
Chapter 20

Archaeology and Cultural Heritage

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20. Archaeology and Cultural Heritage

20.1. Introduction

This chapter of the Environmental Impact Assessment Report (EIAR) identifies, describes and presents an assessment of the likely significant effects of the proposed DART+ South West Project (hereafter as ‘the proposed Project’) on Archaeology and Cultural Heritage. The assessment will examine the potential impacts during the construction and operational phases.

The assessment of Architectural Heritage (including industrial heritage) is covered in Chapter 21.

20.2. Legislation, Policy and Guidance

The Transport (Railway Infrastructure) Act 2001 (as amended) provides for the making of a Railway Order application by Córas Iompair Éireann to An Bord Pleanála. The European Union (Railway Orders) (Environmental Impact Assessment) (Amendment) Regulations 2021 (S.I. No. 743 of 2021) gives further effect to the transposition of the EIA Directive (EU Directive 2011/92/EU as amended by Directive 2014/52/EU) on the assessment of the effects of certain public private projects on the environment by amending the Transport (Railway Infrastructure) Act 2001 (‘the 2001 Act’). An examination, analysis and evaluation is carried out by An Bord Pleanála in order to identify, describe and assess, in the light of each individual case, the direct and indirect significant effects of the proposed railway works, including significant effects derived from the vulnerability of the activity to risks of major accidents and disasters relevant to it, on: population and human health; biodiversity, with particular attention to species and habitats protected under the Habitats and Birds Directives; land, soil, water, air and climate; material assets, cultural heritage, the landscape, and the interaction between the above factors. In carrying out an EIA in respect of an application made under section 37 of the 2001 Act, An Bord Pleanála is required, where appropriate, to co-ordinate the assessment with any assessment under the Habitats Directive or the Birds Directive.

The key legislation and guidance referenced in the preparation of the EIAR is outlined in Chapter 1 (Sections 1.5, 1.6 and 1.7) and below and specific to Archaeology and Cultural Heritage, the following legislation, policy and guidance documents has informed the assessment as also outlined below.

20.2.1. Legislation

Relevant European and National legislation that has informed the assessment includes:

European

- The European Union (Railway Orders) (Environmental Impact Assessment) (Amendment) Regulations 2021 (S.I. No. 743 of 2021) gives further effect to the transposition of the EIA Directive (EU Directive 2011/92/EU as amended by Directive 2014/52/EU) on the assessment of the effects of certain public private projects on the environment by amending the Transport (Railway Infrastructure) Act 2001 (‘the 2001 Act’);
- Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, better known as “The Habitats Directive”, and Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds, better

known as “The Birds Directive”, provides legal protection for habitats and species of European importance. Ireland has given effect to the Habitats and Birds Directives through Part XAB of the Planning and Development Act 2000 (as amended) and the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011) as amended;

- Charter for the Conservation and Restoration of Monuments and Sites (Venice 1964);
- European Convention on the Protection of the Archaeological Heritage (the ‘Valletta Convention’) ratified by Ireland in 1997;
- Council of Europe Convention for the Protection of the Architectural Heritage of Europe (Granada) 1985, ratified by Ireland in 1991;
- The UNESCO World Heritage Convention, 1972;
- Council of Europe Framework Convention on the Value of Cultural Heritage for Society, (‘Faro Convention’) (2005);
- European Commission EIA Directives 85/337/EEC 2011/92/EU and 2014/52/EU;
- Circular Letter: PL 05/2018 Transposition into Planning Law of Directive 2014/52/EU; and
- The European Landscape Convention (ELC), ratified by Ireland 2002 European Landscapes Convention 2010. (The Department of the Environment, Heritage and Local Government ‘Landscape and Landscape Assessment Guidelines’ have been in draft form since 2000, however the National Landscape Strategy (NLS) was launched in July 2014).

National

- National Monuments (Amendments) Acts, 1930-2014, as amended;
- Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act, 2000 and the Planning and Development Act 2000 (as amended);
- Heritage Act, 1995 (as amended);
- Planning and Development (Strategic Infrastructure) Act 2006 (as amended);
- The Transport (Railway Infrastructure) Act 2001 as amended, including as amended by the European Union (Railway Orders) (Environmental Impact Assessment) (Amendment) Regulations 2021 (S.I. No. 743 of 2021); and
- The provisions of Part IV of the Planning and Development Act 2000 (as amended) (which addresses protected structures) are disapplied where the works involved are authorised by a Railway Order by virtue of section 38 of the Transport (Railway Infrastructure) Act 2001 (as amended) and the development is also deemed to be exempted development.

20.2.2. Policy

Relevant policy documents that have informed the assessment include:

- Kildare County Development Plan 2017-2023 (and draft plan 2023-2029 as available);

- Dublin City Development Plan 2022-2028¹;
- South Dublin County Development Plan 2022-2028;
- Dublin City Strategic Heritage Plan 2022-2026; and
- Kildare County Council Heritage Plan 2019-2025.

20.2.3. Guidance

Relevant guidance documents that have informed the assessment include:

- Code of Practice for Archaeology agreed between the Minister for Arts, Heritage, Regional, Rural and Gaeltacht Affairs and Transport Infrastructure Ireland 2017;
- The Setting of Heritage Assets, Historic Environment Good Practice Advice in Planning Note 3 (Second Edition). Historic England (2017);
- National Landscape Strategy for Ireland 2015-2025, Department of Arts, Heritage and the Gaeltacht (2015);
- Guidance on Heritage Impact Assessments for Cultural World Heritage Properties – A publication of the International Council on Monuments and Sites, January 2011 (ICOMOS, 2011);
- Proposals for Irelands Landscapes The Heritage Council (2010);
- Managing Change in the Historic Environment, Historic Scotland (October 2010);
- Guidelines for the Testing and Mitigation of the Wetland Archaeological Heritage for National Road Schemes (NRA, 2006);
- Guidelines for the Assessment of Architectural Heritage Impact of National Road Schemes, (NRA, 2005);
- Guidelines for the Assessment of Archaeological Heritage Impact of National Road Schemes, (NRA, 2005);
- Frameworks and Principles for the Protection of the Archaeological Heritage (Department of Arts, Heritage, Gaeltacht and Islands, 1999); and
- ICOMOS International Charters including:
 - Historic Gardens (Florence Charter) 1981;
 - Charter for the Conservation of Historic Towns and Urban Areas (Washington Charter) 1987;
 - Charter for the Protection and Management of Archaeological Heritage 1990;

¹ At the time of going to print the final geospatial datasets for the 2022 Plan were not publicly available. The datasets referred to and illustrated in this EIAR and supporting documentation including Volume 3A of this EIAR are therefore based on the previous 2016 Plan. The assessments have, however, had regard to the published PDF maps included as part of Volume 3 - Zoning Maps of the 2022 Plan.

- International Cultural Tourism Charter – Managing Tourism at Places of Heritage Significance 1999;
- Charter on the Built Vernacular Heritage 1999;
- ICOMOS Xi'an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas, 2005;
- ICOMOS Charter on Cultural Routes 2008;
- ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites (also known as the 'Ename Charter') 2008;
- Joint ICOMOS – TICCIH Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes 2011;
- The Valletta Principles for the Safeguarding and Management of Historic Cities, Towns and Urban Areas 2011;
- ICOMOS Charter for Places of Cultural Significance (The Burra Charter) 2013; and
- Salalah guidelines for the management of public archaeological sites – 2017.

20.3. Methodology

The methodology was designed to provide a full understanding of the potential impact on archaeological and cultural heritage assets and on the character of the historic urban and residential streetscape and landscape. In so doing, it allowed the character of the study area (defined in Section 20.3.2) to be described and facilitated the identification of individual heritage assets and locations where there is the potential to reveal subsurface archaeological features.

20.3.1. Defining Archaeology and Cultural Heritage

For the purpose of this Chapter the following definition from the Department of Arts, Heritage, Gaeltacht and the Islands (DAHGI) (now Department of Housing, Local Government and Heritage (DHLGH)) Framework and Principles for the Protection of the Archaeological Heritage is applied for archaeology (DAHGI 1999):

'the study of past societies through material remains left by those societies and the evidence of their environment. The 'archaeological heritage' consists of such material remains (whether in the form of sites and monuments or artefacts in the sense of moveable objects) and environmental evidence'.

Cultural heritage as set out in the Environmental Protection Agency (EPA) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (hereafter referred to as the EPA Guidelines) (EPA 2022) includes archaeology, architectural heritage, folklore and history. It is a broad term that includes a wide range of tangible and intangible cultural considerations. Cultural heritage can relate to settlements, former designed landscapes, buildings and structures, folklore, townland and place names, and historical events, as well as traditions (e.g., mass paths and pilgrim ways) and traditional practices (e.g., saints' pattern days).

Cultural heritage is part of our cultural identity and contributes to defining a sense of place. The value of a strong sense of place is likely to become more important as the world grows increasingly homogenised. Recognising the unique sense of place in our towns, villages and city, whilst also respecting the individual heritage assets, is critical.

Cultural heritage assets are valued for the important contribution they make to the understanding of the history of a place, an event or people. Sites of cultural heritage interest are often afforded protection either as recorded archaeological monuments (on the Record of Monuments and Places (RMP)/ Sites and Monuments Record (SMR)) or as protected structures (on the Record of Protected Structures (RPS) in the relevant City or County Development Plan), or as structures within the National Inventory of Architectural Heritage (NIAH).

Each of these provides a unique cultural record and acts as a carrier of memory, meaning and cultural value. When considered in its wider context, they can form an essential component in the mechanism for analysing the broader cultural character and context of an area. Together, these can assist in mapping the changes that have led to the development of the modern environment. Such analysis provides insight into the communication, trade, transport, growth and associations of past societies.

There are numerous cultural heritage features that contribute to character, identity, and authenticity of Dublin City and its wider environs. These include the street plan, local architectural and archaeological monuments, the form of buildings and spaces, industrial heritage such as railway infrastructure and crossings etc. This unique historic character was identified and recorded throughout the EIA process by the relevant specialists in the EIA team. By identifying, recording and articulating these sensitive cultural heritage values, they can be considered, respected and protected in the context of change in the future.

Remnants of Dublin's industrial heritage can be found throughout Dublin City and its wider environs (e.g., the train infrastructure, signal buildings, stations, road and pedestrian bridge structures), some of it upstanding, the rest possibly surviving below-ground. These features all contribute to the present-day character and uniqueness of an area by reflecting its historic past and are assessed as part of the historic street scape within Chapter 21 Architectural Heritage.

The evaluation of the archaeological resource was based on a desk study of published and unpublished documentary, aerial photography and cartographic sources. By using different information sources and data sets, an understanding of the historic landscape character that surrounds and is part of the Project has been developed. The modern landscape is a result of numerous modifications over time. Understanding how these processes occur, and how they are represented in today's urban and suburban landscape, is critical in providing an insight into the layering and development of the cultural heritage environment. It also facilitates an appreciation of an area's unique character. The process is concerned with identifying the dominant historic influences which have formed and define the present landscape. By using existing heritage data sets such as the RPS, RMP, NIAH for example, through the use of GIS and CAD, dominant clusters of monuments, buildings and cultural heritage features begin to emerge. This includes the results of previous assessments undertaken for the original Kildare Route Project which was subject to a series of invasive and non-invasive archaeological investigations (See Section 20.4.5 includes a review of these investigations). This has facilitated the production of an archaeological and historical background to the proposed Project lands, identifying the nature of the

recorded archaeological sites and finds arising from previous development and excavation in its environs. This has also established, as far as the records allow, the archaeological potential of the site and its immediate environs.

Architectural Heritage and Industrial Heritage is being examined in Chapter 21.

Appendices associated with this chapter are detailed in Volume 4 of this EIAR, and contain the following information:

- Appendix 20.1 – National Monuments Legislation;
- Appendix 20.2 – Archaeological Designations; and
- Appendix 20.3 – Glossary of Impacts and Assessment Methodology.

20.3.2. Study Area

The area examined for this study includes the full extent of the proposed Project corridor. In order to inform the likely significant impacts from an archaeological and cultural heritage perspective, a 250m assessment study area was established on either side of the existing railway line. This corridor is the predicted extent of likely impact of the proposed Project. Relevant excavations, monuments, stray topographical finds and historical references from outside of the study area corridor are also discussed where they have informed the development of the study area or where they may provide information on the archaeological potential of the study area itself.

Professional judgement was used to determine where the assessment study area should be extended to consider archaeological sites/ monuments or historic structures that lie beyond 250m. As required and where appropriate, the relationship of structures, sites, monuments, and complexes that fall outside this study area were considered and evaluated to examine whether their setting or physical extent (above or below ground) might extend into the study area.

20.3.3. Survey Methodology

The assessment of the archaeological and cultural heritage of the proposed Project is based on a desk study of published and unpublished documentary and cartographic sources. A review of existing documentation and supplementary research and field surveys has taken place where necessary in order to evaluate the archaeological and cultural heritage constraints in terms of avoidance and mitigation measures.

20.3.3.1. Desk Surveys

The desk study availed of the following sources:

- United Nations Educational, Scientific and Cultural Organization (UNESCO): properties inscribed on the World Heritage List and those nominated for inclusion on the tentative list;
- The National Monuments, Preservation Orders and Register of Historic Monuments lists were sourced directly from the Department of Housing, Local Government and Heritage (DHLGH);
- Record of Monuments and Places (RMP) and Sites and Monuments Record (SMR): The SMR, as revised in the light of fieldwork, formed the basis for the establishment of the statutory RMP

(pursuant to Section 12 of the National Monuments (Amendment) Act, 1994). The RMP records known upstanding archaeological monuments, their original location (in cases of destroyed monuments) and the position of possible sites identified as cropmarks on vertical aerial photographs. The information held in the RMP files is read in conjunction with published constraint maps. Archaeological sites identified since 1994 have been added to the non-statutory SMR database of the Archaeological Survey of Ireland (National Monuments Service, DHLGH), which is available online at www.archaeology.ie and includes both RMP and SMR sites. Those sites designated as SMR sites have not yet been added to the statutory record, but are scheduled for inclusion in the next revision of the RMP;

- Dublin City Council's (DCC) Dublin City Development Plan (2022-2028), South Dublin County Development Plan (2022-2028); Kildare County Council Development Plan (2017-2023);
- The topographical files of the National Museum of Ireland;
- Excavations Bulletins and Excavations Database (1970-2020); and Dublin County Archaeology GIS, online (The Heritage Council);
- A review of historical maps was also undertaken to identify any features of cultural heritage significance within the proposed study area, including: Speed (1610), De Gomme (1673), Phillip (1685), Brooking (1728), Rocque (1756 and 1757), Scalé (1773) and the first edition and later (1838-1847) Ordnance Survey Mapping; available online on the Ordnance Survey of Ireland's website (www.osi-maps.ie);
- Place names; Townland names and toponomy (<https://www.logainm.ie/en/>);
- Dublin City Industrial Heritage Record (DCIHR) (DCC 2003-2009);
- Aerial imagery (Google Earth 2001–2020, Bing 2013; OSi 1995, 2000, 2006); and
- Other sources of information of documentation and research are included in Section 20.10.

Documentary and literary sources were consulted, and a number of other published and unpublished documentary sources as contained in Section 20.10.

20.3.3.2. Field Surveys

Whist trackside access was not required for the archaeological survey, field walkover surveys were carried out in the areas for proposed substations, attenuation areas and construction compounds. A drive by windshield survey of the route and existing crossings was carried out to review the landscape through which the railway corridor runs.

20.3.4. Models / Tools Used in Assessment

No modelling software/ tools were used in the archaeological assessment.

20.3.5. Assessment Methodology

Potential impact on the receiving archaeological and cultural heritage environment can be described as direct physical impacts, indirect physical impacts, and impacts on setting:

- Direct physical impacts – those development activities that directly cause damage to the fabric of a heritage asset. Typically, these activities are related to construction works; for example, excavation works associated with the proposed Project;
- Indirect physical impacts – those processes, triggered by development activity, that lead to the degradation of heritage assets; and
- Impacts on setting – how the presence of a development changes the surroundings of a heritage asset (archaeological, architectural or cultural heritage sites) in such a way that it affects (positively or negatively) the heritage significance of that asset. Visual impacts are most commonly encountered but other environmental factors such as noise, light or air quality can be relevant in some cases. Impacts may be encountered at all stages in the life cycle of a development from construction to decommissioning but they are only likely to be considered significant during the prolonged operational life of the development.

The archaeology and cultural heritage assessment has followed the methodology set out in the EPA Guidelines (EPA, 2022) and the National Roads Authority (NRA) Guidelines for the Assessment of Archaeological Heritage Impact of National Road Schemes (hereafter referred to as the NRA Guidelines) (NRA, 2005).

20.3.5.1. Key Parameters for Assessment

The key activities that have the potential to result in likely significant effects on archaeology and cultural heritage are outlined below:

Construction Phase

- Ground works and site clearance works including demolition leading to the removal or part removal of a heritage asset due to construction activities;
- Ground disturbance and excavation, caused by construction activities (including service connections and diversions) which may lead to the damage or destruction/ removal of recorded or previously unknown (newly revealed) heritage assets; and
- The degradation of the setting and amenity of a monument or the severance/ fragmentation of interrelated features.

Operation and Maintenance Phase

- Operational activities may comprise maintenance activities, though the impact risk to recorded or previously identified archaeological features or cultural heritage assets is considered to be low;
- A change that negatively impacts on a sense of place (i.e. detracts from the setting of historic features) and that cannot be mitigated has the potential to be considered a significant or profound impact throughout the operational life of the proposed Project; and

- Potential visual impacts on archaeological and cultural heritage features during the operational phase may be incurred as a result of the proposed Project and result in a change in the character of the receiving historic environment. This change may have a positive or negative affect on the heritage asset.

20.3.5.2. Assessment Criteria and Significance

Archaeological and cultural heritage sites are a non-renewable resource and cultural heritage material assets are generally considered to be location sensitive. In this context, any change to their environment, such as construction activity and ground disturbance works, could adversely affect these sites. The likely significance of all effects is determined in consideration of the magnitude of the impact and the baseline rating upon which the impact has an effect (i.e., the sensitivity or value of the cultural heritage asset). Having assessed the predicted magnitude of impact with respect to the sensitivity/value of the asset (Table 20.1, Table 20.2 and Figure 20-1), the overall significance of the effect is then classified as imperceptible, not significant, slight, moderate, significant, very significant, or profound (Table 20.3).

A glossary of impact assessment terms, including the criteria for the assessment of effect significance, is contained in Volume 4, Appendix 20.3.

Table 20.1: Significance/ Sensitivity Criteria

Sensitivity/ Significance	Criteria
High	<p>Sites of international significance:</p> <ul style="list-style-type: none"> • World Heritage Sites.; • National Monuments; • Protected Structures (assessed by the NIAH to be of international and national importance), where these are also National Monuments; and • Undesignated archaeological and cultural heritage sites.
Medium	<ul style="list-style-type: none"> • Recorded Monuments (RMP sites & SMR sites scheduled for inclusion in the next revision of the RMP); • Protected Structures/ NIAH sites (assessed by the NIAH to be of regional importance), where these are also Recorded Monuments; • Newly identified archaeological sites, confirmed through archaeological investigation, to be added to the SMR; and • Undesignated archaeological and cultural heritage sites.
Low	<ul style="list-style-type: none"> • Sites listed in the Dublin City Industrial Heritage Record (DCIHR) and National Inventory of Architectural Heritage (NIAH) Building for which there are no upstanding remains; • Undisturbed greenfield areas and riverine environs, which have an inherent archaeological potential; and • Undesignated archaeological and cultural heritage sites.
Negligible	Assets with very little or no surviving archaeological and/ or cultural heritage interest.

Table 20.2: Magnitude of Impact Criteria

Impact Magnitude	Criteria
High	These impacts arise where an archaeological/ cultural heritage asset is completely and irreversibly destroyed by a proposed development. A change such that the value of the asset is totally altered or destroyed, leading to a complete loss of character, integrity and data about the site.
Medium	An impact which, by its magnitude, duration or intensity alters an important/ significant aspect of the environment. An impact like this would be where an archaeological/ cultural heritage asset would be impacted upon leading to a significant loss of character, integrity and data about the site. Or an impact which by its magnitude results in the partial loss of a historic structure (including fabric loss or alteration) or grounds including the part removal of buildings or features or part removal of demesne land (e.g. severance, visual intrusion or degradation of setting and amenity). A permanent positive impact that enhances or restores the character and/ or setting of a cultural heritage site or upstanding archaeological heritage site in a clearly noticeable manner.
Low	A low impact arises where a change to the site is proposed which though noticeable is not such that the archaeological/ cultural heritage character/ integrity of the site is significantly compromised, and where there is no significant loss of data about the site. A positive impact that results in partial enhancement of the character and/ or setting of a cultural heritage site or upstanding archaeological heritage site in the medium to long-term.
Negligible	An impact which causes very minor changes in the character of the environment and does not directly impact an archaeological/ cultural heritage asset or affect the appreciation or significance of the asset. There would be very minor changes to the character and integrity of the asset and no loss of data about the site.

Table 20.3: Defining Significance of Impacts

Impact	Definition
Imperceptible	An impact capable of measurement but without noticeable consequences.
Not Significant	An impact which causes noticeable changes in the character of the environment but without significant consequences.
Slight	An impact which causes minor changes in the character of the environment and does not affect an archaeological/ cultural heritage asset in a moderate or significant manner.
Moderate	A moderate impact arises where a change to the site is proposed which though noticeable, does not lead to a significant loss of character, integrity and data about the archaeological/ cultural heritage asset.
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 or all of a site would be permanently impacted upon, leading to a significant loss of character, integrity and data about the archaeological/ cultural heritage asset.
Very Significant	An impact which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment.
Profound	Applies where mitigation would be unlikely to remove adverse impacts. Reserved for adverse, negative impacts only. These impacts arise where an archaeological/ cultural heritage asset is completely and irreversibly destroyed by a proposed development.

Source: Description of Impacts (EPA 2022).

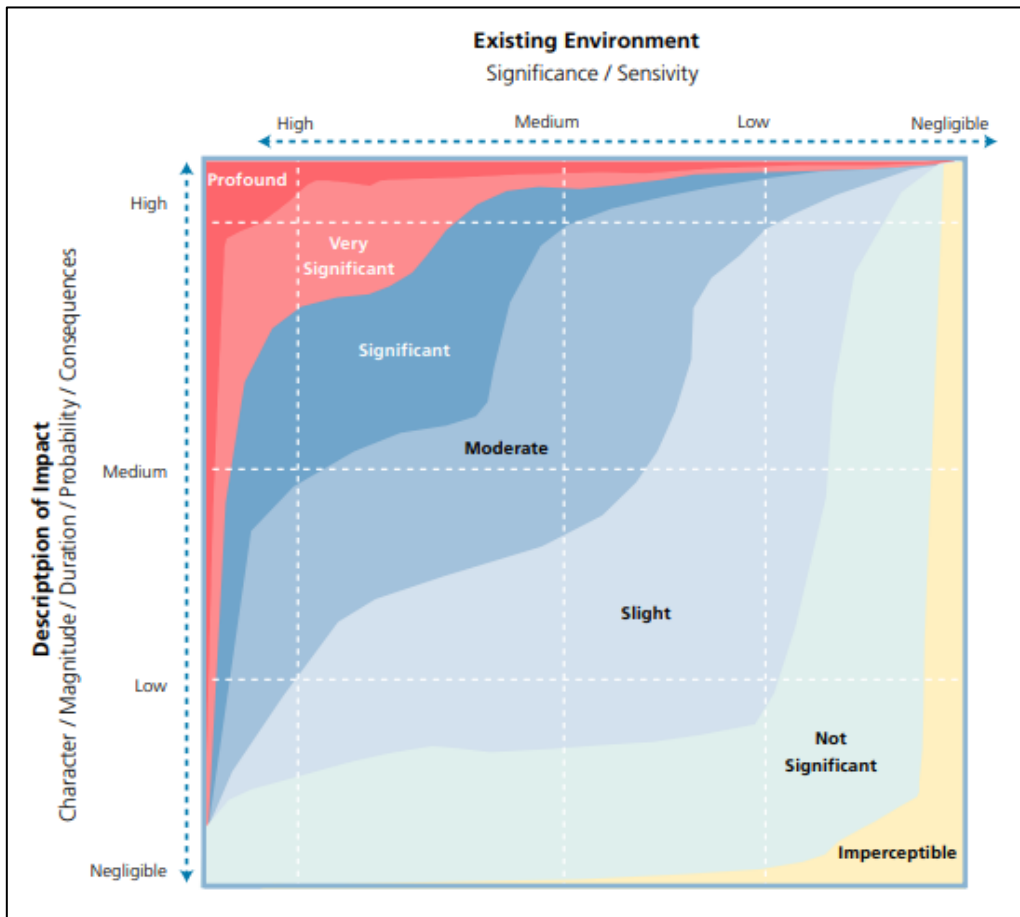


Figure 20-1 Description of Impacts from the EPA Guidelines on Information to be Contained in Environmental Impact Assessment Reports (EPA, 2022)

20.3.6. Consultation

The overall project stakeholder and public consultation undertaken in respect of the Project is set out in the Public Consultation No. 1 Findings Report (for PC1) and Public Consultation No. 2 Findings Report (for PC2) which are included in Volume 4, Appendix 1.3 and 1.4. All feedback was collated, including feedback specific to the EIAR topic ‘Archaeology and Cultural Heritage’. This feedback has informed this chapter including the baseline and impact assessment presented.

