Dist. from proposed road development	Impact type	Potential Impact level	Mitigation
CH 29	Mincloon	Site of vernacular structures. No longer extant.	6+300	0m	Direct	Significant negative	Archaeological testing prior to construction
CH 30	Mincloon	Vernacular house and farmstead.	6+450	13m west	Indirect	Moderate negative	Written and photographic landscape record prior to construction
CH 31	Mincloon	A number of vernacular outbuildings.	6+500	75m east-southeast	Indirect	Imperceptible negative	None required
CH 32	Mincloon	A stone outbuilding.	6+500	0m	Direct	Moderate negative	Written and photographic record prior to construction
CH 33	Rahoon	Stone-walled laneway.	6+975	0m	Direct	Moderate negative	Written and photographic record prior to construction
CH 34	Rahoon	Site of vernacular structures marked. No longer extant.	7+280	0m	Direct	Significant negative	Archaeological testing prior to construction
CH 35	Rahoon	Leitriff House.	7+350	88m southeast	Indirect	Moderate negative	Written and photographic landscape record prior to construction
CH 36	Letteragh	Stone-walled laneway.	7+410	0m	Direct	Moderate negative	Written and photographic record prior to construction

CH No.	Townland	Description	Approx. Ch.	Dist. from proposed road development	Impact type	Potential Impact level	Mitigation
CH 37	Dangan Upper	Well-built cairns from stone clearance.	7+600	0m	Direct	Moderate negative	Written and photographic record prior to construction
CH 38	Ballagh	Possible square enclosure.	N59 Link Road North 0+150	0m	Direct	Significant negative	Archaeological testing prior to construction
CH 39	Barnacranny	Lake View House.	8+350	39m southeast	Indirect	Slight negative	Written and photographic landscape record prior to construction
CH 40	Dangan Upper	Ashley Park.	8+700	19m southeast	Neutral	N/a	None required.
CH 41	Dangan Lower	Mary Ville.	8+950	15m east	Neutral	N/a	None required.
CH 42	Dangan Lower	Ruined stone outbuilding.	8+725	8m southeast	Indirect	Moderate negative	Written and photographic landscape record prior to construction
CH 43	Dangan Lower	Site of Dangan Cottage.	8+800	27m southeast	No impact	N/a	None required.
CH 44	Dagan Lower	Site of walled garden and outbuildings associated with Dangan House (Nunnery).	9+100	38m northwest	No impact	N/a	None required.
CH 45	Mionlach	Possible boating inlet off the River Corrib.	9+450	33m southeast	Indirect	Slight negative	Written and photographic landscape record prior to construction

CH No.	Townland	Description	Approx. Ch.	Dist. from proposed road development	Impact type	Potential Impact level	Mitigation
CH 46	Mionlach	Possible circular enclosure identified during AP analysis.	9+600	28m southeast of alignment (within proposed habitat enhancement for bats)	No impact	N/a	None required.
CH 47	Mionlach	Possible vernacular animal shelter.	9+700	34m northwest	Indirect	Slight negative	Written and photographic landscape record prior to construction
CH 48	Mionlach	Possible consumption wall.	9+600	24m northeast	Indirect	Imperceptible negative	None required
CH 49	Mionlach	Possible prehistoric tomb.	9+850	0m	Direct	Significant negative	Archaeological testing prior to construction
CH 50	Mionlach	Possible circular feature.	10+375	56m south	Indirect	Slight negative	Written and photographic landscape record prior to construction
CH 51	Mionlach	Possible boulder of archaeological potential.	10+500	0m	Direct	Moderate negative	Archaeological testing prior to construction
CH 52	Mionlach	Site of vernacular structures. No longer appear to be extant.	10+600	0m	Direct	Significant negative	Archaeological testing prior to construction
CH 53	An Caisleán Gearr	Ruins of a vernacular structures.	13+225	97m south-southeast	Indirect	Slight negative	Written and photographic landscape record prior to construction

CH No.	Townland	Description	Approx. Ch.	Dist. from proposed road development	Impact type	Potential Impact level	Mitigation
CH 54	An Caisleán Gearr	Vernacular cottage.	13+775	39m north	Indirect	Moderate negative	Written and photographic landscape record prior to construction
CH 55	Parkmore	Site of vernacular structures marked. No longer extant.	13+925	0m	Direct	Significant negative	Archaeological testing prior to construction
CH 56	Parkmore	Site of vernacular structures. No longer extant.	14+120	0m	Direct	Significant negative	Archaeological testing prior to construction
CH 57	Parkmore	Possible mass path.	14+200	0m	Direct	Significant negative	Archaeological testing & written and photographic record prior to construction
CH 58	Coolagh	Site of vernacular structures. No longer extant.	15+850	0m	Direct	Significant negative	Archaeological testing prior to construction
CH 59	Breanloughaun	Vernacular outbuilding.	15+800	150m east-northeast	Neutral	N/a	None required.
CH 60	Coolagh	Two storey vernacular farm house.	16+400	169m northeast	Indirect	Slight negative	Written and photographic landscape record prior to construction
CH 61	Coolagh	Renovated vernacular cottage and outbuilding.	16+550	260m northeast	Indirect	Slight negative	Written and photographic landscape record prior to construction

CH No.	Townland	Description	Approx. Ch.	Dist. from proposed road development	Impact type	Potential Impact level	Mitigation
CH 62	Coolagh	Group of vernacular buildings. The structures are all upstanding but vary in condition.	16+625	188m northwest	Indirect	Slight negative	Written and photographic landscape record prior to construction
CH 63	Bushypark	Ruins of a vernacular structure.	N59 Link Road North 0+000	3m northeast	Neutral	N/a	None required.
CH 64	Letteragh	Vernacular cottage, now extended.	N59 Link Road South 1+575	113m southeast	Indirect	Imperceptible negative	None required
CH 65	Letteragh	Ruins of a vernacular cottage.	N59 Link Road South 1+600	229m east-southeast	Neutral	N/a	None required.
CH 66	Rahoon	Vernacular house, recently renovated.	N59 Link Road South 2+050	159m west-northwest	Neutral	N/a	None required.
CH 67	Dangan Lower	Dangan House.	9+100	199m southeast	Indirect	Slight negative	Written and photographic landscape record prior to construction
CH 68	Bushypark	Disused railway	Pipeline wayleave	0m	Direct	Moderate negative	Written and photographic record prior to construction
CH 69	Bushypark	Potential mass rock	Pipeline wayleave	30m west-northwest	Indirect	Slight negative	Written and photographic landscape record prior to construction
CH 70	Bushpark/ Dangan Lower	Railway culvert	Pipeline wayleave	To the immediate east	Direct	Moderate negative	Written and photographic record prior to construction

CH No.	Townland	Description	Approx. Ch.	Dist. from proposed road development	Impact type	Potential Impact level	Mitigation
CH 71	Mincloon	Walled trackway	6+200	0m	Direct	Moderate negative	Written and photographic record prior to construction
CH 72	Mionlach	Walled trackway	9+800	0m	Direct	Moderate negative	Written and photographic record prior to construction

**Table 13.25: Areas of Archaeological Potential (AAP): Summary of sites, impacts and mitigation**

AAP No.	Townland	Description	Approx. Ch.	Dist. from proposed road development	Impact type	Potential Impact level	Mitigation
AAP 1	Na Foraí Maola Thiar/ Cnoc na Gréine	Liberty Stream (TB 2)	0+430 -0+650	0m	Direct	Moderate-profound negative	Underwater archaeological assessment prior to construction
AAP 2	Troscaigh Thoir/ An Chloch Scoilte	Trusky Stream (TB 6)	2+650 -2+950	0m	Direct	Moderate-profound negative	Underwater archaeological assessment prior to construction
AAP 3	Na hAille/ An Cheapach	Barna Stream (TB 10)	3+850 -4+150	0m	Direct	Moderate-profound negative	Underwater archaeological assessment prior to construction
AAP 4	Ballynahown East	Stream (TB 12)	4+800 -5+200	0m	Direct	Moderate-profound negative	Underwater archaeological assessment prior to construction

AAP No.	Townland	Description	Approx. Ch.	Dist. from proposed road development	Impact type	Potential Impact level	Mitigation
AAP 5	Rahoon	Stream and boggy hollow	6+800 -6+900	0m	Direct	Moderate-profound negative	Underwater archaeological assessment & archaeological testing prior to construction.
AAP 6	Rahoon	Small stream	7+300 – 7+375	0m	Direct	Moderate-profound negative	Underwater archaeological assessment prior to construction
AAP 7	Barnacranny	Small stream	7+500 -7+675	0m	Direct	Moderate-profound negative	Underwater archaeological assessment prior to construction
AAP 8	Barnacranny	Boggy, waterlogged marginal lands	N59 Link Road North 0+500 to 0+850	0m	Direct	Moderate-profound negative	Archaeological testing prior to construction
AAP 9	Dangan Lower/ Mionlach	River Corrib (TB 22)	9+175-9+525	0m	Direct	Moderate-profound negative	Underwater archaeological assessment prior to construction
AAP 10	An Caisleán Gearr	Boggy pasture – margins of <i>Lough an Dúlaigh</i>	12+200 - 12+450	0m	Direct	Moderate-profound negative	Archaeological testing prior to construction
AAP 11	An Caisleán Gearr	Boggy hollow (AH 24)	12+975 – 13+075	0m	Direct	Moderate-profound negative	Archaeological testing prior to construction.