Specific consultation was also undertaken with key stakeholders in relation to EIA Scoping. A summary of the issues raised in relation to the scope of the EIA is included in Volume 4, Appendix 1.2. Feedback on the scope and level of detail of the assessment, data sources and methodologies as they pertain to the EIAR topic ‘Archaeology and Cultural Heritage’ have been reviewed and have influenced this chapter of the EIAR.

Specific consultation was also undertaken with representatives of various Departments in Kildare, South Dublin and Dublin City Councils. This included a combination of presentations, workshops and meetings to discuss the project, technical design issues and environment and planning matters.

Nine pre-application meetings were held with ABP to explain the project and present technical and environmental information. A summary of the information presented and the environmental issues

discussed at the nine meetings is provided in Volume 4, Appendix 1.6. Feedback relevant to the topic ‘Archaeology and Cultural Heritage’ has been reviewed and has influenced this chapter of the EIAR.

In addition to this broader consultation, topic specific consultation was also undertaken in the form of formal data requests, meetings and workshops. Those related to ‘Archaeology and Cultural Heritage’ are listed below in Table 20.4.

Table 20.4: Topic-Specific Consultation Summary regarding Archaeology

Consultee	Summary of Consultation Response / Meeting
DCC City Archaeologist office	<p>Pre-application meeting (19th Nov 2020) with DCC City Archaeologist office. The archaeological constraints and potential of the proposed development were presented to DCC in the form of a project presentation. DCC staff made the following observations:</p> <ul style="list-style-type: none"> • Potential for uncovering human remains during SI works; • Around Prospect Cemetery - there may be human remains; • Kilmainham might be a National Monument; and • Track lowering might encounter archaeology.
DCC City Archaeologist and Conservation Offices	<p>Combined Pre-application meeting (19th May 2021) with DCC City Archaeologist office and Conservation office to discuss the Emerging Preferred Option and matters related to Archaeology and Architectural Heritage.</p>
DCC City Archaeologist and Conservation Offices	<p>Combined Pre-application meeting (3rd Feb 2022) with DCC City Archaeologist office and Conservation office. DCC staff made the following observations:</p> <ul style="list-style-type: none"> • Recommendation for monitoring of the Site Investigation works and for a Project Archaeologist to oversee the works.

20.3.7. Difficulties Encountered / Limitations

No difficulties were encountered during the completion of this assessment.

In the initial stages of this project the restrictions associated with the Covid-19 pandemic had some effect on the preparation of this chapter. Libraries and archives closed for a significant period, curtailing access for research purposes. Access to libraries and archives eased later on during the research period, though generally still with some restrictions in place.

20.4. Receiving Environment

20.4.1. Archaeological and Historical Background

20.4.1.1. Introduction

The proposed Project has been divided into four distinct geographic zones along the length of the corridor (Zones A to D) as outlined in Chapter 4 Project Description and summarised below. The proposed Project is described from west to east along the railway corridor.

- Zone A - Hazelhatch & Celbridge Station to Park West & Cherry Orchard Station (refer to Section 4.6);

- Zone B - Park West & Cherry Orchard Station to Heuston Station (incorporating Inchicore Works) (refer to Section 4.7);
- Zone C – Heuston Yard & Station (incorporating New Heuston West Station) (refer to Section 4.8); and
- Zone D - Liffey Bridge to Glasnevin Junction (Phoenix Park Tunnel Branch Line) (refer to Section 4.9).

For the purposes of the discussion on the archaeological and historical background, the study area has been sub-divided into four specific areas with reference to the historic context of townlands. This approach allows for a focused analysis of each area rather than a general overview of the entire study area.

Zone A: Hazelhatch & Celbridge Station to Park West & Cherry Orchard Station

20.4.1.2. Hazelhatch to Ballymadeer

20.4.1.2.1. Prehistoric Period

A fulacht fia (or Bronze Age cooking site) was first identified at Elmhall during archaeological testing (Licence No. 07E0298, Excavations.ie Ref. 2007:861) of the previous Kildare route rail project. The site was subsequently excavated under Licence No. 07E0816 (Excavations.ie Ref. 2008:803). The fulacht fia consisted of an oval mound of black soil and heat-shattered stone. The full extent of the burnt-mound material was not ascertained, as it extended beyond the northern limit of excavation. The exposed mound extended over an area measuring 9.3m (east–west) by 9.2m and was extremely truncated by activity associated with the landscaping and drainage of the adjacent Elmhall golf-course. Three phases of activity associated with the fulacht fia were identified, the earliest of which consisted of a large sub rectangular trough, three large circular pits and four small oval-shaped pits. The second phase consisted of a mound of heat-shattered stones within a dark-grey/ black charcoal-rich silty clay that sealed the earlier features. The final phase was characterised by a second trough cut into the second phase. No substantial evidence from this investigation was recovered to favour any of the common functions assigned to this site type; the site could have been used for cooking or equally it may have functioned for washing or some other purpose. The troughs seem to have been clay-lined, as there was also no evidence to support a wooden lining or internal structure. There were no artefacts recovered from the mound or associated features.

20.4.1.2.2. Early Medieval Period

An enclosure (RMP KD011-068) at Stacumny Cottage and c.100m southeast of the rail line was identified from a roughly-circular cropmark (c. 37m in diameter) that is visible in an aerial photograph. At c.130m south of the Hazelhatch substation alternative ESB Grid connection route is an enclosure site (KD011-029) in Simmonstown which was also identified as a crop mark in an aerial photography; this site it is in proximity to two other enclosure sites. These enclosure sites may represent the remains of a ploughed-out ringforts.

The townland name of Stacumny is unusual, as it would appear to be a corruption of the Old/ Middle Irish ‘Tech Cuimne,’ meaning house of Cuimne, and is possibly attributable to the inability of the

Norman-French speakers to pronounce the initial 't,' hence 'sta.' This would date the place name to before the twelfth century. Another proposed origin for 'sta' is the Old Norse star, meaning a dwelling or homestead (cf. Scottish place names such as Isbister), but this form usually occurs as a suffix not a prefix. As the genitive form of Cuimneach is Cuimnigh (or 'cumny'), the church that once stood on the site could have been under the influence of or have an association with Cuimneach, the abbot of Finnglais who died in 823, as recorded in the Annals of the Four Masters. The townland of Stacumny is rich with heritage remains, including the main house, lodge, cottage and the lime kiln adjacent to the railway and the stone masonry Stacumny bridge.

Nothing is known about the early history of the church site at Stacumny (SMR KD011-021, Figure 20-2), 200m northwest of the railway line, but it is of possible pre-Norman origin. A number of Early Christian saints, fifteen in all, are called Cumin or Cuimin (Holweck 1924), and it may be that this church was founded by one of them. Most of them lived during the 6th and 7th centuries, and many had Columban connections.

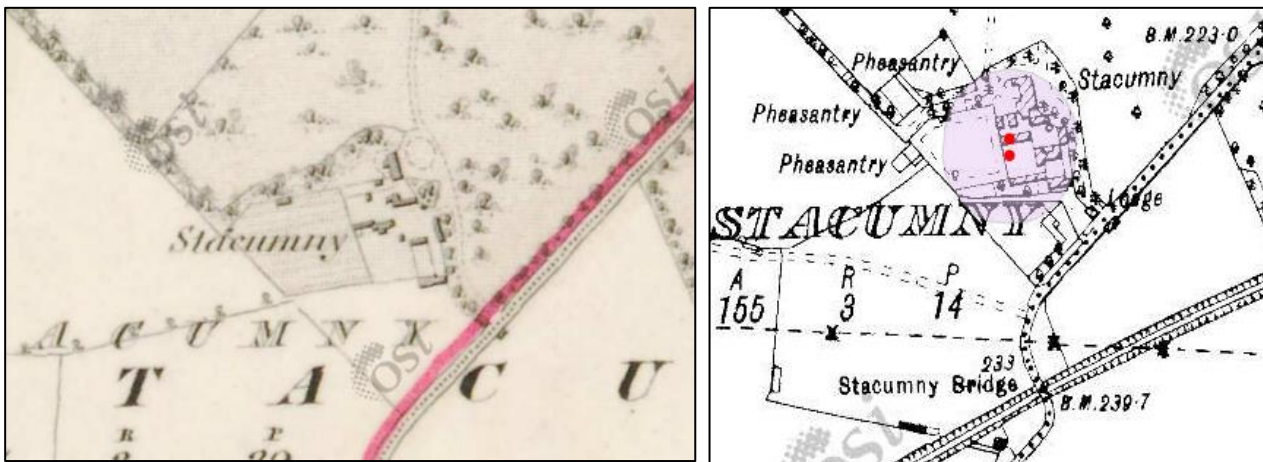


Figure 20-2 Stacumny House on the First and Revised Edition OS Map

Excavations at Stacumny House (RMP KE011-021; Licence No. 97E0119, Excavations.ie Ref. 1997:265) on the site of the church of Stacumny, uncovered 728 skeletons and some finds, mostly of 12th and 13th century date, indicating a definite pre-Norman origin (Cosgrave 1998). Nothing of the church foundation was revealed, and it is believed that the remains of the church were incorporated into a barn and outbuilding walls sometime in the early part of the 19th century (O'Flanagan 1928). Numerous artefacts were recovered, including a large number of medieval pottery sherds (mostly of Ham Green type), medieval floor tiles, stick-pins, a ring-headed pin, a bone comb, coffin nails, glass beads and several silver and copper-alloy coins. The archaeology appeared to relate to three main phases, the most significant of which is likely to date to the period of circa 1125-1275 and included the majority of the burials. Five of the burials were post-medieval in date.

No definitive evidence was found for an Early Christian foundation. 'Stacumny town' is shown on the Down Survey map of the area in 1655. The church is not specifically mentioned or shown, but the location for Stacumny town is certainly consistent with the location of Stacumny House. This could mean that a continuous settlement in some form, either ecclesiastical or secular, has been located there since medieval times. The presence of post-medieval graves, albeit few in number, possibly indicates the survival of a consecrated church into the early post-medieval era.

In terms of local history and ‘secular politics,’ the territory bordering the baronies of Newcastle and North Salt in County Kildare were ruled by the Uí Gabla, a lineage of the Dál Chormaic dynasty, which in turn claimed a relationship with the Dál Messin Corb. The southern part of Uppercross, and perhaps adjacent parts of the barony of Newcastle, was home to a segment of the Fothairt, a population group scattered throughout Leinster. These early dynasties were reduced in status from about AD 600 onwards by the rise of the Uí Máil and subsequently by the emergence of new ruling lineages claiming descent from Dúnlaing, who supposedly was overking of Leinster in the sixth century.

One of these lineages, the unimportant Uí Fergusa, occupied a small wedge-shaped territory between the Liffey and the Dodder, but how far this territory reached into Uppercross is unclear. Of far more significance was the Uí Dúinchada, the lineage named from Dúinchad (d. AD 728), a Leinster king who traced his ancestry to Dúnlaing. From a base at Liamain (Lyons), on the Kildare–Dublin boundary, the Uí Dúinchada ruled a local kingdom that stretched across south County Dublin and that at times between the 8th and 10th centuries was powerful enough to claim over kingship of the province (O’Brien 1962; Byrne 1973; Smyth 1982; MacShamhráin 1996).

20.4.1.2.3. Medieval Period

Henry II arrived in Ireland in 1132 and appointed Strongbow as tenant-in-charge in Leinster. He in turn granted land in the Celbridge area to Adam de Hereford, a Norman knight and conqueror of North Kildare. The lands from Ballymadeer to Hazelhatch would have been under his control.

There is no specific archaeological monuments or records for the medieval period within this section of the study area along the mainline rail route. However, an alternative ESB grid connection link option runs from the proposed Hazelhatch substation to an existing substation in Celbridge through the townlands Commons, Simmonstown and Newtown townlands where two castle sites are recorded.

The cable connection route runs c 190m south of the site of Simmonstown castle (KD011-016), this site was recorded in the Ordnance Survey Letters as ‘*a Castle in ruins, of which a great part is remaining*’ (Herity 2002, 9), however the ruins were burnt c. 1980 and subsequently removed, leaving no visible surface trace of the monument (SMR file).

The cable connection route also runs c. 130m north of a Castle (KD011-019) and Mills site (KD011-038). According to Fitzgerald (after RMP files), the site marked ‘Terrils Ca. (castle) and Mills’ on Taylor’s 1783 Map of Co. Kildare was subsequently occupied by the ‘Temple Mills’ which are shown on the first edition 6-inch OS map (1836). He quotes a description of the mill and its appurtenances from the Civil Survey of 1654; ‘*Mrs. Mabel Aylmer, Irish Papist, is the owner of "Tyrrells Mill" and two acres of land, which are valued for letting purposes at £16 a year. ... There is one castle upon the aforesaid two acres of land which in the year 1640 was valued to be worth £100, but since being ruined, is now valued at £5.*’ Fitzgerald concludes, ‘*Of Tyrrell’s Castle there are now no remains*’, but he supplies a drawing of the castle by S. Walker in 1778 which shows a narrow rectangular building with a projecting corner tower (RMP files).

In fact, Taylor’s map is labelled ‘*Terrils Ca. & Mills Ca. Rs.*’, meaning Terrill’s Castle and Mills Castle Ruins. The map is therefore indicating two castles, one of which corresponds with castle reference KD011-016 which is depicted on the first edition 6-inch OS map. It is not clear from Taylor’s map where the second one was located but the name would suggest it was close to Temple Mill. It would also

appear from the Civil Survey that the proprietor was in fact Lady Allen of St. Wolstan's, Irish Papist. The Civil Survey notes that '*There is one little Castle upon the lands of Simonstown aforesaid was valued to be worth twenty pounds in the year 1640 butt being since burned is now valued to be worth ten pounds*' (Simington 1952).

20.4.1.2.4. Post-Medieval Period

The site of a possible mill-race was identified at the confluence of two streams to the north of a proposed car park for the previous Kildare railway route project at the proposed Hazelhatch carpark, in Loughlinstown townland (Licence No. 07E0298 ext., Excavations.ie Ref. 2007:861). The sides of the streams were lined with well-cut limestone blocks that extended for up to c.6m. The revetment along the east–west-orientated stream appeared to contain a return at its western end, which may originally have been designed to hinder the flow of water in this direction. The presence of this feature suggests that the revetments were built to divert water in the direction of the Shinkeen Stream, which is a small tributary of the River Liffey, located to the northwest of the site.

20.4.1.2.5. Industrial Archaeological Heritage

The upstanding industrial heritage along the scheme is provided in Chapter 21 Architectural Heritage.

The railway

The Great Southern and Western Railway (GS&WR) became the third main railway to open in the country in the 1940's. In November 1841, the first contracts for the Dublin–Hazelhatch and Hazelhatch–Sallins lines were allotted to contractors William McCormick and William Dargan, respectively.

Hazelhatch Station is located on the road from Newcastle to Celbridge. According to Joyce (1912), an '*uninteresting road leads to Hazle hatch (sic)², on the Grand Canal, a station of some importance in former years when the traffic on these waterways was greater than it is at the present time.*' The name of this place appears on the maps of the Down Survey as '*Hazelhurst,*' meaning a hurst or wood of hazel trees. Joyce (1912) describes the approach to the railway station via a 'high bridge' and the station itself as 'pretty.' The station along with the wrought iron foot bridge are protected structures.

Stacumny lime kiln

The lime kiln at Stacumny is shown on the 1st edition OS map of 1837 located immediately north of a field boundary in a field to the south west of the main house. The lime kiln was built before the railway, and it is only on later editions of the OS maps (1939) that it is shown as an elongated rectangular structure with the beginning of the ramp lying adjacent to the rail corridor.

The Grand Canal

The Grand Canal, a feature of industrial interest, runs approximately 400m south and parallel to the railway. An act, passed in 1715, proposed a link between Dublin and the Rivers Shannon and Barrow. Interest waned, however, until 1755, when an engineer was appointed to oversee the works. The canal is first shown on Rocque's map of Dublin (1760). By 1773, twelve miles, beginning at Clondalkin, had been completed, at a price of £57,000. The construction of the canal was subsequently taken over by

² sic meaning "intentionally so written" The quoted matter has been transcribed or translated exactly as found in the source text, complete with any erroneous, archaic, or otherwise nonstandard spelling, punctuation, or grammar.

Dublin Corporation, but nine years later, the canal was in private hands again. It was opened to cargo boat traffic on February 2, 1779; the first passenger service began in 1780 between Dublin and Sallins. In 1796, the Grand Canal Docks were opened. The introduction of the railways brought about a decline in traffic, and the last boats were withdrawn in 1959–60 (Bennett 1991).

The aforementioned Temple mills are also recorded in the Kildare Industrial Archaeology Heritage Survey (KIAHS ref.: 011-020) which notes that the Temple Mills in Newtown are probably identical to the cotton mills and power loom described by Lewis (1837, RMP KD011-038). The proximity to Celbridge Abbey may suggest an 18th/ early 19th century mill founded at the site of an established former mill/ millrace.

20.4.1.3. Aderrig to Ballymanaggin

20.4.1.3.1. Prehistoric Period

The discovery of a copper alloy palstave axe (NMI Reg. No. 1996:19:00) in Clonburriss Little and another copper alloy axehead in Kishoge (NMI Reg. No. 1994:20:00) are suggestive of Bronze Age activity in the area.

The recorded monuments along this section of the rail corridor otherwise mostly range in date from the early Christian period, up to the medieval and post-medieval periods. The apparent absence of recorded prehistoric monuments is likely to be due to the removal of most above ground traces of early sites and monuments by the intensive agriculture that has been practiced in this area for the last several millennia. Recent excavations in Grange and Kilmahuddrick townlands to the south of the railway have uncovered numerous prehistoric monuments.

20.4.1.3.2. Early Medieval Period

Christianity was introduced into Ireland in the 5th century AD and brought with it not only writing and recorded history, but a range of new monuments. The best-known native monument of this period is the ringfort. Ringforts are the classic early Christian settlement type and are among the commonest archaeological monuments in the country. They consist of circular areas defined by banks and external ditches, and excavation often reveals the remains of dwelling houses and outbuildings for extended families. Ringforts are usually situated on gentle slopes with good views of the surrounding area. They tend to have a dispersed distribution, although some are occasionally located in pairs, or even joined together.

An enclosure (RMP DU017-093) is recorded at Gollierstown, c. 235m south of the rail line. This recorded monument was also identified from crop marks that are visible on an aerial photograph.

Human remains were uncovered within the road-take of the Adamstown link road (ALR) to the north of the old Lucan train station in Adamstown, Dublin (Licence No. 05E1295, Excavations.ie Ref. 2005:379). The excavations entailed the lifting of 36 full or partial skeletons and eight disarticulated skeletons. Two linear features and two deposits were also excavated at the site. The skeletal remains were primarily orientated in a west–east direction, with heads to the west, but a number were aligned slightly along a south-west/ north-east axis and two along a north-west/ south-east axis. All were in simple graves, with no traces of any coffins or grave-markers. They appeared to represent 43 adults and one infant. A single find uncovered with a burial was a fragment of plastic rosary beads found in

the pelvic region of Skeleton 10. This find may not suggest a modern date for the burials, as they were disturbed and truncated by the railway wall, which appears to date to the 1950s. It is possible that the rosary beads were interred when the burial was disturbed during the demolition of Lucan station or the construction of the wall that divided the site from the Dublin/ Kildare railway line. Removal of the wall and build-up on its southern side revealed that skeletal remains did not extend over the northern side of the existing railway wall. The human burials likely represent the remains of an Early Medieval cemetery.

There are two enclosure sites (RMP DU017-036 and DU017-035) located 30m and 400m respectively to the south of the existing railway in the townland of Cappagh. This site has no visible expression and was revealed as a cropmark by aerial photography. These sites may be ploughed out ringforts.

This area of County Dublin, south of the Liffey was under the control of native Leinster rulers until the arrival of the Anglo-Normans in the late twelfth century. Early dynasties of the Laigin were well represented in the region. The Dál Messin Corb was originally based at Naas (Byrne 1973, 138) and had ecclesiastical interests, as indeed had the Uí Bairrche in Clondalkin, Saggart and Kilnamanagh (MacShamhráin 1996, 152, 176). These early dynasties were reduced in status from around AD 600 onwards by the rise of the Uí Máil and subsequently by the emergence of new ruling lineages claiming descent from Dúnlaing, who supposedly was overking of Leinster in the 6th century.

20.4.1.3.3. Medieval Period

The Normans came to Ireland in the middle of the 12th century, bringing with them new military traditions and fortifications, new language and new social structures. Anglo-Norman fortifications include mottes and baileys, moated sites and the tower house. There were several stone castles along and outside the rail corridor. Tower houses often have very thick walls, with intramural staircases, small windows (the earliest have very thin arrow or musket loops), and a vaulted first storey to prevent the spread of fire. As new military technologies such as gunpowder rendered thick walls less useful as a defence, houses gradually became less defensive and more comfortable. Tower houses were replaced in some areas by hall houses and fortified houses, similar to tower houses but less strongly fortified. Eventually, from the 17th century onwards, larger, more comfortable houses became the norm, and large houses, were built onto the existing castles.

Adamstown Castle (RMP DU017-029) stood c. 95m to the south of the rail corridor. It was an oblong in plan (see Figure 20-3) three-storey tower house with a projecting turret and stepped crenelations. It was demolished in the 1960s. The castle derives its name from a family called Adam. According to Ball (1905), it was established in the sixteenth century in the parish of Esker and probably belonged to Thomas Adam, who died in the year 1556. With the establishment of the Commonwealth a century later, there is only fleeting reference to an 'old castle' in the lands of Aderrig, suggesting that, even by then, Adamstown had lost some of its affluence. The field located immediately to the north, has been archaeologically tested due to its close proximity to the site of the castle. No finds, features or structures of any archaeological significance were uncovered (Licence No. 05E1295, Excavation.ie Ref. 2005:379).

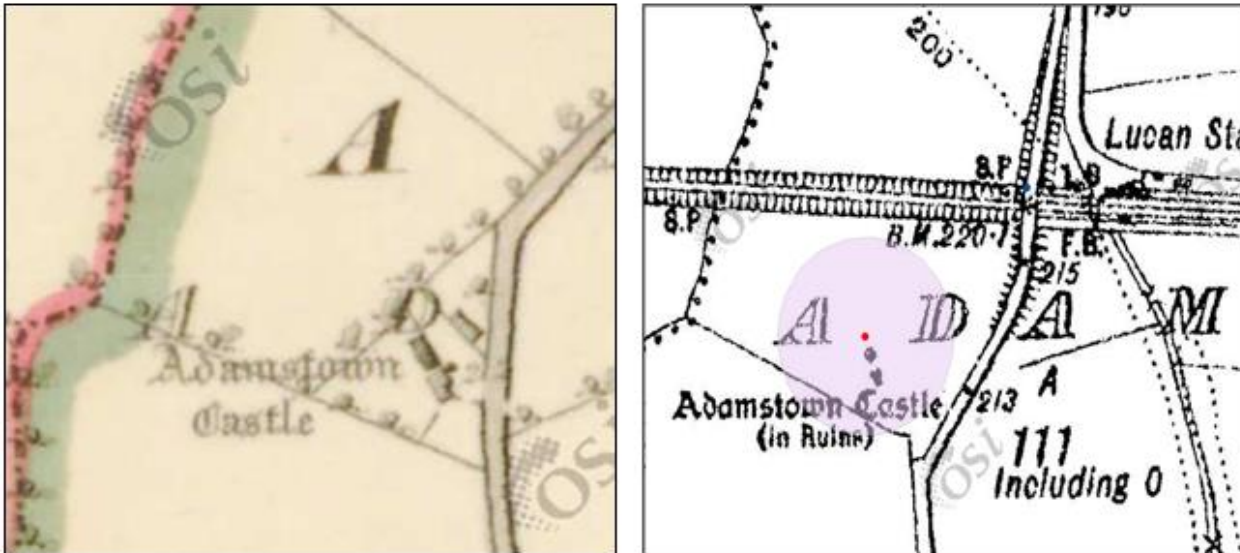


Figure 20-3 Adamstown Castle on the First Edition and Revised OS Map Showing also the Existing Railway Line to the North

20.4.1.3.4. Industrial Development

The Grand Canal

The Grand Canal, a feature of industrial interest, runs south and parallel to the rail corridor. An act, passed in 1715, proposed a link between Dublin and the Rivers Shannon and Barrow. Interest waned, however, until 1755, when an engineer was appointed to oversee the works. The canal is first shown on Rocque's map of Dublin (1760). By 1773, twelve miles, beginning at Clondalkin, had been completed, at a price of £57,000. The construction of the canal was subsequently taken over by Dublin Corporation, but nine years later, the canal was in private hands again. It was opened to cargo boat traffic on February 2, 1779; the first passenger service began in 1780 between Dublin and Sallins. In 1796, the Grand Canal Docks were opened. The introduction of the railways brought about a decline in traffic, and the last boats were withdrawn in 1959–60 (Bennett 1991).

The railway

The steep climb from Inchicore ends at Clondalkin, where the gradients ease as the line approaches the central plain of Ireland. Two stations were erected along this stretch of the railway. The ceremonial cutting of the first sod was performed by the Duke of Leinster at Adamstown near Lucan in January 1845. In the presence of a great crowd, his grace "took off his coat and in his shirt sleeves, with the skill and goodwill of an able workman, dug up six sods, which he threw into a wheelbarrow and rolled off to some distance." The cheering was immense, and one bystander exclaimed he "could now die happy, as he had seen a duke working like a common man" (O'Connor, 1999). Dargan made good progress with the construction of the first section of the GS and WR line, within six months the directors of the company could ride over a completed section between Lucan and Sallins.

Lucan station located in Adamstown townland is shown on the 1st edition OS 6-inch mapping (1936-37), the station house and goods store are shown as a narrow development on the north side of the railroad to the east of Newcastle Road bridge. To the north of the bridge off Newcastle Road there is an access route to the rail station. The Griffeen River has been culverted under the railway line to the

east of the station and east of Hayden's Lane bridge. This station has since been demolished. All that remains of Lucan station is a blocked red brick doorway, there is dense vegetation surrounding this structure and the area has become a wasteland.

Zone B: Park West & Cherry Orchard Station to Heuston Station (Zone B) and Zone C: Heuston Station and Yard

20.4.1.3.5. Prehistoric Period

There is no known prehistoric activity from within the study area from Gallanstown to Inchicore.

20.4.1.3.6. Early Medieval Period

An early Medieval cemetery (RMP DU017-083) was identified during archaeological monitoring of groundworks in advance of the development of Park West Business park in Gallanstown, c. 140m southeast of the study area (Licence No. 99E0108, Excavations.ie Ref. 1999:246). Three east-west orientated burials and disarticulated bone were excavated. Subsequent archaeological testing of the cemetery (Licence No. 00E0267, Excavations.ie Ref. 2000:0299) revealed a stone-lined well and an additional burial of a young child. Pits containing the macro-fossil remains of oats, barley, wheat, rye and legumes were indicative of a corn-drying kiln somewhere in the vicinity. Similar activity has been recorded at other Early Christian sites in Dublin. Successive archaeological monitoring works (Licence No. 03E1393 and 03E1393 ext, Excavations.ie Ref. 2003:0603, 2004:0601, 2005:488) of groundworks in advance of the development of the Park West Business Park did not uncover any further remains of the cemetery.

The date of the fabric of the church (RMP DU018-031003) and graveyard (RMP DU018-031004) at Ballyfermot that survive under Le Fanu Park is not clear, but elements of the church are likely to date to the medieval period. No above-ground remains of the church or graveyard are exposed at present, as the site was covered with earth in the 1970s to protect it against vandalism. The site appears today as a mound surmounted by a rectangular platform. Joyce (1912) describes the site as follows:

"...road up the steep hill leads to the old church and graveyard of Ballyfermot, near which formerly stood a castle whose site is now occupied by Ballyfermot House. Between the house and road is a curious brick wall, built in a series of curves, and stated to have at one time formed [a] portion of the enclosure of an orchard belonging to the castle."

Johnston (1974), a local historian, describes the monument as the ruins of a church 18 yards long and six yards wide with a graveyard. Archaeological testing (Licence No. 98E0367, Excavations.ie Ref. 1998:120) within the graveyard uncovered the graveyard wall and articulated and disarticulated human remains.

20.4.1.3.7. Medieval Period

The manorial lands of Gallanstown, which flank the rail corridor, are now only remembered in the name of a modern housing estate located adjacent to the north of the track. These lands originally formed a manor and were also an ecclesiastical property. In 1441, they were in the possession of the bishop of Killaloe, Thomas O'Ghanelan, but he was found to be 'Irish of the Irish nation and an enemy of the King'. Before long, the lands became the property of St Mary's Abbey in Dublin, which held them until the dissolution of the religious houses. Around the time of the Restoration, the lands contained 'a castle

like house with the ruins of a gate house near it,' occupied by Richard Styles and subsequently by 'the Widow Waterhouse' (Ball 1906).

The lands of Blackditch belonged to the see of Dublin. In 1334, they were tilled and partly stocked with cattle and in the ownership of the archbishop. A century later, they were leased, with one of the fields being described as 'the baron's mede' and one of the boundaries as 'the trench,' giving rise to the townland name Blackditch.

The place name Ballyfermot is thought to owe its origin to the Irish chief Mac Gillamcholmog. However, the earliest documented references to land ownership date from the early 14th century and concern the transfer of title to a manor at Ballyfermot. Another interpretation put forward by Dr Risteard Ó Foghludha, based on the fact that the Irish for the name is given as Baile Thormaid (logainm.ie), is that the second part of the place name is a Norman personal name. It is likely that this castle was located on the manorial site.

The site of the former castle, church and graveyard in Ballyfermot is on the summit of a natural ridge at Le Fanu Park, c.130m north of the existing rail line (DU018-031001-004, Figure 20-4). A drawing by Beranger in 1766 shows a tower with diagonally opposed turrets, lit by mullioned windows (Harbison 1998, 54-5). Ballyfermot manor was held by the Fitzwilliam family in the early 14th century later passing to Robert de Clahull in 1327. By the end of the 14th century the manor was held by Reginald Barnewall. In 1395 Reginald Butler was living there and in 1451 John Barnewall was in residence. It was occupied until the late 16th century when it went into decline. In the 18th century it was used as a school (Ball 1920).

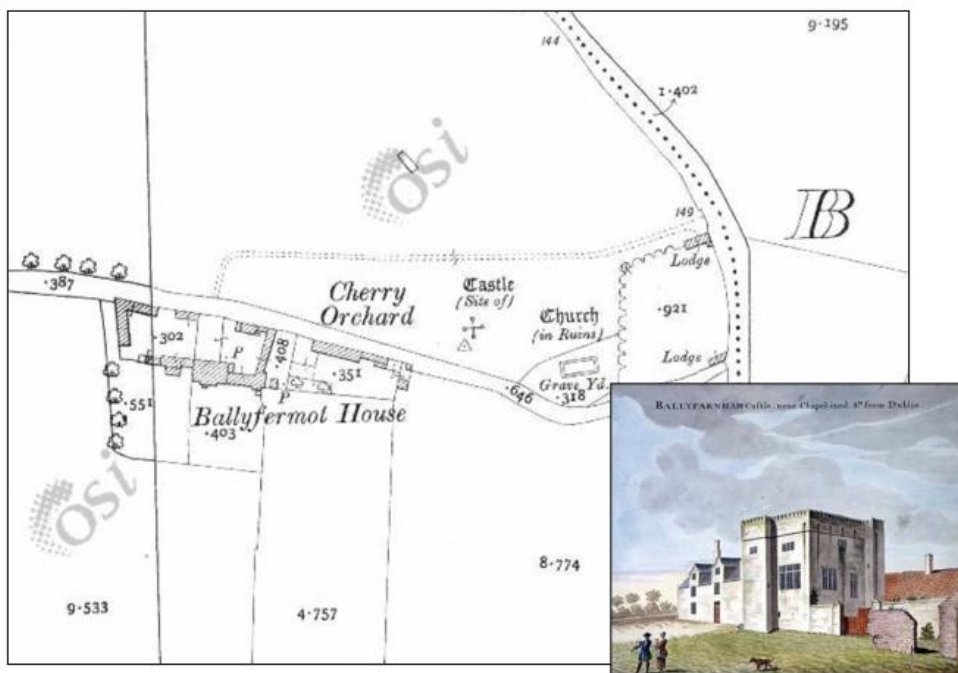


Figure 20-4 Site of the Castle, Church and Graveyard in Ballyfermot on the Revised Edition OS Map 1870

The Church was the medieval parish church of Ballyfermot, described by D'Alton (1838, 639) as being in perfect condition. It was dedicated to St. Laurence and was associated with the Knights Hospitallers of Kilmainham. In 1539 it transferred to John Allen. In 1608 the King granted to Sir Robert Newcomen

the ruinous chapel called St. Laurences at Ballyfermot. The Regal Visitations of 1615 reported the church and chancel in ruins (op cit 640). In 1978 when the site was inspected (OPW) there were still foundations of the church and some gravestones of 19th century date (RMP files).

The remains of the church and graveyard have been completely cleared and landscaped to create Le Fanu Park.

Archaeological test excavation was carried during October 1998 at the corner of Le Fanu Road and Raheen Road, Ballyfermot, Co. Dublin. Test excavations carried out in 1998 uncovered the graveyard wall and articulated and disarticulated human remains within the boundary of the graveyard (O'Donovan, 2000, 35)

20.4.1.3.8. Post-Medieval Period

To support the massive undertaking of the construction of the railways, GS&WR company purchased a 73 acre site in Inchicore for engine workshops and depot. Until the 17th or early 18th century, Inchicore had been a semi-rural and possibly heavily wooded landscape which formed part of the wider holdings of Kilmainham Priory. With the disestablishment of the priory, the lands within the study area passed through a number of hands. The focus of local settlement in the area remained concentrated upon Kilmainham, although from the Middle Ages the banks of the Camac River were the location of numerous mills for the processing of wool, cereals, and - in the 18th and 19th centuries - paper and timber. Rocque's map shows that the western suburbs of the city from Kilmainham to Islandbridge, and further west to Inchicore and Ballyfermot Lower were largely surrounded by agricultural fields up to the second half of the 18th century.

Before the development of the railway, Inchicore was depicted on the 1843 OS map as Inchicore North and Inchicore South, which were subdivided by the main road from Dublin. The townland consisted of open fields; very much part of the countryside with a small number of properties and one large house marked Inchicore House.

The development of the depot sparked the industrial development of this part of west County Dublin. The Inchicore Railway Works opened in 1846 and became the largest engineering complex of its kind in the country (Figure 20-5). It is a landmark site, identifiable by rail passengers with its unique turreted facade, the work of Sancton Wood who had also designed Heuston (formerly Kingsbridge) station. When the first workshops were opened, the GS and WR company had to house the workers in what was then an isolated area. They erected several terraces (e.g., St. Georges, St Patricks terraces) of cottage-style houses. A dining hall, library and recreation centre were also provided, and the company paid part of the cost of a school for the employee's children. At its peak the depot employed 2,000 people. From 1861, when the first engines were commissioned, the production at Inchicore grew to the extent, that of a total of 690 steam locomotives manufactured by Ireland's railway companies, 406 were manufactured in the CIÉ Railway Inchicore Works.

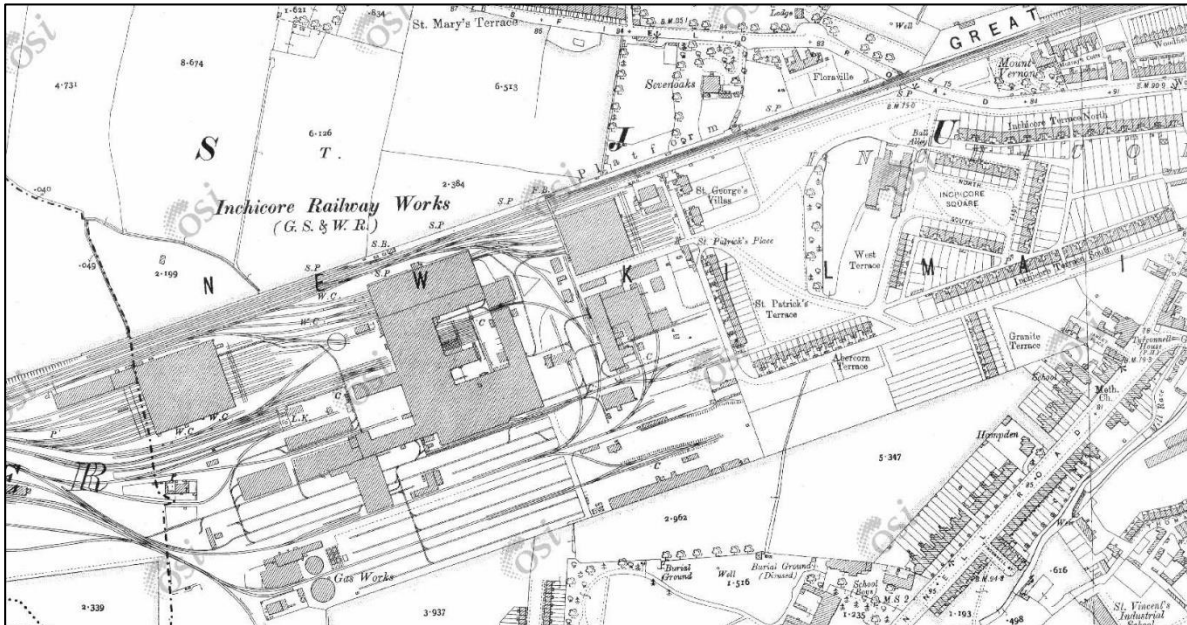


Figure 20-5 The Inchicore Railway Works and Worker's Houses on the Revised Edition 25-Inch OS Map

20.4.1.3.9. Industrial Development

The proto-industrial activities associated with goods haulage and milling presaged the development of large-scale industrial and transport works in the Goldenbridge/ Inchicore/ Islandbridge area with the establishment of the GS&WR in the 1840's, and later with the opening of the Inchicore Railway Works (The Great Southern Railway Works, DCIHR Ref: 18-0902) in 1846.

The area currently comprises an urban environment characterised by residential housing units, rail works and a number of parks and playing fields. As has been mentioned previously, for much of the eighteenth century, the majority of the area to the west of the present day South Circular Road retained a relatively rural character. However, this century also saw the gradual extension westwards from the city of structures and sites associated with manufacturing and processing industries which required more space and resources than were available within the city (Clarke 1998). Many of these industries remained concentrated along the watercourses of the Camac and Liffey which powered them.

This combined with proximity to the city made the area attractive to merchants and other wealthy individuals and led to the piecemeal erection of new suburban houses and villas by wealthy city dwellers and merchants (e.g., Ball 1995). It also led to the refurbishment of some older houses, such as the old structure known as Inchicore House (Ó Broin 1999).

With the expansion of mills, the construction of the Grand Canal, the erection of Richmond Barracks, the setting up of the GW&WR and the creation of the Inchicore rail works, the Inchicore area became a centre of population and began to lose its rural character. All these developments provided employment, and with the influx of workers to the area, resulted in the provision of shops, pubs and houses. This dramatic increase in population meant that broader living conditions in the area came under considerable pressure.

Most of the residents 'were either soldiers, employees of the Great Southern and Western Company Engineering works or of some smaller factories, or warders at Kilmainham Gaol' (Kenny 1995). While the scale of the railway undertakings at Islandbridge and Inchicore was such that they employed '1200

first-class hands at their works' and remained the largest local employer, a large number of people were also employed by the Inchicore Enterprise Omnibus Company (Murray 1980). As a result, by c. 1900 the residents of the area were 'almost exclusively working class' and in 1868 'only sixteen houses were valued at more than £20' (Daly quoted in Kenny 1995).

20.4.1.4. Kilmainham to Islandbridge

20.4.1.4.1. Prehistoric Period

In 2002, a Bronze Age flat cemetery comprising six pit burials with cremated human remains was excavated c. 80m south of the existing rail line in the Royal Hospital Kilmainham. Three of the pits contained funerary vessels. These were a decorated tripartite vase, the sherds of a deliberately broken decorated pygmy cup and one complete pygmy cup (RMP DU018-112; Licence No. 02E0067 ext., Excavations.ie Ref. 2006:665).

Additional early human activity likely occurred along the banks of the Camac and Liffey Rivers, on the ridges above the valleys of both rivers, and in the woods that until the middle ages covered much of Inchicore (Ball 1920). The ancient 'Slighe Mhór' routeway which extended westwards from the eastern shore near the Liffey through the midlands as far as Galway, though first described in the early medieval period, may follow the course of an even older prehistoric route into Dublin's hinterland (Clarke 1998). This routeway followed the approximate course of Thomas Street, James's Street, then continued westwards through Kilmainham and Inchicore. A minor route branched southward, following the approximate course of the present Grattan Crescent and Tyrconnell Road and the southern arc of the Camac River.

20.4.1.4.2. Early Medieval Period

Several commentators have located the 7th century St Maignenn's church (RMP DU018-020283) near to, or within, the presently disused cemetery of Bully's Acre in the grounds of the Royal Hospital Kilmainham, 100m southeast of the study area. The Bully's Acre cemetery was in use up until the 19th century and it may represent the continued use of an earlier cemetery. Several pieces of cut-stone of probable Early Medieval date are contained within this cemetery, close to which still stand the remains of a decorated 9th –11th century high cross shaft (RMP DU018-020284).

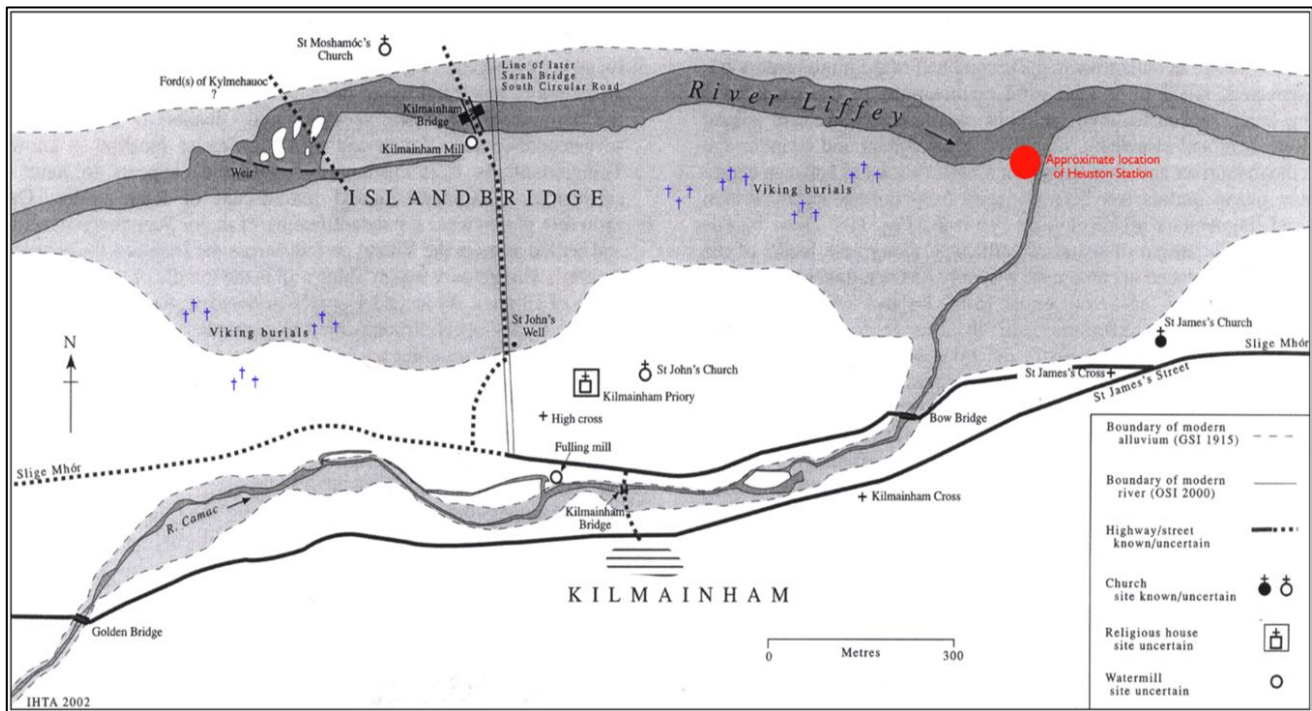


Figure 20-6 Irish Historical Towns Atlas (IHTA) Map of Medieval Kilmainham

The presence of two articulated human skeletons were identified in the southwest corner of Bully's acre during archaeological monitoring of the excavations of trenches to accommodate cabling and ducting for the Irish Museum of Modern Art (IMMA; Licence No. 11E0410, Excavations.ie Ref. 2011:218 and 2012:235). The skeletons were preserved in situ and no further information on their provenance is available.

The site of St John's Holy Well is located c. 300m west of the study area. It is possible that the pattern-day of St John was established in the medieval period (as suggested by the dedication of the well). The well (RMP DU018-020282) is marked on the first edition six-inch Ordnance Survey map and was the scene of gatherings on St John's Eve (June 24th) until the latter part of the 19th century. It has since been destroyed.

The 9th century Viking incursions impacted heavily on the Islandbridge/ Kilmainham area. This is clearly illustrated by the discovery of the remains of a series of Viking burials interred along the southern bank of the River Liffey. A recorded Viking cemetery site (RMP DU018-020272) was revealed during the creation of the Lutyen's-designed Memorial Park. The Memorial Park is located on a promontory gravel ridge that runs on an east to west axis and extends from the confluence of the River Liffey to the north and to the River Camac (at Heuston Bridge) to the south. The gravel ridge originally rose to a height of approximately 23m Ordnance Datum prior to the 19th and 20th century development such as the construction of the railway line and Kingsbridge (now Heuston station) in the 1840s, gravel quarrying and the creation of the Memorial Park in the 1930s (O'Brien 1998).

Burials were exposed when the amphitheatre for the park was being laid-out in 1933-1934. Viking burials aligned south-north, with grave goods and several burials aligned west-east without grave-goods were recovered (O'Brien 1998). The spread of burials recorded from the 19th century was extensive, stretching intermittently from at least the Memorial Park/ Islandbridge in the west as far as

Heuston Station to the east, a distance of some 1.5 km (Figure 20-7). At the time of discovery, the findings were recorded haphazardly and in varying degrees of detail. However, a comprehensive study was later undertaken by Elizabeth O'Brien, who painstakingly reconstructed all the find-spots and endeavoured to establish numbers of burials. She deduced that at Islandbridge (Memorial Park and its vicinity), a minimum of eighteen burials were recovered. The recorded find spots were plotted by Clarke, Simms and Gillespie (2002). Some, but not all, of the burials produced grave goods including swords, shield bosses and knives, as well as decorative jewellery, some of which were dated by stylistic comparisons, to the 9th century (Graham-Campbell 1976). Some burials were not Viking in origin and O'Brien (1998) proposed that the native Christian cemetery associated with the monastic foundation of Cell Maigneann was reused by the Vikings.

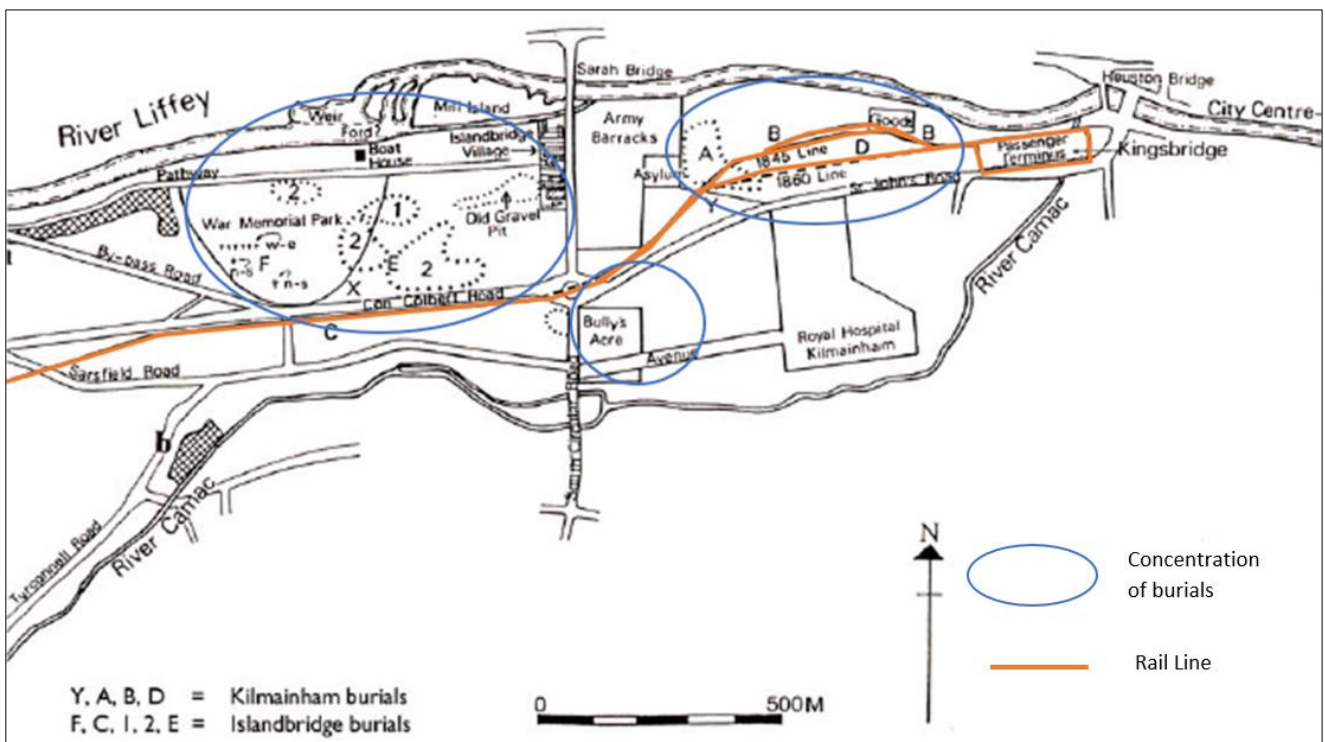


Figure 20-7 Known Areas of Burial within Islandbridge and Kilmainham and the Railway Line (after O'Brien 1998)

The exact extent of the cemetery site is unknown, and one Viking burial has been excavated at the northern limits of the Memorial Park, c. 300m northwest of the existing railway line (Licence Ref. 080693, Excavations.ie Ref. 2008:467). Possible medieval pits were also identified within the gravel esker on the north side of the Memorial Park. The gravel esker had been quarried in the 19th century (Licence No. 10E0128, Excavations.ie Ref. 2010:279). Archaeological monitoring works (Excavations.ie Ref. 1919:025) on Con Colbert Road, and just north of the rail corridor, uncovered eight pits of medieval and post-medieval date. Artefacts included an 8th century decorated bronze strap tag, a small bronze strip, two bone needles, two bone pins, four worked flints, two chert flakes, two flint arrowheads, a flint scraper, a chert scraper, a bone bead and iron fragments. The artefacts were interpreted as unstratified Viking Age or earlier intrusions from when the area was under allotments. Post-medieval cobbles and pottery sherds were also identified.