AAP No.	Townland	Description	Approx. Ch.	Dist. from proposed road development	Impact type	Potential Impact level	Mitigation
AAP 12	Bushypark	Site of 'Loughaunnafraska'	Pipeline wayleave	0m	Direct	Moderate-profound negative	Archaeological testing prior to construction

**Table 13.26: Townland Boundaries (TB): Summary of sites, impacts and mitigation**

TB No.	Townland	Description	Approx. Ch.	Dist. from proposed road development	Impact type	Potential Impact level	Mitigation
TB 1	An Baile Nua/ Na Foráí Maola Thiar	Sea Road (R336)	0+000	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 2	Na Foráí Maola Thiar/ Cnoc na Gréine	Liberty Stream (Also AAP 1)	0+450 – 0+650	0m	Direct	Moderate negative	Written and photographic record & underwater archaeological assessment prior to construction
TB 3	Na Foráí Maola Thiar/ Na Foráí Maola Thoir	Local Road	1+100	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 4	Na Foráí Maola Thoir/ Troscaigh Thiar	Local Road	1+550	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 5	Troscaigh Thiar/ Troscaigh Thoir	Hedgerow & modern fence	2+425	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 6	Troscaigh Thoir/ An Chloch Scoilte	Former site of townland boundary	2+650 - 2+850	0m	Direct	Moderate negative	Written and photographic record, underwater archaeological assessment

TB No.	Townland	Description	Approx. Ch.	Dist. from proposed road development	Impact type	Potential Impact level	Mitigation
		including a portion of stream (AAP 2)					and archaeological testing prior to construction
TB 7	Troscaigh Thoir/ An Chloch Scoilte/ Ballard West	Stone wall	2+975 - 3+200	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 8	Ballard West/ Ballard East/ An Chloch Scoilte	Local road. Boundary between Ballard West and East not extant	3+250 - 3+350	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 9	Ballard East/ Na hAille	Stone wall	3+490	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 10	Na hAille/ An Cheapach	Barna Stream (AAP 3)	4+100	0m	Direct	Moderate negative	Written and photographic record & underwater archaeological assessment prior to construction
TB 11	An Cheapach/ Ballynahown East	Stone walled laneway	4+700 – 4+800	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 12	Ballynahown East/ Keeraun	Stream (AAP 4) and field boundary (boundary completely overgrown)	4+800-5+250	0m	Direct	Moderate negative	Written and photographic record & underwater archaeological assessment prior to construction
TB 13	Keeraun/ Ballyburke	Stone wall and hedgerow	5+660 - 5+725	0m	Direct	Moderate negative	Written and photographic record prior to construction

<b>TB No.</b>	<b>Townland</b>	<b>Description</b>	<b>Approx. Ch.</b>	<b>Dist. from proposed road development</b>	<b>Impact type</b>	<b>Potential Impact level</b>	<b>Mitigation</b>
TB 14	Ballyburke/ Mincloon	Stone wall	6+050	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 15	Mincloon/ Ragoon	Stone wall	6+800	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 16	Ragoon/ Letteragh	Stone wall, sections of which have been removed	7+400	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 17	Letteragh /Barnacranny	Stone wall	7+550	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 18	Barnacranny/ Dangan Upper	Stone wall	7+740	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 19	Barnacranny/ Dangan Upper	No access granted	8+200	0m	Direct	Moderate negative	Written and photographic record/ archaeological testing, prior to construction
TB 20	Dangan Upper/ Dangan Lower/ Kentfield/ Ballagh/ Bushypark	N59 Moycullen Road (crossed at 2 points)	8+525	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 21	Barnacranny/ Ballagh	Stone wall and ditch	N59 Link Road North 0+550	0m	Direct	Moderate negative	Written and photographic record & archaeological testing prior to construction
TB 22	Dangan Lower/ Menlough	River Corrib (AAP 9)	9+350	0m	Direct	Moderate negative	Underwater archaeological assessment

<b>TB No.</b>	<b>Townland</b>	<b>Description</b>	<b>Approx. Ch.</b>	<b>Dist. from proposed road development</b>	<b>Impact type</b>	<b>Potential Impact level</b>	<b>Mitigation</b>
							& written and photographic record prior to construction
TB 23	Mionlach/ Ballindooley	Stone wall	10+725	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 24	Coolagh/ Ballindooley/ An Caisleán Gearr	Quarried away	11+600	0m	No impact	N/a	None required
TB 25	Ballindooley/ An Caisleán Gearr	Stone wall and hedgerow	11+600 - 12+250	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 26	An Caisleán Gearr/ Parkmore	Tuam Road	13+900	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 27	An Caisleán Gearr/ Cappanabornia	Hedgerow	13+840	0m	Direct	Moderate negative	Written and photographic record & archaeological testing prior to construction
TB 28	Cappanabornia/ Parkmore	Tuam Road	13+840	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 29	Parkmore/ Pollkeen	Stone wall	14+350	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 30	Parkmore/ Ballybrit	Removed	14+750	0m	Direct	Moderate negative	Archaeological testing prior to construction
TB 31	Ballybrit/ Doughiska	Removed	15+600	0m	Direct	Moderate negative	Archaeological testing prior to construction

<b>TB No.</b>	<b>Townland</b>	<b>Description</b>	<b>Approx. Ch.</b>	<b>Dist. from proposed road development</b>	<b>Impact type</b>	<b>Potential Impact level</b>	<b>Mitigation</b>
TB 32	Doughiska/ Coolagh/ Breanloughaun	Stone wall and road	15+750- 16+800	0m	Direct	Moderate negative	Written and photographic record prior to construction
TB 33	Rahoon/ Letteragh	Stone wall	N59 Link Road South 1+620	0m	Direct	Moderate negative	Written and photographic record prior to construction

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