O'Brien presented strong evidence to suggest that the Viking burials extended throughout the ridge. Twenty of the recorded burials were not provenanced, although they were found in the general area (O'Brien 1998). To the south of the study area, in Bully's Acre, a sword was recorded from 'near the stone cross reputed to mark the burial place of Murrough O'Brien, killed in 1014 (O'Brien 1998). A second sword, which was purchased by the Royal Irish Academy in 1851, was also found near or at Bully's Acre, and this find spot was described as 'Mr Drum's field near Kilmainham'. The possible identification of these finds may represent a further two burials closer to Bully's Acre on the ridge which suggests that the general breadth of the spread of the burials is not only east-west but also north-south, indicative of a combination of concentrated and dispersed burial pattern (Simpson 2008).

Archaeological testing was carried at the site of a proposed underground fuel-tank and plant room at Heuston Station. The site was on top of the 19th century railway embankment that consisted of dumped layers of gravel and clays and industrial material. No evidence for Viking burials was identified within the embankment, though the lower levels of the trenches were too deep to investigate (Licence 02E0219, Excavations.ie Ref. 2002:0545).

20.4.1.4.3. Medieval Period

Following the arrival of the Anglo-Normans in 1169, a number of new religious orders arrived in Ireland from the continent. One such order was the Knights Hospitallers' of St John of Jerusalem, a military and religious organisation founded in the wake of the Crusades. The knights were granted land in Kilmainham by Richard de Clare (Strongbow) and in c. 1174 they founded a priory (DU018-020286) close to the site of the old monastic building associated with Cill Maighnenn, and approximately 400m southeast of the existing rail line (Gwynn & Hadcock 1988). The priory was gifted land from the Tyrrells of Castleknock, leaving it with landed possessions of over five hundred acres. Its possessions included a moiety of the River Liffey that reached as far as the entrance to the Phoenix Park in Parkgate Street. The knights were a wealthy and powerful community, and, as Kenny (1998) comments, the 'hospital' of the knights served more as a guest house and private nursing home than an infirmary or almshouse.

The secretive administration, great wealth and independence of the Knights Templar led eventually to their suppression throughout Europe in the 14th century. In 1307, King Edward II ordered their suppression in England and in Ireland and their land and possessions throughout the two islands were seized. Shortly thereafter, Kilmainham priory 'which was granted to the knights of the order of St John the Baptist formally, but in fact to the order of St John the Evangelist, was principally appropriated for the reception of guests and strangers, to the exclusion of the sick and infirm who had constant admittance there before' (D'Alton 1838).

That the priory continued to grow in wealth and power under the new regime until its final suppression in the 16th century is perhaps illustrated by the fact that the priors of Kilmainham sat as barons in the House of Lords throughout the middle ages. By the beginning of the 17th century, the priory had deteriorated and much of it lay in ruins. In 1680, all that remained standing of the priory were parts of the walls of the chapel. Some stonework, removed from the chapel, was reused in the construction of its successor, the Royal Hospital (DU018-020285) (Kenny 1995).

The Royal Hospital (DU018-020-285), also c. 100m south of the existing rail line, was constructed in 1680–84 by Sir William Robinson, Surveyor General of the Fortifications and Buildings in Ireland and possibly Ireland's most prominent architect of the 17th century as a new retirement home for soldiers

of the Irish forces. It was occupied by 1684, but work was not finally complete until the tower was added in 1701 (this structure is visible on the banner of Brooking's 1728 map of Dublin, Figure 20-8). The hospital continued in use up to 1927, during most of which, it also provided the residence for the commander of the army in Ireland. The Masters lodgings (DU018-020255), built in 1762–3 were located to the north of the hospital garden (DU018-020528), both of which are within 100m of the existing rail line.

Remains of the original post-medieval walled garden were identified during archaeological investigations in the 1970s (Excavations.ie Ref. 1976:21). Archaeological testing within the Pensioner's Graveyard of the Royal Hospital in advance of restoration works in the graveyard. The graveyard is north of the Bully's Acre. Fifteen hand-dug test trenches were opened. Two grave-cuts in total were encountered at depths of 0.4m and 0.6m indicating the potential for burials at varying depths. The burials were also beyond the currently visible extent of graves (Licence No. 08E0141, Excavations.ie Ref. 2008:472).

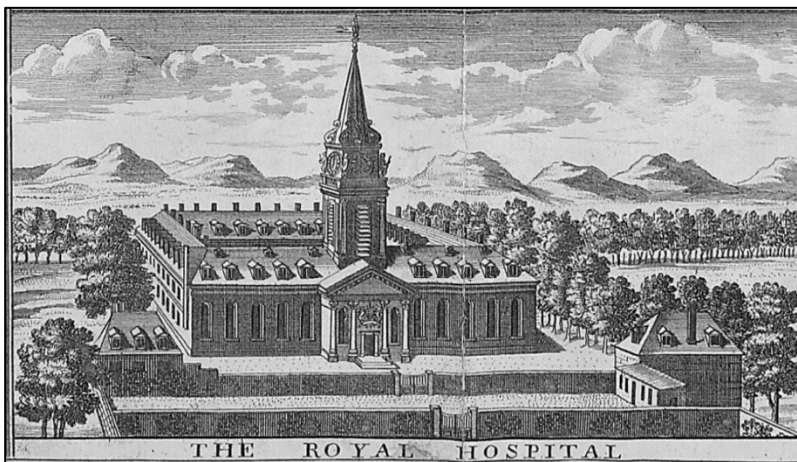


Figure 20-8 The Royal Hospital on Brooking's 1728 Map of Dublin

20.4.1.4.4. Post-medieval Period

Clancy Barracks

The Irish National Memorial Park occupies an area of about eight hectares. It was designed by Sir Edwin Lutyens (1869-1944) and was laid out between 1933 and 1939 to commemorate the Irishmen who lost their lives during the First World War.

Clancy Barracks is approximately 35m west of the study area. It was built in 1798 as the Royal Artillery Barracks with an addition of a cavalry barracks to the north in the mid-19th century. The barracks had two main squares; the Upper Square and the Cambridge Square. Within the site footprint was a mansion erected by Sir William Robinson, Surveyor General of the Fortifications and Buildings. Known as the Great House at Islandbridge, the 1715 sale catalogue describes the property in some detail and it would appear to have been located under Upper Square, the southern parade ground (Myles 2007). The site of Islandbridge Barracks first came into military use in 1797 under the auspices of the semi-autonomous Ordnance Board of the British Army. The land was let to the Ordnance Board by the Governor of the Royal Hospital Kilmainham; this board had been in existence since the late 17th Century. To the west of the barracks site the land was in agricultural use. After the establishment of

the barracks and prior to the time of the preparation of the Ordnance Survey first edition map, a row of housing developed on the western side of the road and the area to the west of these was being used for the extraction of gravel.

The development of the barracks as a functioning institution was piecemeal. It grew in response to the requirements of the Anglo-French wars. The barracks nearly saw its first military conflict in 1803. However due to confusion over the signals to be given, the planned attack never took place. In November 1838, a formal decision was reached to abandon Islandbridge Barracks as soon as work was completed on the new Barracks at Portobello, and in 1854 there was an offer from the Great Southern Railway to buy the site. This first offer was initially refused. In the late 1850s, there was a complete reversal of this policy.

Casey (2005) points out that the barracks had extended to the river sometime after the publication of the first edition OS six-inch map. This period coincides with the Crimean War, in which cavalry units based in Ireland played a major role. It was at this time that the Riding School Building and loose boxes and stable barracks were constructed. In 1922, the barracks was handed over to the Irish National Army where it continued to be used by the same two specialist branches of the army, namely the Engineering Corp and the Ordnance Division. In 2004 under an overarching state rationalisation plan the site of Clancy, formerly Islandbridge, Barracks were sold to private developers and is now one of Ireland's largest private sector rented residential developments with a number of apartment blocks.

Several archaeological investigations have uncovered post-medieval and earlier remains at the barracks. Archaeological testing (Licence No. 07E0621, Excavations.ie Ref. 2007:518) at the barracks identified a deposit of silty clay that overlay natural alluvial clays and was sealed by later post-medieval re-deposits. The silty clay contained samples of worked timber that were dated to 595AD. A subsequent excavation (Licence No. 07E0261, Excavations.ie Ref. 2007:519) uncovered a post-and-wattle riverine revetment and cultivation soils that pre-dated the barracks. A burial containing the skeletal remains of three horses, including one, Dickie Bird, that had served in the 5th Dragoon Guards for the entire Crimean Campaign, was also discovered. An underground tunnel and 19th century basement were identified during additional monitoring works (Licence 09E0434, Excavations.ie Ref. 2009:341). An extensive archaeological excavation in advance of development at Clancy Barracks has also been carried out. The results of these excavations are not yet within the public domain.

Kilmainham Gaol

In 1796, Kilmainham Gaol (National Monument and RMP DU018-125) was opened on the north side of the River Camac, fronting onto Inchicore Road. It was initially called the 'New Gaol' to distinguish it from the old prison it was intended to replace – a noisome dungeon, just a few hundred metres from the present site. It was officially called the County of Dublin Gaol, and was originally run by the Grand Jury for County Dublin. Prior to the construction of the gaol, this part of Kilmainham was known as Gallows Hill and it was here, on a parcel of common ground, that convicted criminals were hanged. Kilmainham Gaol was decommissioned as a prison by the Irish Free State government in 1924 and sat empty until restoration began on the building in the 1960s. Many Irish revolutionaries, including the leaders of the 1916 Easter Rising, were imprisoned and executed in the prison by the orders of the British Government. It is one of the largest unoccupied gaols in Europe, covering some of the most

heroic and tragic events in Ireland's emergence as a modern nation from 1780s to the 1920s. The gaol now houses a museum on the history of Irish nationalism.

Archaeological investigations within the gaol grounds have revealed post-medieval artefacts including a hoard of keys (Licence No. C00695/E4636, Excavations.ie Ref. 2017:703) and a 19th century wall (Licence No. E4636, Excavations.ie Ref. 2015:211).

Archaeological testing opposite the gaol, within the footprint of the former Nestlé factory on Inchicore Road, uncovered post-medieval basements associated with former housing on the site (Licence No. 00E0183 ext., Excavations.ie Ref. 2001:435 and 2005:496).

The Great Southern and Western Railway

The Great Southern and Western Railway (GS&WR) became the third main railway to open in Ireland in the 1840s. In November 1841, the first contracts for the Dublin–Hazelhatch and Hazelhatch–Sallins lines were allotted to contractors William McCormick and William Dargan, respectively. The GS and WR was known as the Premier Line of Ireland. By the early twentieth century, it had trains running to almost every place of importance in the south and southwest of the country. In its heyday, the company had over 1,100 miles of line, of which 240 miles was a double track. The company retained its independence until 1924–25, when the railways, which operated entirely within what is now the Republic of Ireland, were amalgamated to form the Great Southern Railway, of which the GS and WR organisation was the largest constituent.

The GS&WR opened the first section of railway line from their Dublin headquarters at Kingsbridge (Heuston) Station on 4 August 1846. It was named after George IV and commissioned in 1846 from Sancton Wood, an English architect after a design competition. The site of the station was not a popular choice for the placement of the terminal building in Dublin. MacNeill had to write a pamphlet to assure the public that the location was not remote but convenient to the city's principal places of business.

The first 4.5 miles of railway line from Kingsbridge station climbs steeply, with gradients varying from 1 in 85 to 1 in 140. For a long time, it was customary to detail men with water and brushes to scrub the surface of the rails between Islandbridge and Inchicore to reduce the chance of wheel slip. Soon after the opening of the line, an additional track, known as the Third Road, was put in between Islandbridge and Inchicore. Up trains usually stopped at a platform at Inchicore for the collection of tickets, and, during this time, the locomotive was replaced by an 'incline brake van.' At the signal to start, the brakes were released and the train, under the control of a special brakes-man, ran down to Kingsbridge by gravity. The introduction of vacuum brakes made it possible to end this practice, which ceased in December 1877. In 1966, CIÉ renamed its principal railway stations in honour of the executed leaders of the 1916 Easter Rising; Kingsbridge station was renamed in honour of Sean Heuston.

Industrial milling

The remains of a brick-built culvert, a drainage channel that may have originated from a mill race and a demolished wall were identified at the site of the 18th century Kilmainham mill (RMP DU018-020288)

and 20th century warehouse on Inchicore Road, c. 215m southeast of the study area (Licence No. 02E1622, Excavations.ie Ref. 2003:539).

Zone D: Liffey Bridge to Glasnevin Junction (Phoenix Park Tunnel Branch Line)

20.4.1.5. Phoenix Park to Glasnevin

20.4.1.5.1. Prehistoric Period

Prehistoric activity within the Phoenix Park is well documented and includes the Late Neolithic Linkardstown-type burial (RMP DU018-007011) that comprised two crouched inhumations and four cists containing cremated remains. The burial site was first discovered in the 19th century at the Hill of the Mariners, approximately 2.5km west of the existing rail line. While the NMI Topographical files contain information on stray archaeological artefacts from the prehistoric and later periods that have been found within the Phoenix Park, none of these discoveries have been made within the vicinity of the study area.

A bronze ring (NMI Reg. No. 1962:95) discovered somewhere in the townland of Cabra may be prehistoric in origin, though in the absence of any further information it is difficult to derive further information on the provenance of the artefact.

20.4.1.5.2. Early Medieval Period

The Early Christian monastic site (RMP DU018-005001) at Glasnevin was established on the banks of the River Tolka in the 6th century. Its foundation is attributed to St Mobhí, who died of the plague in AD 545 (Gwynn & Hadcock 1988). The monastery ceased to function at some period before the 11th century, and no upstanding trace of the settlement now survives. The outline of an outer monastic enclosure may be preserved to the east of the present-day Bon Secours Hospital, approximately 1.2km north of the existing rail line. Two skeletons (RMP DU018-005004) were discovered when a path was being laid close to Church Lane in 1941. Further burials were discovered a decade later in 1951, during the digging of foundation trenches at the Bon Secours Hospital. More burials (RMP DU018-005007) discovered to the east of St Mobhí's Church in 1956. Finds associated with the burials included animal bones and a knife like iron object (NMI 1956:16). The discovery suggested that the original burial ground connected with the monastic foundation extended beyond the present graveyard wall.

The remains of up to ten slab-lined graves (RMP DU018-005006 and DU018-005010) have been discovered at the site of Marlborough House (now the location of the Met Office), 980m northeast of the existing rail line. Shields found with the burials in 1895 were thought by locals at the time to be relics of the Battle of Clontarf that was fought between the Irish, under Brian Boru, and the Norse and their allies on Good Friday, 1014 (De Courcy 1996). A bone implement (an apple-like scoop) was found with the burials (NMI 1915:42).

A coin hoard found at Glasnevin also dates to the Early Medieval period. The hoard contained Anglo-Saxon and Arabic coins, one of which was dated to 927 A.D. from a Viking mint from York.

20.4.1.5.3. Medieval Period

Glasnevin is mentioned in the historical record in a letter sent to Rome in 1179, ten years after the arrival of the Anglo-Normans, that lists the already established churches in Dublin that date to the

Viking Period and earlier (Bradley 1998). In 1178, Archbishop Laurence O'Toole had assigned the church, together with the lands of Glasnevin, to the Priory of the Holy Trinity (i.e. Christ Church), a gift confirmed in 1179 by Pope Alexander the Third (D' Alton 1838).

As a Home-farm of the Priory, service had to be rendered at Glasnevin by the manor's tenants, who were obliged to assist the Priory in ploughing, hoeing, haymaking, reaping and carrying the corn. The Priory farmed vast portions of the lands at Glasnevin and its tenants farmed the remainder. The steward of the Home-farm is believed to have lived on the site of the present Convent of the Holy Faith, where there were ample farm buildings (Malone n.d.). In 1344, when the manorial residence at Glasnevin underwent restoration, the Priory's staff at Glasnevin is recorded as consisting of a bailiff, a sergeant or foreman, a carter, six ploughmen, a shepherd, a door-keeper and a housemaid (Ball 1920).

The lands at Glasnevin would have been subject to change of leases throughout the medieval period, and in the 16th century, leases of the Glasnevin lands increased rapidly in number. Among the leases there appears the demise in 1542 of the manor to Alderman Thomas Stephens, his wife Alson Fitzsimon and Oliver Stephens, and the lord's meadow went to the owner of Drumcondra, James Bath, in 1544. In 1572 the Seven farms went to Thomas Lockwood and Richard Fagan, and in 1594 Draycott's farm went to Aelund Ussher, with houses and other places within the village going to various other persons (Ball 1920).

An Cabrach (Cabra), which translates as the 'the poor land', comprised sparsely populated woodland during the medieval period. The lands of Cabra were in the possession of Walter Kerdiff at the end of the 14th century and were sold to Thomas Plunkett in the 15th century. He subsequently granted the lands to Christ Church Cathedral. Christ Church Cathedral owned extensive tracts of forest, known as Salcock's Wood, from the late 12th century. Salcock's Wood, which was located between Cabra and Grangegorman, supplied the wood for the nave of Christchurch Cathedral in 1564 (Murphy and Potterton 2010).

The ploughland of Cabragh Hill, or Ballygossan, was granted to the Prior of Holm Patrick, by Edward I in the late 13th century, while William Stockenbregge was granted lands that were seized from the Prior of Ballyboggan, to the north of Cabra, in 1404 (Neary 1983). The Manor of Cabra was held by a branch of the Plunket family from 1480; the Plunket's were subsequently ennobled as the Earls of Fingall, and their main residence was Dunsoghly Castle, near Finglas. There had been a considerable village in Little Cabragh prior to the 15th century, but it was largely abandoned due to excessive taxation and was subsequently brought into the franchise of Dublin (Ball 1920).

20.4.1.5.4. Post-Medieval Period

The Glasnevin leases continued to change hands throughout the post-medieval period. Several grand houses were built in the area including the 'Glen/ Delville' at the site of present-day Bon Secours, Sir John Rogerson's residence on Glasnevin Hill, Hampstead Castle at the site of the present-day Dublin City University.

Cabragh House (RMP DU018-064), which was the residence of the Seagrave family, was constructed by Sir Ambrose Forth in 1598. The Jacobean-styled house was inhabited by Walter Seagrave from c. 1619, who moved his residence from Finglas Wood to Little Cabra after receiving an endowment of church lands (Aalen and Whelan 1992). The Civil Survey of 1654 to 1656 records Henry Seagrave as

the resident of Cabragh House; it is also worth noting that Henry Seagrave was one of a small group of Catholic landowners who managed to retain their lands after the depositions (Smyth 1992). Another resident of the house was Lord Norbury, John Toler, who was nicknamed the 'Hanging Judge' and was known for his duelling pistols. The house is shown with extensive gardens on Rocque's map of the County of Dublin.

The idea of forming a deer park, that would eventually become the Phoenix Park (RMP DU018-007001), was first considered by Lord Falkland in the early 17th century. In 1623, a reference is made relating to a proposed Royal park concerning a William Moore who was employed by 'Royal command in His Majesty's park which was to be enclosed near Dublin for game and breeding of deer' (Litton-Falkiner 1901). In December 1662, King Charles II sanctioned the purchase of 441 acres of land 'being part of the manor of Chapelizod', adjacent to the Phoenix Demesne (Litton-Falkiner 1900), marking the first official reference to the Phoenix Park. The Duke of Ormond enclosed the Phoenix Park in 1663 (McCullen 1993). The original wall was built by William Dodson to a very low standard and consequently required various repairs. In 1671 a new wall was built that defined the current extent of the park (Cosgrave 1909). The wall is visible in Rocque's 1773 map of the county of Dublin (Figure 20-9).



Figure 20-9 The Phoenix Park on Rocque's 1773 Map of County Dublin

Post-medieval culverts were uncovered at the present-day Zoo Road within the Phoenix Park during archaeological monitoring of realignment of the road. A mid-20th century concrete bunker and several small brick-built culverts were also uncovered (Licence No. 08E0739, Excavations.ie Ref. 2008:440).

The Botanic Gardens were founded in Glasnevin in 1795 by the Dublin Society on land owned by the poet Thomas Tickell. It was originally intended as an institution to advance research into plants for agricultural, medicinal and dyeing purposes. Several glass houses were constructed in the 19th century to accommodate the growing collection of plants from tropical areas, including the Great Palm House and the Turner Curvilinear Range (The National Botanic Gardens of Ireland, 2020).

Glasnevin Cemetery, originally called 'Prospect Cemetery', was opened in 1832 on the south side of the River Tolka in an area sometimes known as the 'Bloody Acre', where tradition has it that a battle was fought here between the 'Danes and the Natives' (RMP DU018-003, now a redundant record), approximately 160m northeast of the existing rail line. Prior to its establishment, Penal Laws had created a situation where there were no cemeteries for Irish Catholics to inter their dead, necessitating the use of Protestant graveyards and leading to some animosity. Daniel O'Connell was instrumental in the passing of the Act of Easement of Burial Bill (1824), in order to establish a burial ground for both Irish Catholics and Protestants (MacThomas 2012). The iconic O'Connell Tower stands over the vault containing Daniel O'Connell's remains, and is the focal point of the cemetery. It is styled after the round towers, or *cloigteach*, which were erected in monastic enclosures in the 9th and 10th centuries. The cemetery is delimited in some parts by high walls and watch towers and was manned by watchmen to protect the cemetery from body snatchers who would exhume cadavers for medical students.

The railway

The section of railway line constructed in Glasnevin from 1876-1877 linked the GS&WR Railway with the Midland and Great Western Railway, via a tunnel running beneath the Phoenix Park (DCIHR Ref. 18_03_016). The ruling gradient of early railways was dictated by the relatively low haulage capabilities of steam-powered locomotives. The pursuit of a near-level track necessitated large scale and expensive civil engineering works, including deep cuttings, such as in the Phoenix Park, and high embankments, such as in Glasnevin (Rynne 2015).

The railway embankment runs parallel to the northern boundary of the St Paul's area of Prospect Cemetery (Figure 20-10 and Figure 20-11). This area of the cemetery was developed in the early 20th century, to the south of the main cemetery and of the railway embankment. The eastern section of St Paul's was known as the 'Poor Ground'. The cemetery records document 3,873 unmarked burials within this section that took place between 1910 and 1914. There is a 1910 plan of the burial ground which was laid in grids with regular 4' grave plots (1.2m) running north south with 2' gaps (0.6m) cut intervals of but were in reality narrower. It was used both by the public and by institutions such as the North Dublin Union, South Dublin Union, Richmond Hospital, Mercer's Hospital and others. There are also burials from the aftermath of the 1916 Easter Rising, which were commemorated in 1966 through the erection of a memorial.

Unlicensed archaeological testing within the 'Poor Ground' confirmed that the unmarked burials adhere to the grid pattern that was laid out upon the opening of the cemetery (Myles 2017).

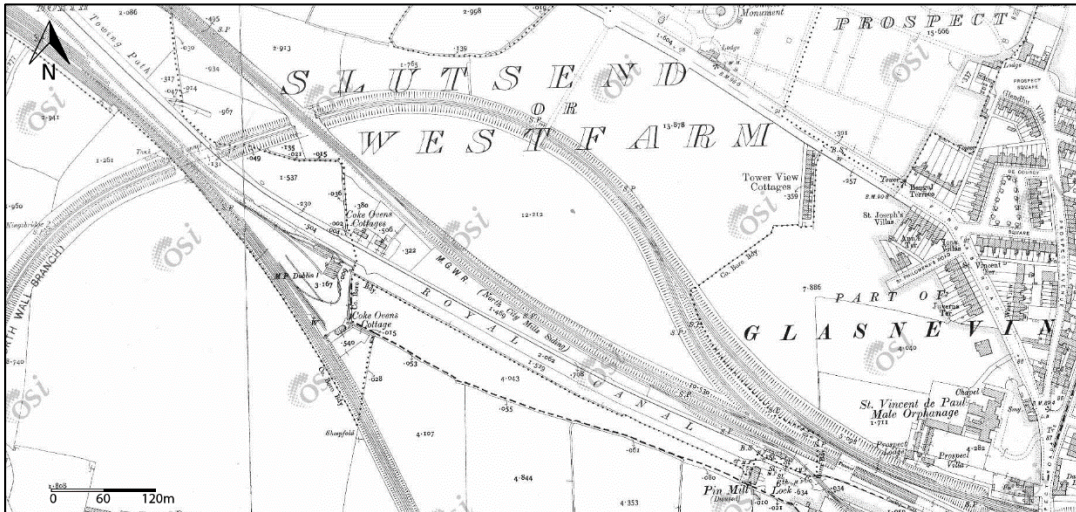


Figure 20-10 The Railway Embankment in Glasnevin prior to the setting out of the St Paul's Section of Prospect Cemetery, on the Revised Edition 25-Inch Map



Figure 20-11 The Railway Embankment and St Paul's Section of Prospect Cemetery on Aerial Imagery

20.4.2. Townlands and Toponymy

The toponymy of an area can be a valuable indicator of the type of cultural heritage within it. Place-names are an invaluable source of information not only on the topography, land ownership, and land use within the landscape, but also on the history, archaeological monuments and folklore associated with a place. Sources examined for place-name meanings include Logainm.ie, the Placenames Database of Ireland, and the Ordnance Survey Name Books and Letters which were published between 1824 and 1842 as part of the first complete mapping survey of Ireland.

The project and existing railway line runs through 32 townlands and six baronies within the study area, in the counties of Dublin and Kildare. Townlands are land divisions that form a unique feature in the Irish landscape; their origins can be of great antiquity and many are of pre-Norman date. They existed well before the establishment of parishes or counties. In Kildare most of the townlands have been named in Crown Survey manuscripts as early as 1540 (Logainm).

The townland names in the study area are almost exclusively Irish in origin but using a phonetic anglicised form as outlined in Table 20.5. In general, they refer to the landscape features (such as hills, plains, woodland, marsh or meadow) or ownership of land. For example, the ‘Phoenix’ element of the Phoenix Park is derived from *fionn uisce*, meaning ‘clear water’.

Some names may refer to archaeological monuments, as for example the townlands that refer to the presence of ringforts: Raheen is an anglicisation of *Ráthín*, meaning ‘small ringfort’, which might suggest there was such a site present in the townland; the *kil* element of Kilmainham, refers to a church; and Islandbridge is derived from *Dhroichead na hInse*, meaning bridge of the crooked island.

The English townland names, Adamstown, Elmhall and Hazelhatch are typical of such place-names in Ireland, which generally describe the previous owners of the land (personal or family name) and/ or land-use (e.g. grange, farm, court).

Heuston Station is located in Dublin City, which is not subdivided into townlands but rather wards, the boundaries of which changed over time, in 1780 it was within in the Work House Ward, the workhouse was built by the Dublin Corporation in 1667 on the site now occupied by St James’s Hospital, it was opened in 1706, from 1836 in St James Ward and in 1849 Ushers Quay Ward. Heuston Station was formerly Kingsbridge Station. In 1966 it was named after Seán Heuston, one of the executed leaders of the 1916 Rising who had worked in the station’s offices.

Table 20.5: Origins of Townland Names within Hazelhatch & Celbridge Station to Park West & Cherry Orchard Station (Zone A)

Project zone	Townland	Parish & Barony	Origin	Placename origin/ meaning (sources:
Zone A	Hazelhatch	Newcastle, Newcastle	English/ Irish	This name has appeared in many sources since 1405. It is from the Irish, ‘Collchoill’, with <i>Coll</i> meaning hazel and <i>choill</i> meaning wood
Zone A	Straleek	Donaghcumper Salt South	Irish	From the elements <i>Stra</i> meaning deep and <i>leac</i> a flagstone translates to “of the flagstone surface”.
Zone A	Loughlinstown	Donaghcumper Salt South	Irish	In 1540 it was known as <i>Tolysselaghelyn?</i> in the <i>manerium de Lexslype’</i> and then most commonly as <i>Loughlinstown</i> or Baile Mhaoileachlainn meaning the townland of McLoughlin
Zone A	Elmhall	Donaghcumper Salt South	English	Elm hall
Zone A	Stacumny Cottage	Stacumny Salt South	Irish/ English	An anglicisation of the Irish <i>Steach Cuimne</i> The cottage at the house of Cuimneach. The townland name is unusual, as it would appear to be a corruption of the Old/ Middle Irish <i>tech</i> , possibly attributable to the inability of the Norman-French speakers to pronounce the initial ‘t,’ hence ‘sta.’ This would date the place name to before the 12 th century. Another proposed origin for ‘sta’ is the Old Norse <i>star</i> , meaning a dwelling or homestead, but this form usually occurs as a suffix not a prefix. As the genitive form of Cuimneach is Cuimnigh (or ‘cumny’), the church that once stood on the site could have been under the influence of or have an

Project zone	Townland	Parish & Barony	Origin	Placename origin/ meaning (sources:
				association with Cuimneach, the abbot of Finnglais who died in 823, as recorded in the Annals of the Four Masters. The townland of Stacumny is rich with heritage remains, including the main house, lodge, cottage and the lime kiln adjacent to the railway and the stone masonry Stacumny bridge.
Zone A	Stacumny	Stacumny Salt South	Irish	As above Tech Cuimneach/ The house of Cuimneach
Zone A	Ballymadeer	Stacumny Salt South	Irish	An anglicisation of the Irish <i>Baile Maí Dúir</i> meaning the settlement or town of Dwyre's plain
Zone A	Aderrig	Aderrig Newcastle	Irish	Áth Deirg derived from the Irish <i>Áth</i> meaning ford and <i>dearg</i> meaning the red ford
Zone A	Gollierstown	Kilmactalway Newcastle	Irish	Bhaile Gallrath/ meaning Gallretts Town. In the OS Namebooks it states that Galrett isa family name. The lands were part of an estate of St Mary's Abbey
Zone A	Finnstown	Esker Newcastle	Irish	Baile Finn/ the settlement of Fyan, a family name
Zone A	Adamstown	Aderrig Newcastle	English	Named after the Adams family of the manor
Zone A	Esker South	Esker Newcastle	Irish	From the Irish <i>eiscir</i> meaning ridge
Zone A	Grange	Esker Newcastle	English	The grange of monastic farm
Zone A	Kishoge	Esker Newcastle	Irish	From the Irish word <i>An Chiseog</i> -it may be the diminutive of the Irish word <i>Ciseach</i> meaning a causeway/ bridge of wickerwork
Zone A	Clonburriss Little	Clondalkin Uppercross	Irish	The name Clonburriss combines the English and Irish traditions, which consists of <i>cluain</i> , a meadow, and <i>borrais</i> , a burgage plot, which is the medieval division of land within an Anglo-Norman town
Zone A	Cappagh	Cloncurry Ikeathy and Oughterany	Irish	From the Irish <i>Ceapóg</i> , meaning 'a small plot'
Zone A	Neillstown	Clondalkin Uppercross	Irish/ English	Bhaile Néill/ the settlement of Néill
Zone A	Raheen	Saggart Newcastle	Irish	An Ráithín/ small ringfort
Zone A	Ballymanaggin	Clondalkin Uppercross	Irish	Bhaile Mhic Cnagáin/ settlement of the son of Cnagán (a personal name) The townland of Ballymanaggin, where the station building and stop are located in the Clondalkin region, is written as 'Ballymacnegin in the Extent of Clondalkin, 1326,' in Alen's Register. It is referred to as 'Balmaknegen in the barony of Clondlakane' in an indenture of December 1, 1435, found in the

Project zone	Townland	Parish & Barony	Origin	Placename origin/ meaning (sources:
				same register. Balmaknaggan appears in the extract from the St Patrick's inquisition of 1547, referred to under Mohellscross (Ua Broin 1944). In 1756, it is shown on a deed as BallyMcKnaggin and as Ballymacnaggin in many deeds dating to a later period. The origin of the name is difficult to interpret, but the later part of the name probably refers to a surname. Two small fields in this townland, located immediately south of the railway, are named on Roger Kendrick's map of 1746 and referred to by John Brownrigg, 1780, as Chapel Park. However, there is no tradition or documentary proof of a chapel being located in this vicinity.
Zone A (ESB Grid Connection route)	Simmonstown	Donaghcumper South Salt	English	A family name
Zone A (ESB Grid Connection route)	Celbridge Abbey	Donaghcumper, South Salt	Irish	Mainistir Chill Droichid – Celbridge Abbey
Zone A (ESB Grid Connection route)	Commons	Donaghcumper, South Salt	Anglo, Norman	Common land

Table 20.6: Origins of Townland Names Park West & Cherry Orchard Station to Heuston Station (Zone B) and Heuston Station and Yard (Zone C)

Project zone	Townland	Parish & Barony	Origin	Placename origin/ meaning
Zone B	Ballyfermot	Ballyfermot Uppercross	Irish	Baile Formaid/ the settlement of Formot In 1199 it is referred to as the <i>Vill of Tormet Machelli</i> and then simplified in 1212 as <i>Villa Turmot</i>
Zone B	Inchicore (North and South)	St James' Uppercross	Irish	The name has been around since the 17 th Century. It is from the Irish <i>Inse Chór</i> , from <i>Inis</i> meaning island or river meadow, however it is not known where the second element of the name is, A second-quarter 17th century document mentions ' <i>The Steep Shrubby Hill alias Nynescore alias Inchicore</i> '; forms that are relatively close to today's Anglicised form are found a short time later in the same age, m.sh. ' <i>Inchicore and Inchycore</i> ' from 1654. There is a form from 1659, ' <i>Inseguore</i> ', which would suggest that the second element may be the personal name Gorey, but that form is quite exceptional; it is at some point if there is any support for such a version from the other forms in 17th and 18th century documents.

Project zone	Townland	Parish & Barony	Origin	Placename origin/ meaning
Zone B	Islandbridge	St James' Uppercross	Irish	From the Irish <i>Dhroichead na hInse</i> meaning Bridge of the island. Thought to be from an imperfect island formed by the rivers Liffey and Cammock. This is the name of a bridge which stood here prior to the present Sarah Bridge, it also gives the name to the village.
Zone B	Kilmainham	St Jude's Uppercross	Irish	An anglicisation of <i>Cell Maignenn</i> meaning Maignean's church – See historical background above.

Table 20.7: Origins of Townland Names Liffey Bridge to Glasnevin Junction (Zone D)

Project zone	Townland	Parish & Barony	Origin	Placename origin/ meaning
Zone D	Liffey Bank	St. James, Castleknock	English	Land adjacent to the Liffey
Zone D	Phoenix Park	Castleknock/ Chapelizod Castleknock/ Newcastle	Irish	The word Phoenix is a corruption of the Irish <i>Fionn uisce</i> meaning spring of the clear water. However, the name of the park derived from a manor house erected by Sir Edward Fisher in the early 17th century where the magazine now stands was called The Phoenix
Zone D	St. James	St. James, Castleknock	English	From St James's Church. In a lease of 1584 'a piece of ground, adjoining to St James's fields, and a parcel of the commons of this city near the Oldbridge leading to the mill of Kilmanham'
Zone D	Conyngham Rd	St. James, Castleknock	English	From the 1 st Marquis of Conyngham (1766-1832) – it was previously called the 'Way to Island Bridge'
Zone D	Grangegorman (South, Middle & North)	Grangegorman Castleknock/ Dublin	Irish	The name of Grangegorman is derived from a grange or monastic farm in the area. It was known in the medieval period as Cill Dúiligh. The Priory of Holy Trinity (Christ Church) was founded by the Augustinians in 1162 and was located in the area now known as Temple Bar (Somerville-Large, 59). It was very wealthy, similar to St Mary's and St Thomas's, and in the taxation rolls of 1302-06 the value of the Priory and associated lands was given at just under £183, ensuring that it was the most prosperous of all Irish monasteries at that time (Gwynn & Hadcock, 171). On the north side of the city the Priory possessed the manors of Glasnevin and Gorman. The name of the priory grange is evident in the name of the area 'Grangegorman'. The enclosed farm is reputed to have consisted of a large hall with additional rooms, a hay barn with a malt house and a workshop. There was also a yard for cattle and haggard. There is specific reference to a barn on this site from the Calendar of Ancient Records of Dublin "Sir Henry Harrington Knight, his house of Grange Gorman, in tymes past, called the Prior of Christe Church his barn.... to the west end of a

Project zone	Townland	Parish & Barony	Origin	Placename origin/ meaning
				<i>voyde ground where the auld barne was, in the floor of which barne was a stone showing the franchises...</i>
Zone D	Slutsend	Glasnevin Coolock	English	Also known as West farm

20.4.3. Topographical Files of the National Museum of Ireland

The topographical files of the National Museum of Ireland (NMI) identify recorded stray finds held in the archive of the museum. The finds which have been donated to the state in accordance with national monuments legislation are provenanced to townland and the files sometimes include reports on excavations undertaken by NMI archaeologists earlier in the 20th century. The exact findspot of the stray finds are not always known or recorded. These stray finds indicate the general archaeological potential for stray finds in the study area which may be an indicator of activity which may date to any period.

20.4.3.1. Zone A: Hazelhatch & Celbridge Station to Park West & Cherry Orchard Station stray finds

Stray finds have been identified in the townlands in Zone A, however the exact findspots are unknown. The records include pottery from Grange (NMI Reg. No. 1972:92, 1972:93, 1972:94) and a glass bottle (NMI Ref:1972:95-104). A copper alloy axehead was found in Kishoge (NMI Reg. No. 1994:20:00) and a copper alloy palstave in Clonburris Little are as mentioned above suggestive of Bronze Age activity in the area.

20.4.3.2. Zone B: Park West & Cherry Orchard Station to Heuston Station and Zone C: Heuston Station and Yard stray finds

The NMI record shows a high concentration of artefacts in Islandbridge/ Kilmainham.

Islandbridge/ Kilmainham

In all, the topographical files contain approximately 211 separate files referring to artefacts or features recovered from the Kilmainham and Islandbridge area. Of these 211 files, the majority refer to unprovenanced finds (i.e., their exact location is unknown) which were purchased by (or donated to) either the Royal Irish Academy (RIA) or the Museum from the 1840s onwards. The finds include a range of weaponry, metal objects, pottery fragments and tools of varying dates. Some of these probably related to the early medieval Viking occupation of the area and to later medieval and post-medieval occupation associated with the church and lands of the Knights Templar and Knights of St John. A large number of the artefacts recovered from Kilmainham were reportedly recovered during the cutting of the GS&WR and were in many instances presented to the RIA by the Directors of the Railway Company. The artefacts recovered in association with burials uncovered during the construction of the

Irish Memorial Park at Islandbridge were among the few objects recovered from the broader area whose find locations could be relatively accurately pinpointed.

Eight files concerned the recovery of human bones and thus directly or indirectly referred to burials in the Islandbridge or Kilmainham area. These eight files contained information on finds or groups of finds which were given National Museum of Ireland Registration Numbers (NMI Reg. Nos.). Two of these files referred to human bone recovered in January 1866, namely NMI Reg. No. 1866: R. 2381; and NMI Reg. No. 1866: R. 2379. No find locations were recorded for these burials. Three more of these files referred to the discovery of human burials during the construction of the Irish Memorial Park in 1933 (RMP No. DU018-020272), which were registered as NMI Reg. No. RIA 1933: 7-16 & 16A.

The remaining three files of this group concerned further burials uncovered during continued work at the Memorial Park in the following year (NMI Reg. No 1934: 10,877-879; NMI Reg. No. 1934: 5599; and NMI Reg. No. 1934: 425, 426). All eight of these files related to finds recovered from Islandbridge.

A further three topographical files contained information referring to archaeological investigations in the Kilmainham/ Islandbridge area which did not directly relate to human burials in the area. The first of these files contained the excavation notebooks from Dr Gerhart Bersu's 1948 excavation within the formal garden area to the north of the Royal Hospital quadrangle in Kilmainham (NMI Reg. No. E931:1). The second of these files listed the material (both medieval and post-medieval) recovered from dredging the Liffey at the 'King's Ford', Islandbridge (NMI Reg. No. 1937: 2379-2416). The third of these files contained unregistered correspondence dating from 1912 between Irish and Norwegian Museum and Government officials regarding the Viking Cemetery and burials at Islandbridge.

A bronze bell (RIA1917:2) was identified 'near Inchicore' and an iron object (NMI Reg. No. 1942:1836) was found in an 'unspecified' location in Inchicore.

20.4.3.3. Zone D: Liffey Bridge to Glasnevin Junction stray finds

There are 26 records in the topographical files for numerous artefacts and discoveries, including the prehistoric burials discussed in Section 20.4.1.5.1, that have been made in and near to the Phoenix Park. None of these discoveries have been made within the study area corridor.

Several stray finds have been identified in Glasnevin. A record from 1977 relates to a find of a socketed bronze axehead and unlooped bronze palstave which were found together, dumped in a polythene bag at the Tolka Lodge area (NMI Reg. No. 1977:2184-2185). This site was located at the present Glasnevin Woods housing estate on the southern bank of the Tolka River. These Bronze Age items had only recently been dumped at the time of discovery and their true provenance is unknown. It is not therefore possible to infer Bronze Age activity in the vicinity from these objects.

Other stray finds listed in the townlands in this Zone include a ceramic pipe (RIA1911:5) found in Glasnevin in Prospect, human remains (NMI Reg. No. 2008:33) on Mobhi Road and an iron knife on Mobhi Lane none appear along the line of the existing railway corridor. A bone scoop (RIA: 1915:42) was found in Marlborough Hall in Glasnevin.

Three finds were recorded from unspecified locations in Cabra which included a bronze ring (NMI Reg. No. 1933:5070), a Copper alloy Coin (NMI Reg. No. 1962:95) and an Iron Tool (NMI Reg. No. 1947:170). The bronze ring may be prehistoric in origin, though in the absence of any further information it is difficult to derive further information on the provenance of the artefact.

20.4.4. Designated Archaeological Sites

20.4.4.1. National Monuments

The term ‘national monument’ as defined in Section 2 of the National Monuments Act (1930) means 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 in State care include those which are in the ownership or guardianship of the Minister.

There are two national monuments (NM) in the ownership of the state that are recorded within the study area; Kilmainham Gaol (DU018-125, NM Ref:675) 105m south of the railway line) and Phoenix Park (DU018-007001). Zone D runs through the tunnel that runs beneath Phoenix Park (DU018-007001). Both sites are managed by the Office of Public Works (OPW) on behalf of the Minister for Housing, Local Government and Heritage.

Table 20.8: National Monuments within 250m of the Study Area

RMP/ SMR	Class	Location	Distance
DU018-125, National monument Ref. 675	Prison (Kilmainham Gaol)	Kilmainham	105m south of Zone B
DU018-007001, National monument	Deer park (Phoenix Park)	Dublin North City	Within Project Zone D

20.4.4.2. Zone of Archaeological Potential for Dublin City

Zones of archaeological potential (ZAP) can be defined as areas within the urban and rural landscape that possess the potential to contain archaeological remains due to the settlement history of a place and or to the presence of topographical features such as rivers, lakes and high, defensible ground.

The eastern end of Zone B, and the full extent of Zone C is within the Zone of Archaeological Potential (ZAP) for Dublin City (DU018-020) (Table 20.9).

Table 20.9: ZAP within 250m of the Study Area

RMP/ SMR	Class	Location	Distance
DU018-020	Historic town	Dublin City	0m Within Project Zones B & C
DU018-007001, National Monument	Deer park (Phoenix Park)	Dublin North City	0m Within Project Zone D

The Dublin City Development Plan 2022 - 2028 recognises that the appropriate archaeological strategy for preservation and development can only be determined for each site on the basis of an understanding of the archaeological potential of a site and the archaeological impact of a proposed Project on that potential. Any development proposals within a designated ZAP must be subject to pre-planning discussion and applications should be accompanied by an archaeological assessment including where possible archaeological testing.

20.4.4.3. Recorded Archaeological Sites

The Record of Monuments and Places (RMP) is a statutory list of archaeological monuments provided for in the National Monuments Act (as amended).

There are numerous recorded archaeological sites/ complexes (RMP sites) located within 250m of the study area. The sites are described in the context of the archaeological and historical background in Section 20.4.1. The sites are illustrated in drawing DP-04-23-DWG-EV-TTA-23737 of Volume 3A of this EIAR.

Measured from rail corridor to the zone of notification surrounding the RMP sites, the RMP sites that lie within 250m radius of the rail corridor are listed below in Table 20.10 to Table 20.13. There are 7 RMP sites in Zone A; 9 RMP sites in Zone B, 6 in Zone C and 1 in Zone D.

Table 20.10: RMP/ SMR sites within 250m of Zone A

RMP/ SMR	Class	Location	ITM	Distance
DU020-021	Enclosure	Ringwood	698310, 730807	110m south
KD011-021 KD011-021001	Church site and Graveyard	Stacumny	699789, 732707	115m north
KD011-068	Enclosure	Stacumny cottage	700271, 732589	30m south
DU017-093	Enclosure	Gollierstown	701891, 732600	180m south
DU017-029	Castle - tower house	Adamstown (Newcastle by.)	702836, 732705	25m south
DU017-036	Enclosure	Cappagh	705830, 732591	0m north
DU017-032001- DU017-032002-	Castle – unclassified House - 16 th / 17 th century	Neillstown	706498, 732931	150m north

Table 20.11: RMP/ SMR sites within 250m of Zone B

RMP/ SMR	Class	Location	ITM	Distance
DU017-083	Burial ground	Gallanstown (Castleknock By.)	708085, 732612	80m south
DU018-031001 DU018-031003 DU018-031004	Castle - tower house Church, Graveyard	Ballyfermot Upper	709522, 733234, 709539, 733219.	130m north
DU018-020272 (within ZAP)	Burial	Dublin South City	712011, 733902.	85m north
DU018-029	House - 16 th / 17 th century	Dublin South City	711473, 733930.	200m north
DU018-125 & National Monument Ref. 675	Prison (Kilmainham Gaol)	Kilmainham	712563, 733719.	105m south

RMP/ SMR	Class	Location	ITM	Distance
DU018-302	Burial	Dublin South City	712726, 733966.	0m
DU018-020284 (within ZAP)	Cross	Dublin South City	712795, 733810.	60m south
DU018-020283 (within ZAP)	Ecclesiastical site	Dublin South City	712793, 733810.	60m south
DU018-020288 (within ZAP)	Water mill - unclassified	Dublin South City	712762, 733704.	175m south

Table 20.12: RMP/ SMR sites within 250m of Zone C

RMP/ SMR	Class	Location	ITM	Distance
DU018-020255 (within ZAP)	House – 18 th / 19 th century	Dublin South City	711472, 733931	45m south
DU018-020528-	Designed landscape feature	Dublin South City	713164, 734025	120m south
DU018-112	Pit burial	Dublin South City	713368, 734111	65m south
DU018-020292 (within ZAP)	Hospital	Dublin South City	713509, 734126	60m south
DU018-020477 (within ZAP)	Mill - unclassified	Dublin South City	713618, 734138	55m south
DU018-020341 (within ZAP)	Hospital	Dublin South City	713715, 734155	60m south

Table 20.13: RMP/ SMR sites within 250m of Zone D

RMP/ SMR	Class	Location	ITM	Distance
DU018-007001	Deer park	Dublin North City	711579, 735354.	0m

20.4.5. Previous Excavations

Numerous archaeological investigations have taken place within at least 100m the study area, some of which have been discussed in Section 20.4.1. The sites are illustrated in Volume 3A of this EIAR.

The results provide insight into the general ground conditions and archaeological potential of the proposed Project. The most relevant sites in each Zone are also discussed briefly below and listed in Tables 20.14 to 20.17.

20.4.5.1. Excavations within 100m of Zone A

The following excavations have been carried out within 100m of Zone A.

Table 20.14: Excavations within a 100m radius of Zone A

Licence Number	Excavation.ie Ref.; Author	Location Townland/ ITM	Summary Findings	Distance
08E197	Ellen O'Carroll	Gollierstown, Adamstown, Dublin	Archaeological testing did not reveal any features of archaeological significance.	60m north
06E1146	Michael Tierney	Finnstown, Adamstown, Dublin	Archaeological monitoring did not reveal any features of archaeological significance.	60m north
07E0749	2007:436, C. Moriarty	Section 2, Kildare Rail Route Project	No archaeological features identified (see below).	0m
05E0477	Stuart Elder	Adamstown Link Road, Lucan, Dublin	Investigation of the R120 did not reveal any features of archaeological significance. A brick clamp was identified and may have been associated with the adjacent large house.	0m, the R120 runs parallel to the railway line.
07E0298 And 07E0298Ext	2007:961. C. Moriarty	Section 3, Kildare Rail Route Project Gallenstown, Neilstown and Cappagh,	Testing was carried out in advance of the construction phase of the Kildare route project railway line. Fourteen compound areas and two car-parking areas were tested as part of this assessment. No features or deposits of archaeological interest were identified in any of the test-trenches opened. Monitoring during construction revealed a 19 th century Mill Race in Loughlinstown (see below).	0m
07E0816	2007:803, J. Hession	Elmhall, Kildare Rail Route Project	Fulacht fiadh	0m
04E0147	N/a, Alan Hayden	Sector 3, Park West, Gallanstown, Clondalkin, Dublin	No archaeological features	100m - adjacent to access track.
98E0367	1998:120, Edmond O'Donovan	Le Fanu Park/ Raheen Park, Ballyfermot, Dublin	Burials associated the eastern fringes of Ballyfermot graveyard.	98m from compound.
19E0318	2019:511, J. O'Dowd	Kishoge Rail Station	No archaeological features	0m
99E0108	1999:246; A. Purcell	Park West	Early medieval graveyard	170m S

Archaeological testing and monitoring were carried out along three sections of the original Kildare Route Project (KRP), including car parks and compounds, running from Ballyfermot to Hazelhatch. Archaeological testing along the railway line which included proposed compounds and car parks, did not identify any archaeological sites. Modern disturbances related to urban expansion in the form of residential estates and industrial complexes had made the survival of archaeological features to be unlikely (Moriarty 2008, Licence No. 07E0749). Agricultural furrows, stone-lined field drains and modern disturbances were the only features identified. Subsequent monitoring of all the earthmoving

works along the scheme including the rail extension area on the northern side of the track revealed two previously unknown sites of archaeological significance. These were an Early Bronze Age fulacht fia in Elm Hall (previously discussed in Section 20.4.1.2.1; Licence No. 07E0816) and a 19th century mill race at Loughlinstown (previously discussed in Section 20.4.1.2.4, Licence 07E0298 Ext.).

Though 170m south of the existing rail line, the discovery of a previously unknown Early Medieval cemetery at Park West Business Park (Licence Nos. 99E0108 and 00E0267) in Gallanstown was significant. This previously unknown archaeological site, within relatively close proximity of the existing rail corridor, was only identified during groundworks for a modern development, however no features associated with this site was identified during the KRP works on the northern side of the railway tracks.

A small section of the county boundary between Dublin and Kildare was also investigated on the north side of the railway line between Aderrig and Ballymadeer. The ditch was 5m wide and 1m in depth and the fill contained finds from the 19th and 20th centuries (Licence No. 07E0932).

Topsoil stripping under archaeological supervision at the site of a proposed car park at Kishoge train station (at the site of the proposed Kishoge substation did not cover and archaeological deposits of features (Licence No. 19E0318, Excavations. Ref. 2019:511).

20.4.5.2. Excavations within 100m of Zone B and C

The following excavations have been carried out within 100m of Zone B and C.

Table 20.15: Excavations within a 100m radius of Zone B

Licence Number	Excavation.ie Ref.; Author	Location	Summary Findings	Distance
06E0927	2006:661, M. Saunderson	Essmore House	No archaeological features.	95m south
08E0915	N/a, William O. Frazer	East Wall - Inchicore DART Underground Works	Borehole monitoring within Inchicore Railway works to Heuston station close to railway sidings, tracks and buildings. No features of archaeological significance were identified.	0m
08E0693	2008:467, Maeve Sikora	War Memorial Gardens, Islandbridge	A disturbed grave of a Scandinavian warrior.	100m N
08E0098	2008:444, J. Carroll	Inchicore National School, Sarsfield Rd	No archaeological features.	100m S
13E0428	2014:146, A. Giacometti	66 Inchicore Road	No archaeological features.	15m south
10E0128	2010:279, L. Simpson	Memorial Park	Possible medieval pits.	100m north
E000472	L. Simpson	Con Colbert Road/ Memorial Park	Bully's Acre burial ground.	28m S
02E1622	2003:539, R. Meenan	63A and 63B Inchicore Road	Post-medieval mill.	90m south
08E0711	2008:418, A. Giacometti	Kilmainham Congregational Church	No archaeological features.	35m south

Licence Number	Excavation.ie Ref.; Author	Location	Summary Findings	Distance
02E0705	2002:0609, F. Myles	52 Inchicore Road	No archaeological features.	58m south
00E0183 ext.	2005:496, E. Sullivan	Nestlé factory, 34-38 Inchicore Road	Post-medieval basements.	60m south
00E0183 ext.	2004:0610, E. Sullivan	Nestlé factory, 34-38 Inchicore Road	No archaeological features.	60m south
00E0183 ext.	2001:435, I. Doyle	Nestlé factory, 34-38 Inchicore Road	Post-medieval basements.	60m south
00E0183	2000:0308, I. Doyle	Nestlé factory, 34-38 Inchicore Road	No archaeological features.	60m south
02E1866	2002:0599, C. Walsh	St John of God's Day Care Centre	No archaeological features.	110m NW
14E0451	2014: 211, A. O'Connell	Inchicore Rd	No archaeological features.	100m S
14E0337	2015:029, D. Nelis	SCR; Courthouse	No archaeological features.	100m S
02E0243	2002:0598, C. Walsh	St John of God's Day Care Centre	No archaeological features.	67m NW
17E0572	2918:025, D. Nelis	Pensioner's Graveyard, Royal Hospital	No archaeological features.	23m SE
E000598	N/a, L. Simpson	Bully's Acre, Kilmainham	Bully's Acre burial ground.	85m S
08E0141	2008:472, E. Corcoran	Pensioner's Graveyard, Royal Hospital	Human remains	33m SE
17E0129 and 15E0053	F. Myles	Clancy Quay Islandbridge	Excavation of 5 phases of activity Phase I comprises the natural geological deposits Phase II relates to the tentative evidence for occupation pre-dating the acquisition of the site by the Barrack Board in 1797. Phase III thus relates to the first structures built on the site, where a stable block on an E-W axis was replaced by a rectangular structure accommodating latrines just to the northwest. Phase IV is represented by the construction of a substantial powder magazine between 1826 and 1837 Phase V is modern. A medieval stick pin from a disturbed context (17E0129:1:1) was recovered.	45m north

Table 20.16: Excavations within a 100m radius of Zone C

Licence Number	Excavation.ie Ref.; Author	Location	Summary Findings	Distance
08E0483	N/a, W. Frazer	Conyngham Road/ South Circular Road to Old Clancy Barracks, Islandbridge	No archaeological features.	45m from access road
96E0038	1996:126 and 1996:127, T. Coughlin, C. McConway	Hospital Lane, Islandbridge, Dublin	No archaeological features.	65m from access road
98E0169	1996:127, D. Delaney	765 South Circular Rd.	No archaeological features.	16m from access road
07E0261	2007:518, F. Myles	Clancy Barracks, South Circular Road	A riverside revetment, demolished barracks, post medieval soils, 19 th Century Crypt and cavalry horse burials.	63m NW
04E0672	N/a, M. Byrne	Clancy Barracks, Islandbridge	No archaeological features.	34m NW`
99E0594	1999:190, N. Birmingham	20-26 Conyngham Road,	No archaeological features.	58m N
96E0026	1996:125, G.Scally	28-31 Conyngham Road, Islandbridge	No archaeological features.	60m N
98E0188	1998:182, E. Halpin	Parkgate Street	No archaeological features.	85m N
08E0915	W. O. Frazer	East Wall - Inchicore DART Underground Works	Borehole monitoring within Inchicore Railway works to Heuston station close to railway sidings, tracks and buildings. No features of archaeological significance were identified.	0m
02E0220	2002:0545, F. Walsh	Heuston Station, Phase 2	Archaeological Monitoring of GI works (12 boreholes) did not reveal any clear indication of archaeological potential	0m
02E0219	F. Walsh	Heuston Station, Phase 2	Testing a proposed underground fuel-tank farm and plant room at Heuston Station. The rail embankment survived to a depth of c. 3.5–4m. This consisted of dump layers of gravels and clays, with large quantities of occupational and industrial material of 19th-century date and later.	0m
08E0711	2008:418, A. Giacometti	Kilmainham Congregational Church	No archaeological features.	35m south

Archaeological monitoring of site investigation boreholes was carried out along the length of the formerly proposed route of the DART Underground Project that extended across the city from East Wall to Inchicore. A refuse layer of 19th/ 20th century origin was encountered in BHRC 14 and BHRC 15 within the grounds of a Gaelscoil, adjacent to the Memorial Park, and c. 70m north of the current railway embankment. The grounds of the Gaelscoil had once been a quarry and landfill site. The landfill was up to 2m in depth with bands of refuse material, including a dump of industrial filtration material from the 19th or early 20th century. No other archaeological features or deposits were identified within the current study area (Licence No. 08E0915, Excavations.ie Ref. 2009:AD5).

The multiple discovery of human remains within the Islandbridge/ Kilmainham area have been discussed in Sections 20.4.3. Human remains have also been identified as a result of archaeological investigations, specifically within the pensioner's burial ground at the Royal Hospital (Licence No. 08E0141, Excavations.ie Ref. 2008:472) and the Bully's Acre burial ground (Licence Nos. 11E0410 and 11E0410 ext., Excavations.ie Refs. 2011:218, 2012:235 and 2013:045), both in Kilmainham. This activity is likely to continue north to the River Liffey.

Medieval activity in Islandbridge/ Kilmainham has been well-documented and already discussed in detail. Aside from the Viking Age burials, possible medieval pits (Licence No. 10E0128, Excavations.ie Ref. 2010:279) and confirmed Viking Age pits (Unlicensed, Excavations.ie Ref. 1989:025) have been found within the Memorial Gardens and on Con Colbert Road respectively. This medieval activity, within close vicinity of the existing rail line, survived in what is largely a modern landscape.

Though further than 100m from the development archaeological testing and a subsequent excavation on the north bank of the Liffey at Clancy Barracks (Licence No. 07E0261, Excavations.ie Refs. 2007:518 and 2007:519) uncovered a post-and-wattle riverine revetment and cultivation soils that were sealed by later post-medieval activity. The revetment was thought to be Early Medieval in date and possibly related to the other well-documented Viking Age activity in the area.

The discovery highlights the archaeological potential of rivers and especially of the Liffey within the Islandbridge/ Kilmainham area and at Heuston Station.

20.4.5.3. Excavations within 100m of Zone D

The following excavations were carried out within 100m of Zone D.

Table 20.17: Excavations within a 100m radius of Zone D

Licence Number	Excavation.ie Ref.; Author	Location	Summary Findings	Distance
06E0927	N/a, C. McCarthy	Garda Headquarters, Phoenix Park	Archaeological Testing. No archaeological features.	5m west. The railway line runs beneath in a tunnel.
11E0459	2012:199, E.O'Donovan	Saint Attracta Road/ Royal Canal,	No archaeological features.	30m S

Unlicensed archaeological testing was carried out within the ‘Poor Ground’ burial ground in the eastern area of St Paul’s section of Prospect Cemetery in advance of the development of a proposed chapel. This part of the cemetery is not a designated archaeological monument. The unmarked graves within the ‘Poor Ground’ were found to adhere to the grid pattern that was laid out upon the opening of the cemetery in the early 20th century (Myles 2017).

20.4.6. Site Investigation Works Monitoring

Ground Investigation (GI) works were carried out across the proposed Project (see Chapter 9 Land & Soils).

A total of 198 GI locations were subject to archaeological monitoring (Licence No. 21E0495, Breen)), by virtue of the GI locations being in close proximity or within 100m of a recorded monument (RMP site), within a Zone of Archaeological Potential (ZAP) of a recorded monument (RMP site), or within the Zone of Archaeological Potential (ZAP) or near recorded burial ground DU018-302 at the rail bridge on St John’s Road West. The GI works included rotary core (RC), cable percussion (CP), window sample (WS) and dynamic probe (DP) investigative methods, as well as track bed inspection pits (TBI) and foundation pits for bridges and retaining walls (FP).

No intact archaeological soils or feature were identified during the works. Few finds were identified and just came from four GI locations, and all are modern in date, dating from the 19th- 20th century. The finds comprise pottery sherds, glass and tile fragments, and two metal objects.

The GI monitoring confirmed the disturbed nature of the railway corridor, however given the small scale nature of the investigations it cannot be said that the results are representative of the archaeological potential of the area.

20.4.7. Fieldwork, Cartographic, Aerial and Historic Map Review of the Project

20.4.7.1. General

This Section summarises the historic character and archaeological potential of the proposed Project, based on observations made during the field survey, aerial imagery regression and cartographic sources review and previous archaeological assessments.

A windshield survey was carried out to familiarise the writer with the route and the landscape. This was followed by an accompanied site inspection in February 2022 of greenfields (for substation and compound areas) and at specific key structures. The built and industrial heritage is examined in Chapter 21 of this EIAR which examined industrial heritage features and features of cultural heritage merit.

The proposed Project is described from west to east along the railway corridor. It focuses on proposed earthmoving works areas, as set out in Chapter 4 Project Description and Chapter 5 Construction Strategy in Volume 2 of this EIAR and identifies areas of archaeological potential (AAP) that might be subject to impact. It is supported by aerial imagery and cartographic source regression, and by the results of previous archaeological assessments. The review has been divided and described as per the Project zones (Zone A, B, C and D) from west to east. Construction activity is referenced by the

unique construction reference number as shown in the Project Schematic Drawings provided in Volume 3A of this EIAR.

20.4.7.2. Zone A - Hazelhatch & Celbridge Station to Park West & Cherry Orchard Station

Zone A commences west of Hazelhatch & Celbridge Station in Dangan on the existing track, it extends eastwards under existing road bridges, footbridges and station structures to Park West & Cherry Orchard Station. This section runs east along the existing track incorporating the townlands of Dangan, Ringwood, Hazelhatch, Straleek, Loughlinstown Elmhall, and Stacumny within County Kildare; and through Stacumny Cottage, Ballymadeer, Aderrig, Gollierston, Finnstown, Adamstown, Esker South, Kishoge, Clonburriss Little, Cappagh, Neilstown, Ballmagaggin and Gallanstown in County Dublin.

20.4.7.2.1. Archaeological Landscape Character

From Dangan to Cappagh the landscape is predominantly low-lying farmland, comprising medium to large sized irregular fields of tillage subdivided by drainage ditches and mature hedgerow. They are mostly 18th and 19th century field systems subdivided by the rail line and diverted streams and drainage channels.

From Neilstown to Gallanstown the character of the landscape changes; here the rural landscape gives away to modern industrial and residential development with little remaining historic character.

The recorded monuments in Zone A range in date from the early Christian period, up to the medieval and post-medieval periods. There are relatively few prehistoric monuments in the wider landscape. The apparent absence of recorded prehistoric monuments is likely to be due to the removal of most above-ground traces of early sites and monuments by the intensive agriculture that has been practiced in this area for the last several millennia.

The archaeological sites within this landscape predominantly comprise enclosure sites within farmland. They present as crop marks or ploughed out sites identified in aerial photography (DU020-021 Ringwood; KD011-068, Stacumny cottage; DU017-093, Gollierstown and DU017-036, Cappagh); they do not have an above-ground presence. The enclosures sites do not have any diagnostic features and may date to any period from prehistory onwards.

The Church and Graveyard site in Stacumny (KD011-021001) is located within a modern farm complex, upstanding features associated with the church may have been incorporated into farm buildings, evidence of the structure has not been identified to date. Excavation revealed that the graveyard was in use between c. 1120 and c. 1275 (RMP files) indicating medieval activity within this landscape just before the arrival of the Anglo Normans, suggesting an established early medieval settlement in the area. The Church and graveyard site and their setting is not sensitive to any of the proposed changes in the existing railway infrastructure.

Adamstown Castle (DU017-029) was demolished in the 1960s and was built over. Similarly, no above-ground remains are associated with the Castle and later house site in Neilstown (DU017-032). Any works within the existing railway corridor will have no impact on these sites' settings or historical character.

20.4.7.2.2. Proposed Works and Archaeological Potential in Zone A

Zone A already accommodates a four-track railway. In 2007/8, a 10m wide corridor to the north of the rail line was cleared from Dangan to Ballyfermot to construct the two new tracks. The construction works included new railway stations, compounds, and car parks that were archaeologically monitored (Licence Ref 07E816EXT and 07E0932). Just two sites were identified and subsequently excavated, an Early Bronze Age Fulachta Fiadh at Elmhall (Hession 2009) and a 19th century mill race at Loughlinstown (Moriarty 2008, Licence Ref. 07E298 ext).

Hazelhatch Substation and proposed ESB Grid Connection, and Compounds

A substation and a temporary construction compound are proposed on the northern side of the railway northeast of Hazelhatch and Celbridge Station (Chainage 24+700) and east of the Hazelhatch Car Park (Chainage 24+2400) in the townland of Straleek. The sites are located in a brownfield where there are disused dwellings in the ownership of CIÉ. A second construction compound is located where there is an existing track maintenance compound west of the Hazelhatch Station, and is accessed via an existing access track.

These fields were undeveloped on the first edition OS map (1837), before the railway was constructed (Figure 20-12). To the north of the compound and substation site the townland boundary between Straleek and Commons is marked and is formed by a watercourse. The western compound lies north of the Commons Lower and Hazelhatch townland boundary which also formed the County boundary between Dublin and Kildare.

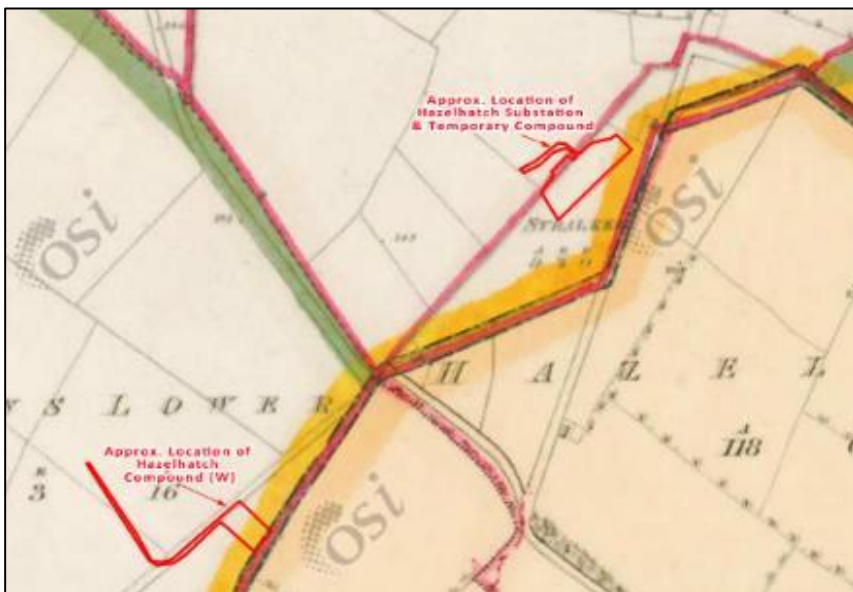


Figure 20-12 Compounds and Substation location on the 1837 First Edition OS Map

By the time of the revised edition OS Map (1870) the railway line and associated station had been built and the fields were still undeveloped, the western compound was planted with trees. (Figure 20-13).

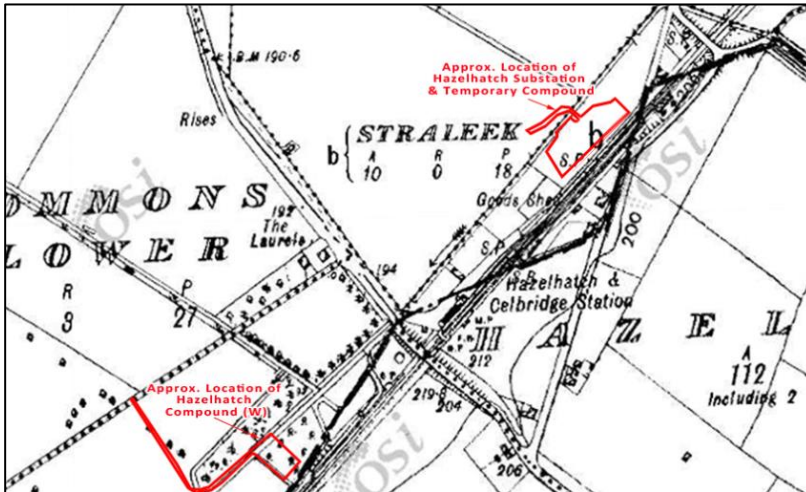


Figure 20-13 Compounds and Substation Location on the Revised 1870 Edition OS Map

An orthophotograph of 1995 (not shown), shows the lands still under farming but with a single dwelling with a long entrance avenue was developed in the lands. Sometime before 1999 a new road to the north made the lands available for development and three houses were subsequently developed on the land (Figure 20-14). The watercourse forming the townland boundary between Straleek and Loughlinstown was also culverted. The western compound is covered in hard core and in use as a maintenance yard.



Figure 20-14 Substation and Compound Areas on Aerial Imagery (Google Earth, 2009)

There are no recorded archaeological monuments within 250m of the substation and compounds. Archaeological monitoring of the neighbouring car park to the west and of the railway widening area in the immediate vicinity of the site to the south did not reveal any features of archaeological significance as part of the original Kildare Rail Project. The archaeological potential of the Hazelhatch substation and compounds is negligible.

20.4.7.2.3. Proposed ESB Grid Connection

The Hazelhatch substation will be connected to the ESB supply grid via the existing Celbridge Substation, located approximately 2km to the northwest, just outside the ZAP for the historic town of Celbridge (KD011-012001). The proposed UGC route will run along the R405-Hazelhatch and Loughlinstown Road, along which there are no archaeological sites.

An alternative UGC route is also proposed, it runs through greenfields in the townlands of Commons Lower, Commons, Simmonstown, and Celbridge Abbey, following the line of the proposed Celbridge Link Road. This route runs c.190m south of the site of Simmonstown castle (KD011-016), c.130m south of a subsurface enclosure site (KD011-029), c. 130m north of a Castle (KD011-019) and Mills site (KD011-038), and 185m north of the site of a 17th century house (DU011-026). It crosses the townlands of Commons Lower/ Commons; Commons Lower/ Simmonstown; Simmonstown/ Celbridge Abbey and Celbridge Abbey (Salt South By) (River Liffey Crossing)/ Celbridge Abbey (Salt South By). Earthmoving works in this area may reveal previously unknown subsurface archaeological sites, soils or features associated with the surrounding recorded archaeological monuments; townland boundaries, or with unrecorded activity within the riverine environment. This stretch of greenfield is considered to be an area of archaeological potential (AAP1-Hazelhatch UGC Alternative Option).

Celbridge Elmhall Compounds

Compounds and access tracks (are proposed either side of the track in the western end of townland of Elmhall (Chainage 23+750) (Figure 20-15).



Figure 20-15 Location of Elmhall Compounds and Access Tracks

On the first (1837) and revised (1870) edition OS Map (Figure 20-16) both compounds are located in greenfields located south of the parkland associated with Elmhall House. Until the railway line divided the parkland, the southern compound crossed into the parkland boundary. The parkland and field to the south were subsequently developed into a Golf Course.

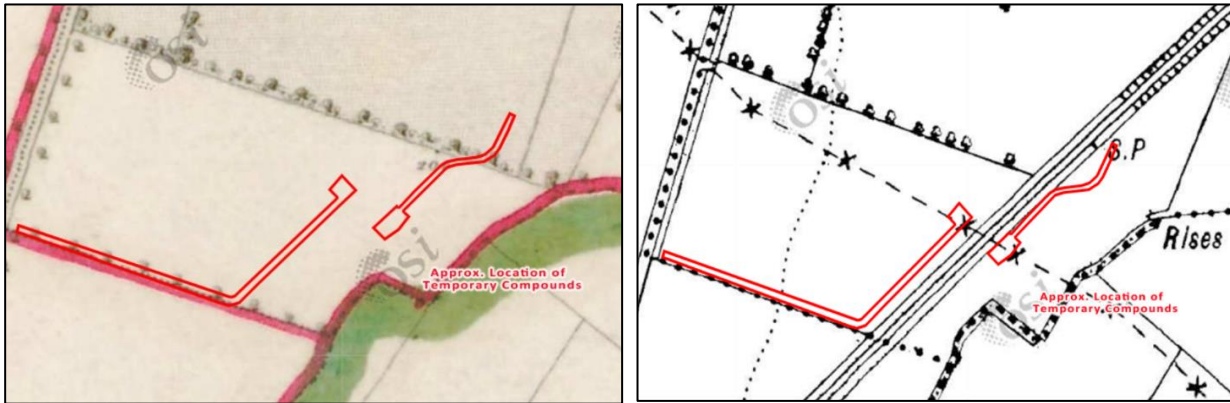


Figure 20-16 Location of Elmhall Compounds on the First (1837) and Revised (1870) Edition OS Map

Given that these compounds and access roads are located in greenfield areas, and that fulacht fiadh has previously been excavated in Elmhall (Moriarty, 2008), it is possible that similar sites will be uncovered in the area. The compounds and access roads are considered to be areas of archaeological potential (AAP 2-Elmhall Compounds and Access Roads).

Stacumny Compound

A compound (Chainage 22+650) is located offline at Stacumny Lane north of the existing rail line in the townland of Stacumny. It is located southwest from the site of the Church and Graveyard of Stacumny Church (KD011-021) and east of a 19th century Lime Kiln. The compound and access road are however located in an area used previously as a compound as part of the Kildare Route Project (KRP). Archaeological testing and monitoring (Moriarty, 2007) in this area did not reveal any archaeological features sites or finds. As part of these works the partial removal of the Lime Kiln walls was carried out under archaeological supervision (Figure 20-17).



Figure 20-17 Stacumny Existing and Proposed Compound and Lime Kiln (Digital Globe)

Adamstown Substation

Adamstown substation (Chainage 21+100) is proposed in the townland of Aderrig, west of the station on the southern side of the existing track adjacent to an existing IÉ pump station. It lies in a sub rectangular low lying field of rough pasture and is defined by a ditched hedgerow boundary to the southeast (Figure 20-18).



Figure 20-18 Aerial view of the Compound Location

On the first (1837) and revised (1870) edition OS Map the area is undeveloped (Figure 20-19).

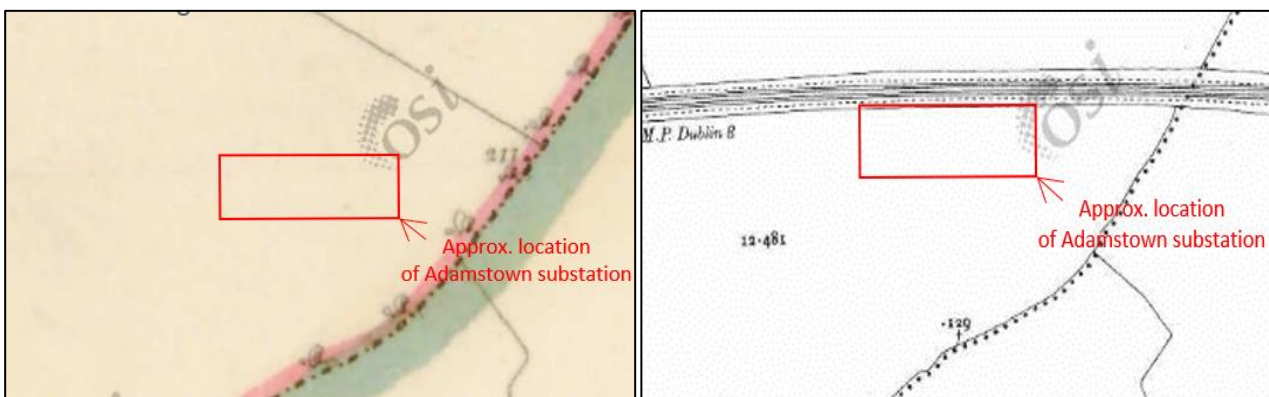


Figure 20-19 Compound Location on the First (1837) and Revised (1870) Edition OS Map

Archaeological monitoring carried out in Aderrig on the northern side of the railway of a compound area and track widening did not reveal any features of archaeological significance in this area.

Given the undisturbed nature of the greenfield the substation in Adamstown is considered to be an area of archaeological potential (AAP3-Adamstown substation), as earthmoving works in this area may reveal previously unknown subsurface archaeological sites, soils or features.

The grid connection for the substation will require a UGC along the existing road towards Kishoge (through the townlands of Aderrig, Gollierstown, Finnstown, Adamstown, Esker South and Kishoge) to the east, it will include some undeveloped greenfield/ brownfield areas. Whilst there are no recorded archaeological sites and no features indicated on the cartographic sources, the greenfield areas they are considered to be of general archaeological potential (AAP4- Adamstown UGC through greenfield areas).

Adamstown Compound

At Finnstown/ Adamstown there is a proposed compound and access area (Chainage 19+500,) to the north and south of the rail line, located at least 75m from the site of Adamstown Castle (DU017-029). On the first (1837) and revised (1870) edition OS Map (Figure 20-20) both compounds are located in greenfields and straddle the townland boundary between Adamstown/ Finnstown.

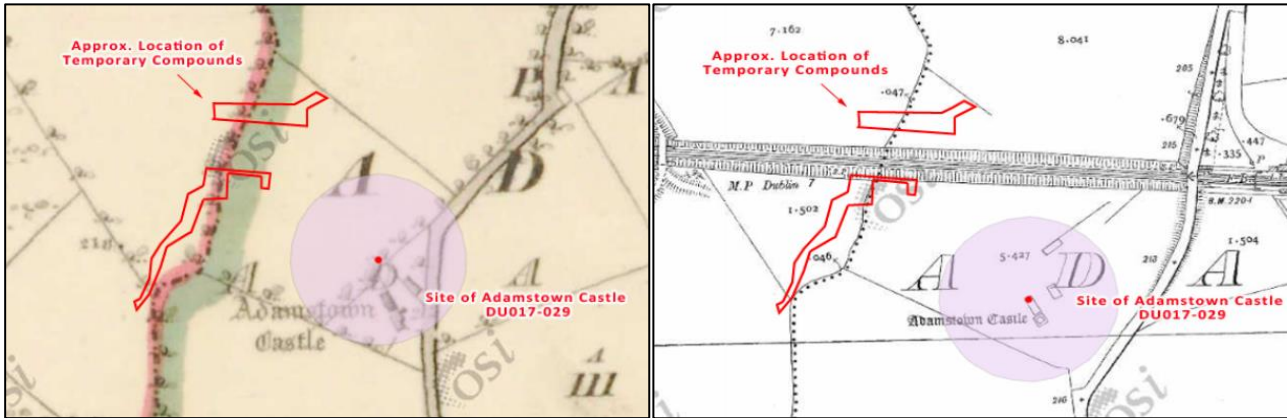


Figure 20-20 Compound locations on the First (1837) and Revised (1870) Edition OS Map

Both areas are disturbed with the northern compound having a large angle tower and the southern access road being used for dumping of spoil and machine tracks and hardcore (Figure 20-21). The proposed access road continues further south to a recently constructed road (not indicated in the aerial below).



Figure 20-21 Compound Location on Digital Globe

Though disturbed there is a potential that features associated with Adamstown Castle may be identified during earthmoving works for the compound and access road and as such these areas are considered to be an area of archaeological potential (AAP5-Adamstown compounds).

Kishoge Substation, Compounds and access

West of Kishoge Station, a substation (Chainage 18+100) is proposed with two compounds north and south of the track (Chainage 18+000).

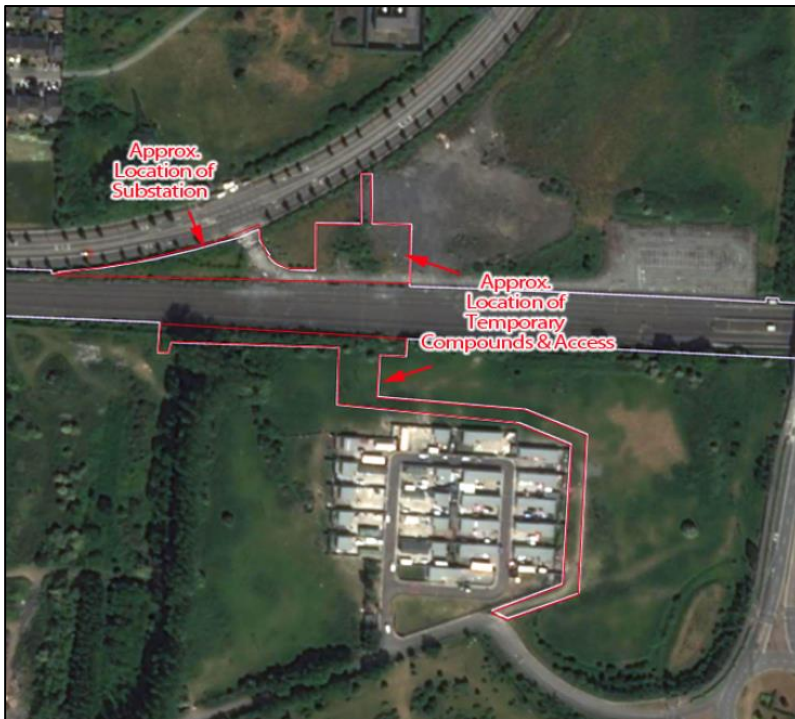


Figure 20-22 Substation and Temporary Compound Locations and Access Roads on Digital Globe

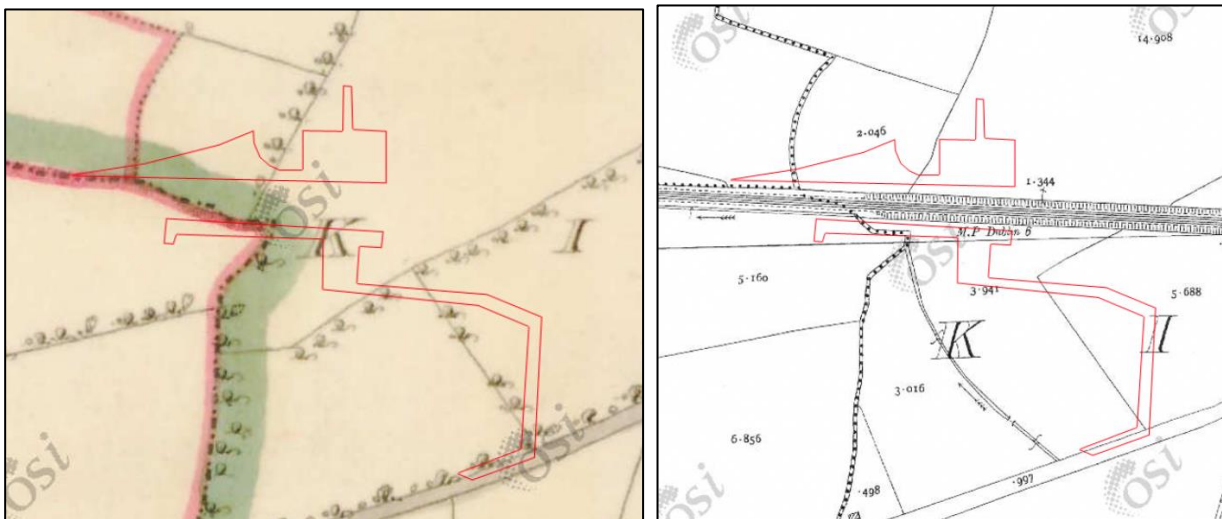


Figure 20-23 Compound locations on the First (1837) and Revised (1870) Edition OS Map

Though disturbed there is a general greenfield archaeological potential that previously unknown archaeological features may be identified during earthmoving works and are considered to be an area of archaeological potential (AAP6-Kishoge Substation and Compounds and Access Roads).

A proposed access road east of Kishoge Station reuses an existing construction access road.

Cloverhill Compound

There is an existing compound area at the proposed Cloverhill compound site (Chainage 15+500). This area was previously archaeologically tested and monitored for the KRP and nothing of archaeological interest was identified (Moriarty, 2009).

Park West Substation and Compound

The Park West substation and compound is located to the north of the railway and immediately east of the M50 motorway in the townlands of Gallanstown and Ballymanaggin. (Figure 20-24). The compound is located 150m north of the Early Christian cemetery in Gallanstown (RMP DU017-083) which was discovered during works associated with Park West Business Park and was subsequently preserved in situ. However Archaeological testing (07E0298) of this area was carried out as part of the KRP and no intact soil horizons were identified in any of the trenches excavated. Subsequent monitoring of the rail track widening works from Cherry Orchard to Hazelhatch (KRP Section 2), and the construction of the Park West and Cherry Orchard Station did not reveal any archaeological sites or features.



Figure 20-24 Location of Park West Substation and Compound and Cemetery Site DU017-083; the southern part of the site in Gallanstown in use as a Compound and Car Park and the northern half in Ballymanaggin is a greenfield site.

The proposed compound and substation in Park West will have no impact on any known or potential archaeological remains. The southern part of the site, within the townland of Gallanstown, has previously been stripped of topsoil and no archaeological features were identified in this location. An access road connecting the compound areas runs through the townland boundary between Ballymanaggin and Gallanstown. The northern half of the site in Ballymanaggin townland is located in an undeveloped greenfield site and is considered to be of general greenfield archaeological potential (AAP7- Compound in Ballymanaggin).

A compound and access road are proposed to the east of Park West Avenue in brownfield sites, the area to the south of the rail line was tested in 2005 (Hayden, 2005, 04E0147) and no features of archaeological potential were identified in the trenches opened. However, the area is substantially undeveloped, and it is not clear if topsoil strip has been carried out, given the areas proximity to the burial ground discovered in Gallanstown (DU017-083), the compounds and access roads are considered to be of archaeological potential (AAP8- Gallanstown Compounds (E) and Access Road).

Track lowering

Track lowering will be required locally at Finnstown R120 Road Bridge (OBC19) and at Stacumny Bridge (OBC21). Localised track lowering up to 100mm in depth, of the 2 tracks on the northern side of the rail corridor will be required to enable the OHLE, the track lowering will take place over a section length of approx. 30m.

These areas have already been archaeological resolved and no further archaeological work is considered to be necessary.

20.4.7.3. Zone B - Park West & Cherry Orchard Station to Heuston Station

20.4.7.3.1. Archaeological Landscape Character

Zone B commences at Park West & Cherry Orchard Station and extends eastwards under existing road bridges, footbridges and station structures to Heuston Yard. This section runs east along the current track incorporating the townlands of Ballyfermot, Inchicore (North and South), Jamestown, Islandbridge, and Kilmainham in County Dublin.

The landscape is urban in character, on the northside of the track it is residential and on the southside it is predominantly industrial.

The Islandbridge – Kilmainham area is characterised by a gravel ridge that runs on an east to west axis, sloping to the River Liffey to the north and the River Camac to the south. This ridge, prior to land development in the 19th century, extended from the confluence of the two rivers at Heuston Bridge to the western edge of the Memorial Park at Islandbridge, and was of considerable strategic importance in military offences against Dublin up to the time of the Anglo-Norman invasion. A detailed historical and archaeological background of the general area of Kilmainham, Islandbridge and Inchicore is provided in Section 20.4.1 above. The area remained substantially undeveloped until the late 19th century.

In Inchicore the railway passes south of Memorial Gardens and at the eastern end of the zone north of Kilmainham Hospital lands which contains Bully's Acre (see historical background above), both these open spaces are of significant archaeological importance, the construction of the original railway line

revealed a significant number of burials and artifacts relating to the Early Medieval Period including Viking burials. The potential of this area is indicated by its inclusion in the Zone of Archaeological Potential of Dublin (DU018-020).

20.4.7.3.2. Proposed Works and Archaeological Potential in Zone B

Compounds Between Cherry Orchard and Le Fanu Road Bridge and at Kylemore Road Bridge.

There are a number of proposed compounds between Cherry Orchard footbridge and Le Fanu Road Bridge, and also at Kylemore Road Bridge. The compounds are located both north and south of the railway line in the townlands of Gallanstown and Ballyfermot Upper (Figure 20-25). They are located in existing car parks or on road verges.



Figure 20-25 Compound Locations and Ballyfermot Castle, Church and Graveyard Site (DU018-031)

No features are shown within the compound areas in the first edition OS map (1837, Figure 20-26) the landscape comprised irregular shaped fields that were most likely associated with the medieval Ballyfermot Manor (described above in Section 20.4.1).

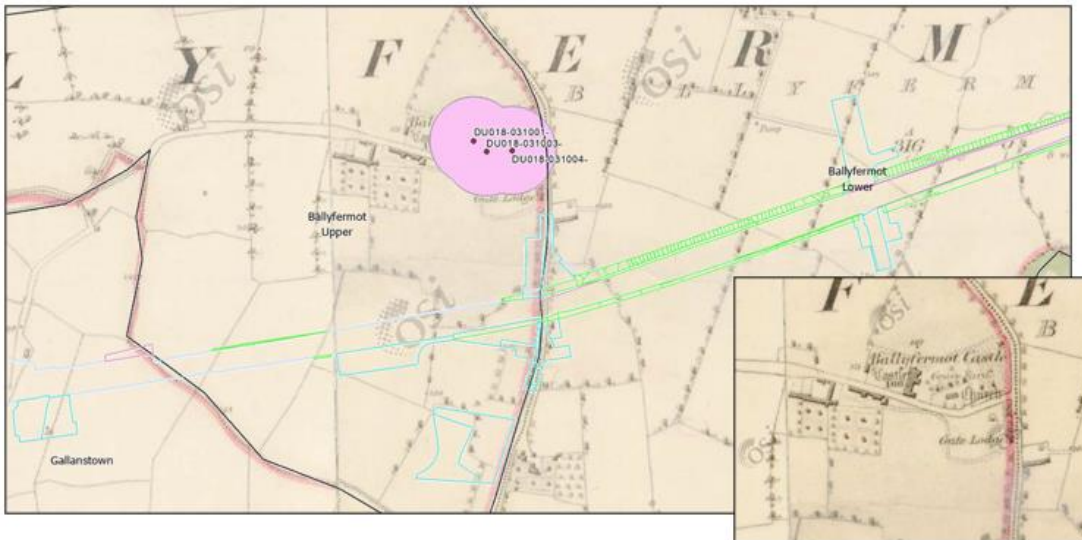


Figure 20-26 First Edition OS Map 1837, showing the Existing Line and the Location of the Proposed Compounds (in blue) (Inset showing detail of Ballyfermot Castle)

The site of Ballyfermot castle, church and graveyard (RMP DU018-031001–004), is located in the southeastern corner of Le Fanu Park (Figure 20-25, Figure 20-26). There are no visible remains of the sites, the area has been completely cleared and landscaped to create the park.

The compound areas are some of the last few undeveloped pockets of lands in this landscape and as such they retain a general archaeological potential as earthmoving works in this area may reveal previously unknown subsurface archaeological sites soils or features. The stretch of works for the compounds and any other associated excavation works between Chainage 13+300 to 12+100 and west of Killeen Road is considered to be areas of archaeological potential (AAP9- Compounds between Cherry Orchard Footbridge and Kylemore Road Bridge).

Kylemore

The Kylemore main compound and adjacent substation is proposed within the westernmost edge of the CIÉ Inchicore Works land in the townlands of Ballyfermot Lower and Inchicore South. These works are located adjacent to rail sidings, it is currently a storage area and includes a large mounded spoil and dumped material that is overgrown. On the revised OS Map of 1837 this area had structures and some rail sidings on it, the removal of the mound is very likely to reveal remnants of these features beneath it which would be of industrial archaeological interest.

A second compound is located to the south of the mainline tracks in a landscaped area just further southeast of the Khyber Pass Footbridge. It is located within the area of a landscaped greenspace to the north of an existing pond. Similar to the latter proposed compound and substation area, the area of this substation also had structures and sidings on it on the revised OS Map of 1837 (see Figure 20-27).

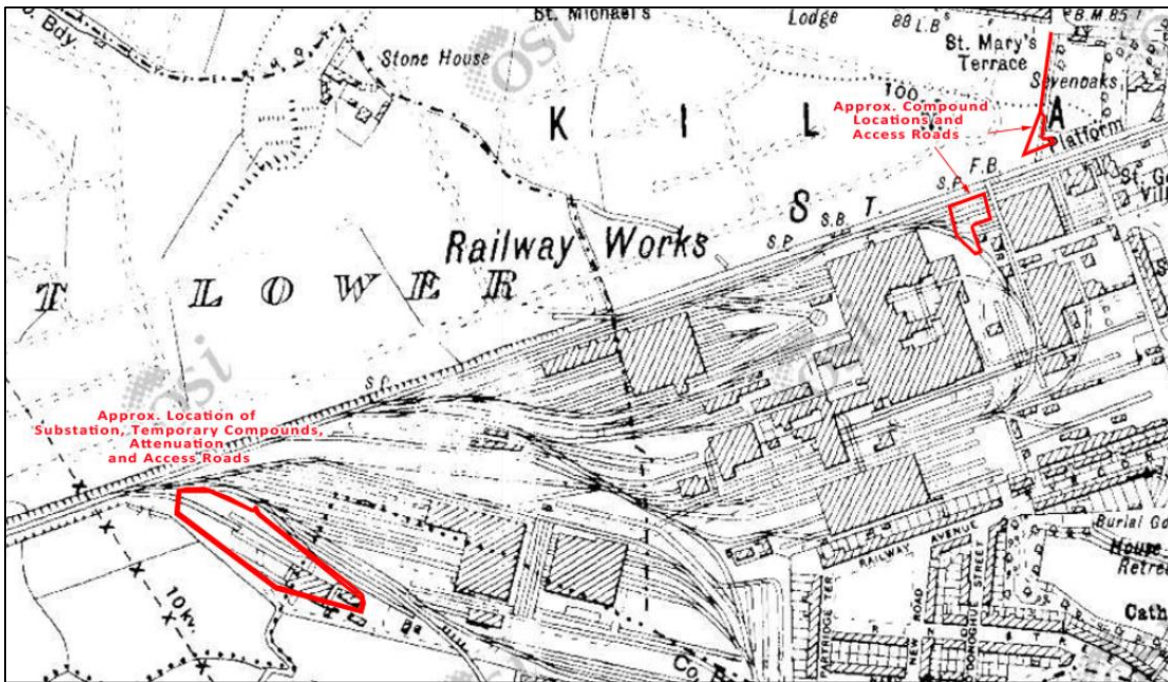


Figure 20-27: The Inchicore Works on the Revised OS 6-Inch Map

Outside of the CIÉ Inchicore Works an attenuation tank is proposed to the east of St. Georges Villas incorporating a car park area and part of an enclosed greenfield area. This area has not previously been developed and it was part of a former open green space associated with the rail workers houses. The greenfield area is sub-rectangular and is bound by a low roughly coursed rubble limestone wall with some later cement block work added to the top of the wall in places (Figure 20-28).



Figure 20-28: Site Location for the Proposed Attenuation Area (Inset Aerial View)

The Khyber Pass Footbridge (OBC5) over the railway corridor to Sarsfield Road uses a similar line as lane that is shown on the first edition OS Map (1837). The laneway is surfaced with tarmac and is defined with a rubble stone wall measuring c.1m high with rounded concrete cap stones topped with

metal railings or fence, in places they have been replaced by a modern fence. There are disturbed overgrown areas on either side of the lane.

The proposed substation and compounds within the CIÉ Inchicore Works are brownfield sites, in the early 20th century there were structures and sidings located in these areas. Though disturbed there remains a potential that subsurface archaeological features might be present below the ground surface in these areas, they are also likely to reveal information about the industrial heritage of the area. The proposed attenuation tank is within an undeveloped greenfield area and is considered to have an archaeological potential.

The proposed Inchicore Works (compound, substation, and track lowering etc) is considered to be of archaeological potential as there is very likely small pockets of lands that have not been disturbed within the complex and the potential to reveal industrial heritage features is high (AAP10: Inchicore Works).

Sarsfield Road Underbridge (UBC4) to St Johns Road Bridge (OBC0A)

The most extensive works will take place in this section of the route requiring works compounds within the existing rail corridor along the northern side of the track and in the vicinity of the bridges at Sarsfield Road, Memorial Road and South Circular/ St. Johns Road at Inchicore north/ Kilmainham. It will require retaining walls on the north and south sides of the railway corridor comprising secant piled walls and cantilever walls. A new cut and cover buried portal structure is proposed within the railway corridor on the north side of the existing South Circular Road Bridge, this will enable new tracks at a lower level to that of the existing tracks to achieve the required vertical clearance for the electrification along the new structure. The buried portal would be approximately 120m long and have a clear span of approximately 10m. The works associated with this zone also includes an attenuation area next to the proposed Heuston West Station.

The eastern section of Zone B traverses the ZAP for the Historic City of Dublin (RMP DU018-020) where it travels through Inchicore to Heuston Station.

This section of the corridor runs also runs adjacent to the recorded medieval cemetery site discovered during the laying out of Memorial Park (DU018-020272). It also sits upon a natural ridge within which early medieval burials have been identified between the Memorial Park cemetery and the two documented early medieval/ Viking period burial sites in Kilmainham/ Islandbridge and further Viking finds which have been identified to the south in Bully's Acre (DU018-020412) in the vicinity of St Maignenn's church (DU018-020283/204). This cemetery and the cemetery further east in Kilmainham is located on a natural gravel ridge that runs on an east to west axis (from Memorial Park to Heuston Station), sloping to the River Liffey to the north and to the River Camac to the south. The ridge was a focus of concerted gravel extraction during the 19th century (recorded by the Ordnance Survey from the time of the 1st edition. The evidence suggests that the burial pattern in both the Kilmainham and Islandbridge cemeteries was both concentrated and dispersed.

The route also runs through the area of archaeological interest adjacent to the findspot of a burial site on St Johns Road (RMP DU018-020284) north of Bully's Acre burial ground. A burial was discovered in 1960 during construction work at St John's Road (northeast side of the present interchange). They were discovered In 1960 human remains (RMP DU018-302 Burial) were discovered during construction work at St. John's Road, near Islandbridge, and just outside of the rail corridor; the burial

was intact, and the skeleton laid in an east-west orientation (suggesting a Christian burial). In addition, the widening of the South Circular Road in 1989-91 along the west side of Bully's Acre led to the discovery of burials (in individual and mass graves) and a curving length of medieval ditch. These discoveries further highlight the potential for burials to survive undisturbed within the immediate vicinity of the existing rail corridor in this area.

The full extent of the Viking Age cemeteries in Islandbridge and Kilmainham is unknown. Many of the discoveries, as recorded in the Topographical Files (Section 20.4.3) were made during the cutting of the GS & WR railway or the laying out of the Memorial Gardens. This discovery highlights the potential for burials to survive undisturbed within the immediate vicinity of the existing rail corridor in this area. In addition, the Bronze Age pit burial site (RMP DU018-112) was discovered within the Slighe Mór gravel ridge on the south side of the River Liffey in Kilmainham. Although some 65m south of the existing railway corridor, the discovery of this Bronze Age site (discussed in Section 20.4.1.4.1) on the same gravel ridge in Kilmainham that the existing rail corridor passes through highlights the importance of the ancient Sligh Mór routeway and the archaeological potential of the area.

Notwithstanding the extensive disturbance caused by the construction of the GS&WR railway in the 19th century, there is a potential, that a further burial or further burials/ features and associated finds might lie in undisturbed pockets of ground in this section of Zone B of the proposed Project or be truncated by it, this area is considered to be of archaeological potential (AAP11- Sarsfield Road Underbridge to St Johns Road Bridge).

20.4.7.4. Zone C – Heuston Yard & Station (incorporating New Heuston West Station)

20.4.7.4.1. Archaeological Landscape Character

Zone C comprises the main Heuston Station building, and a railway yard area located to the west of this building, it contains various ancillary buildings, platforms, track areas, car parks and maintenance facilities. It is entirely industrial in character.

The Zone C lies within the Zone of Archaeological Potential for Dublin City (DU018-020). Topographically it lies at the easternmost end of a natural gravel ridge within which burial sites dating to the Viking period were found and documented during the construction of Kingsbridge Station. The spread of burials recorded from the 19th century was extensive, stretching intermittently from at least the Memorial Park/ Islandbridge in the west as far as Heuston Station.

20.4.7.4.2. Proposed Works and Archaeological Potential in Zone C

The proposed works include a new station located to the west of the main Heuston Station, Heuston Station West, which will include two new platforms. This will require the demolition of an existing buildings and Platform 10, utility diversion, drainage and a substation along the R148 St Johns Road which will require a new access route. Compounds are proposed in the northeastern corner of Zone B within CIÉ lands

Archaeological monitoring of boreholes (02E0219 and 08E0915) did not reveal any archaeological features or remains. However, it is considered that given the size of the boreholes that this does not represent the archaeological potential of the area.

The lands lie immediately south of the River Liffey and as such has an inherent potential to reveal features such as wooden revetments etc. should deep excavations be required, similar to that identified in Clancy Barracks on the south side of the river (discussed in Section 20.4.5 above).

Two proposed compounds are proposed at the western side of Heuston Railway Station depot, one located west of the mainline and the other in existing compound storage areas to the west. The western compound incorporates an attenuation area. The Island Bridge Substation is also proposed to the south of the tracks north of St Johns Road.

On the first edition map (1837), there was a large 'Gravel Pit' marked in these areas with the rest of the lands to the east was otherwise undeveloped and the Liffey unrestrained with no crossing point. By 1870 the 'Kingsbridge Station' was fully operational; however, the location of the proposed compounds remained undeveloped with the cuttings of the former gravel pits still shown.

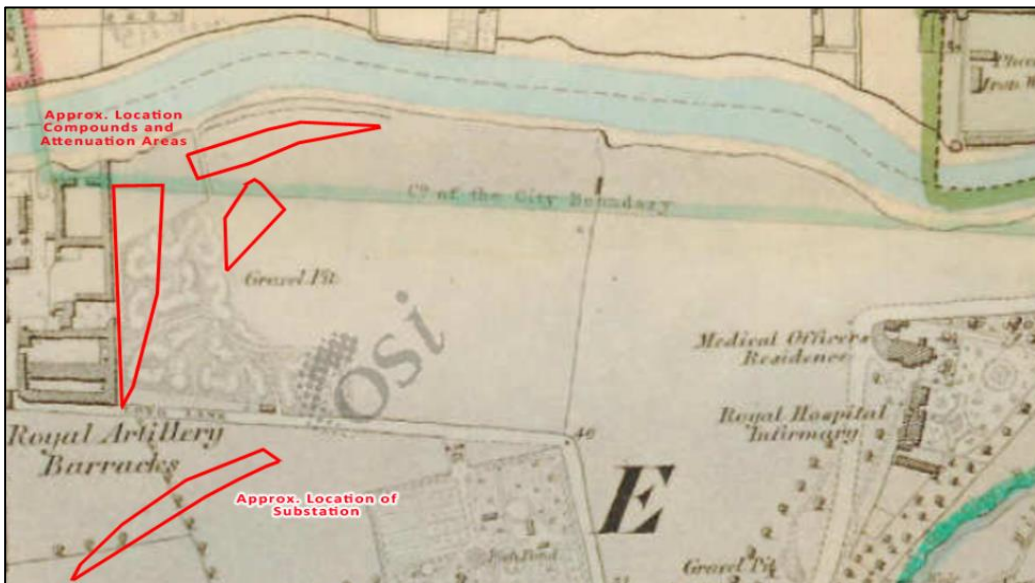


Figure 20-29 The Area of Heuston Station on the 1837 OS Map

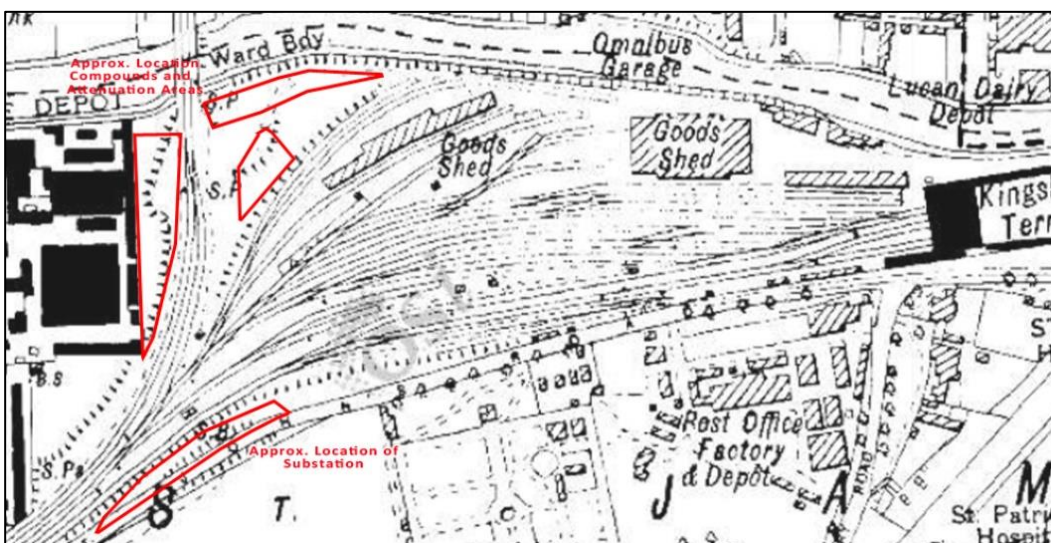


Figure 20-30 Revised 6-Inch OS Map of the Area of Heuston Station Showing the Proposed Works Areas

Almost all of the station lands have been developed with most open areas developed as car parks or storage areas or built up earthworks. The compound/ attenuation area to the west of the mainline track running north comprises a high earthen bank with dumps of stone which is overgrown with foliage and is uneven underfoot (Figure 20-31). The Island Bridge Substation is located on a sloping earthen bank that rises to St Johns Road, this bank is considered to be of archaeological potential as it may be the original ground level/ gravel ridge before the train station was constructed which is on a lower level.



Figure 20-31 (Left photo) View North of the Compound/ Attenuation Area to the West of the Mainline Track. (Right photo) and View West towards the Site of the Island Bridge Substation

Notwithstanding the disturbance caused by the construction of the GS&NR railway in the 19th century, there is a potential, that a further burial or further burials/ features and associated finds associated with the cemetery sites might lie in undisturbed pockets of ground. Given its location within the ZAP for Dublin City, its position on the gravel ridge that is known to have had burials within it the entirety of Zone C is considered to be an area of archaeological potential (AAP12- Zone C, all areas).

20.4.7.5. Zone D - Liffey Bridge to Glasnevin Junction (Phoenix Park Tunnel Branch Line)

Zone D commences on the south bank of the River Liffey (adjacent to the northern boundary of the Heuston Yard) and extends north east terminating at Glasnevin Junction. The existing railway extends northwards along the Liffey Bridge (UBO1) and under Conyngham Road Bridge (OBO2) after which, it enters the existing Phoenix Park Tunnel (PPT) emerges on the north side extending north east under a series of bridges along the Rail Line terminating at Glasnevin Junction. This section of the Project is runs through the townlands of Liffey Bank, Phoenix Park, St. James, Conyngham Rd, Grangegorman (South, Middle & North), and Slutsend.

The topography within this zone is generally flat, with the land north and south of the River Liffey sloping gently towards the river, the rail corridor is located within an existing tunnel under the Phoenix Park.

The Phoenix Park Tunnel has a length of approximately 700m and a deep cutting thereafter to Glasnevin Junction where the DART+ South West Project extent ties in to the existing track at Glasnevin Junction and interfaces with the DART+ West Project, where the route then continues to the Dublin Docklands area (Spencer Dock and Grand Canal Dock).

Once beneath the Phoenix Park tunnel the landscape either side of the railway corridor is predominantly residential with some industrial. Prospect Cemetery is located just on the inside bend of the existing line.

20.4.7.5.1. Proposed Works and Archaeological Potential in Zone D

New retaining walls are required along both the north and south sides of the rail corridor on the Phoenix Park Tunnel Branch Line, specifically the section north of the PPT to Glasnevin Junction. Zone D continues through the ZAP for Dublin City (DU018-020) and through Phoenix Park recorded Deer Park (DU018-007001, national monument); however, it runs within a tunnel beneath the park. Once out of the park there are no RMP sites within 250m of the Project corridor. There have been two archaeological investigations in immediate proximity of this Zone, testing at the Government headquarters in the Phoenix Park (Licence Ref: 06E0927) and archaeological monitoring of geotechnical work at Saint Attracta Road/ Royal Canal, LUAS Crossing (Licence Ref: 11E0459), neither revealed any archaeological features of significance. Structural remains of the side walls of the Midland Great Western Railway cutting and the boundary wall of St Brendan's Hospital in Grangegorman were also examined as part of the LUAS works, trenches were excavated abutting the boundary wall between the hospital complex and the Dublin Bus Phibsborough Depot. In all instances these remains dated from the late 18th and 19th century.

Given its depth, it is likely that the construction of the Phoenix Park Tunnel would have removed any intact archaeological features associated with Phoenix Park. Once out of the tunnel the archaeological potential of the remainder of the route is generally low as there are no RMP sites in its environs and no features has emerged from archaeological investigations or on cartographic sources, however there still remains a potential that previously unknown archaeological features might be identified in the undeveloped pockets of land within the railway corridor, this Zone is therefore also considered to be of archaeological potential (AAP13- ZAP for DU018-020, north of the Liffey and AAP 14 Phoenix Park).

Cabra Compound

A 1ha construction compound is located between the rail line and the boundary of a new development site. On the first edition map this area was part of the townland of Grangegorman Middle and comprised fields associated within a farm located centrally within the townland (later referred to as Homestead). On the revised 25-inch map the railway line has been constructed, and in the area of the compound are rail sidings referred to as 'Cattle Sidings'. The former sidings are in-situ, though disused. They indicate the importance of the railway in the transfer of livestock from rural areas into Dublin either to be sold at markets, transported to Britain via Dublin Port or to be slaughtered at abattoirs in the city. This section of railway opened 1877, as part of Great Southern and Western Railway's extension to North Wall Quays and providing access to cattle siding previously located to west side of railway tracks now disused with traces of wall flanking west side of tracks.

There are no recorded monuments, or any notable archaeological findings recorded in the vicinity of the proposed Cabra compound. The archaeological potential is considered to be minimal. The rail lines and sleepers are however of industrial heritage value (See Architectural Heritage Chapter 21).

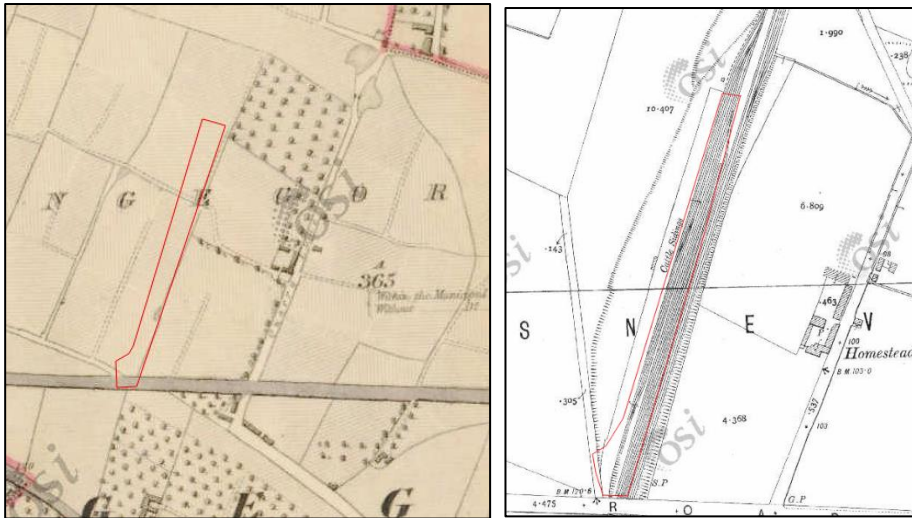


Figure 20-32 First (1837) and Revised (1870) Edition OS Map at the Cabra Construction Compound

Glasnevin Cemetery Compound

The compound proposed is located in an existing parking area, located in the townland of Slutsend or Westfarm a field on the northern banks of the canal. By the time of the revised map the railway had been built and an access road into the fields and bridge over it had been constructed on the Cassini map its the main access area into the mew Prospect Cemetery (St. Pauls Section).

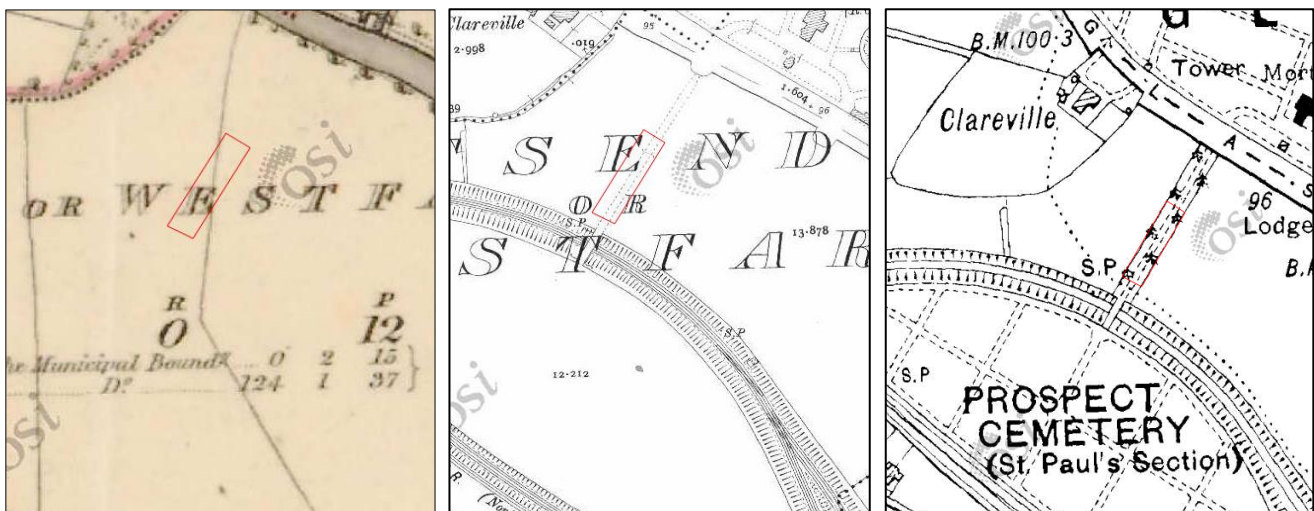


Figure 20-33 The Development of Prospect Cemetery and the Rail line in Glasnevin on First (1837) and Revised (1870) Edition and Revised 6-Inch OS Map

Other works in this Zone will include the lowering and enlargement of an existing pump station which is located in a disturbed field of fallow land located north of the canal, this will not impact on any archaeological remains, this area appears to have been topsoil tripped and disturbed previously.

20.4.7.6. Summary of Areas of Archaeological Potential

An examination of the receiving environment has enabled the identification of the following areas of archaeological potential (AAP's) within each development zone (Table 20.18 – Table 20.21) and provides the sensitivity rating for each (based on Table 20.1).

Table 20.18: Areas of Potential within Zone A

AAP Ref.	Townland	Potential	Chainage	Construction Ref:	Sensitivity Rating
AAP1	Commons Lower, Commons Simmonstown, Celbridge Abbey.	Greenfield archaeological potential Crossing of townland boundaries	N/a	Alternative UGC Route from Hazelhatch to Celbridge	Low
AAP 2	Elmhall	Greenfield archaeological potential	23+800 to 23+550	Elmhall compounds and access roads	Low
AAP 3	Aderrig	Greenfield archaeological potential	21+100	Adamstown Substation	Low
AAP4	Aderrig, Gollierstown, Finnstown, Adamstown, Esker South, Kishoge	Greenfield potential	N/a	Adamstown Substation UGC through greenfields	Low
AAP5	Finnstown, Adamstown	Greenfield and crossing between Finnstown/ Adamstown townland boundary	19+500	Adamstown Compounds	Low
AAP6	Kishoge	Greenfield archaeological potential	18+100 and 18+000	Kishoge	Low
AAP7	Ballymanaggin	Greenfield archaeological potential and crossing of the townland boundary between Ballymanaggin and Gallanstown	North of 14+200	Gallanstown Compound and Access Road north of the former Park West compound	Low
AAP8	Gallanstown	Greenfield archaeological potential	14+200	Gallanstown Compounds and Access road east of Park West Avenue	Low

Table 20.19: Areas of Potential within Zone B

AAP Ref.	Townland	Potential	Chainage	Construction Ref:	Sensitivity Rating
AAP9	Gallanstown, Ballyfermot Upper, Ballyfermot Lower	Greenfield and brownfield archaeological potential	13+350 to 12+100	Compounds between Cherry Orchard footbridge and Kylemore Road Bridge	Low
AAP10	Ballyfermot Lower, Jamestown, Inchicore South, Inchicore North	General archaeological potential and industrial heritage potential	11+800 to 11+600	All earthmoving works in this area	Low
AAP11	Inchicore North Kilmainham	ZAP for City of Dublin (RMP DU018-020), St Johns Road Burial (RMP DU018-020284) Memorial Park (DU018-020272) Bully's Acre burial ground. Find spot for early medieval burials have been identified between the Memorial Park cemetery and the two documented early medieval/ Viking period burial sites in Kilmainham/ Islandbridge.	10+600 to 9+300	All earthmoving works in this area	Medium

Table 20.20: Areas of Potential within Zone C

AAP Ref.	Townland	Potential	Chainage	Construction Ref:	Sensitivity Rating
AAP12	Dublin South City, St James Ward	Dublin City ZAP (DU020-018) Find spot for early medieval burials have been identified between the Memorial Park cemetery and the two documented early medieval/ Viking period burial sites in Kilmainham/ Islandbridge	9+300 to 8,900 and Heuston Station Lands	All earthmoving works in this area	Medium

Table 20.21: Areas of Potential within Zone D

AAP Ref.	Townland	Potential	Chainage	Construction Ref:	Sensitivity Rating
AAP13	Conyngham Road	Dublin City ZAP (DU020-018)	8+900 to 8+800	All earthmoving works in this area	Medium
AAP14	Phoenix Park	Within the ZAP for Phoenix Park (DU018-007001) a national monument and	8+800 to 6+100	Tunnel Works	High

20.4.8. Evolution of the Environment in the Absence of the Project ('Do Nothing')

Annex IV of the EIA Directive sets out the information required to be included in an EIAR. This includes “a description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the Proposed Development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge”.

In the event that the proposed Project does not proceed, an assessment of the future baseline conditions has been carried out and is described within this section.

In the “do-nothing” scenario the interventions for the modernisation of the railway corridor and areas outside of CIÉ lands for the Project would not be undertaken and therefore there would be no potential for adverse impacts to any as yet undiscovered subsurface archaeological deposits, features or finds, nor to any features of architectural heritage, cultural heritage or historic interest.

20.5. Description of Potential Impacts

20.5.1. Potential Construction Impacts

20.5.1.1. Overview

The archaeological assessment of the Project has assisted in clarifying the nature, location and significance of the archaeological remains along the route, and especially in areas where below ground/ earthmoving works is proposed. Ground disturbance impacts to archaeology will be permanent and negative and may occur as a result of the following:

- Construction of substations;
- Ground works required for construction of compounds and access roads;
- Track lowering;
- Bridge reconstructions;
- Secant and cantilevered walls;
- The temporary/ permanent diversion, realignment and widening of roads, junctions and pavements, and/ or the provision of temporary access routes;
- Utility diversions;

- Drainage and attenuation;
- Landscaping works; and
- New Heuston West Station.

Upstanding industrial heritage sites and cultural heritage sites of architectural interest that contribute to the present-day character and uniqueness of the area are assessed in Chapter 21 Architectural Heritage.

The following describes the impacts of the proposed Project on the archaeological heritage resource, the impacts are set out using the assessment criteria as outlined in Section 20.3.5.2 above.

20.5.1.2. Zone A: Hazelhatch & Celbridge Station to Park West & Cherry Orchard Station

Recorded Archaeological Sites/ Monuments (RMP/ SMR sites)

No RMP sites will be impacted by this section of the scheme.

Area of Archaeological Potential

Zone A already accommodates a four-track railway and much of the landtake for this has already been archaeologically tested/ monitored and as such is resolved. The proposed substations at Hazelhatch, Kishoge and Park West are in previously disturbed areas that have been developed or previously used as compounds. The previous archaeological testing and monitoring, the recorded archaeological sites and cartographic review has shown that the archaeological potential along this section of the scheme is considered negligible.

Eight areas of archaeological potential have been identified in Zone A (AAP1-AAP8), all of which have been identified as having a general greenfield archaeological potential. Earthmoving works in these areas may impact on previously unknown archaeological sites that survive below ground. Undesignated heritage assets have a Low sensitivity value, and the magnitude of impact is considered to be Medium. Therefore, the predicted effects on these areas will be negative, direct and permanent resulting in an overall effect of Slight significance.

Table 20.22: Potential Construction Effects in Zone A

AAP Ref.	Townland	Potential	Chainage	Construction Ref:	Sensitivity Rating	Impact	Significance
AAP1	Commons Lower, Commons, Simmonstown, Celbridge Abbey	Greenfield archaeological potential.	N/a	Alternative UGC Route from Hazelhatch to Celbridge	Low	Medium	Direct, Negative, Slight, Permanent
AAP2	Elmhall	Greenfield archaeological potential.	23+800 to 23+550	Elmhall compounds and access roads	Low	Medium	Direct, Negative, Slight, Permanent
AAP3	Aderrig	Greenfield archaeological potential.	21+100	Adamstown Substation: 5.03	Low	Medium	Direct, Negative, Slight, Permanent

AAP Ref.	Townland	Potential	Chainage	Construction Ref:	Sensitivity Rating	Impact	Significance
AAP4	Aderrig, Gollierstown, Finnstown, Adamstown, Esker South, Kishoge	Greenfield potential	N/a	Adamstown Substation UGC through greenfields	Low	Medium	Direct, Negative, Slight, Permanent
AAP5	Finnstown, Adamstown	Greenfield and crossing between Finnstown/ Adamstown townland boundary	19+500	Adamstown Compounds	Low	Medium	Direct, Negative, Slight, Permanent
AAP6	Kishoge	Greenfield archaeological potential	18+100 and 18+000	Kishoge	Low	Medium	Direct, Negative, Slight, Permanent
AAP7	Ballymanaggin	Greenfield archaeological potential and crossing of Ballymanaggin and Gallanstown townland boundary	North of 14+200	Gallanstown Compound and Access Road north of the former Park West compound	Low	Medium	Direct, Negative, Slight, Permanent
AAP8	Gallanstown	Greenfield archaeological potential	14+200	Gallanstown Compounds and Access road east of Park West Avenue	Low	Medium	Direct, Negative, Slight, Permanent

20.5.1.3. Zone B - Park West & Cherry Orchard Station to Heuston Station

Recorded Archaeological Sites/ Monuments (RMP/ SMR sites)

In Zone B, Area of Archaeological Potential (AAP11) incorporates recorded archaeological sites and a ZAP. The proposed development of Zone B will have an impact on the site of a burial that was discovered on St. Johns Road (RMP DU018-020284). There is a potential that human remains (in-situ or disarticulated) might be revealed during the earthmoving works associated with the construction with the St Johns Road Bridge works, however the nature of this potential has yet to be fully ascertained. Should features be identified beneath the existing road/ rail surface at this location, the potential impact on the archaeological features identified is predicted to be direct and permanent. The RMP site is of Medium sensitivity and the magnitude of impact is considered to be potentially Medium. Overall, where features are identified, the effect will, therefore, be of potential Moderate significance.

Zone B also runs through the ZAP for the Historic City of Dublin (RMP DU018-020). This area of the ZAP incorporates the potential site of an early medieval cemetery which follows the natural gravel ridgeline between Memorial Park to Heuston Station. Earthmoving works within the ZAP may impact

on previously unknown archaeological sites or features that survive below ground. The RMP ZAP has a Medium sensitivity value, and the magnitude of impact of the proposed Project is considered to be Medium. Therefore, the overall predicted potential impact of the construction works in this area will have a direct and permanent impact resulting in an overall effect of Moderate significance on any archaeological features that might be uncovered (including burials and stray finds).

Areas of Archaeological Potential

There are two areas of general archaeological potential in Zone B, AAP9 and APP10. Should in-situ archaeological features or sites be identified during earthmoving works in these areas, there would be a negative, direct and permanent impact on them. Undisturbed areas of archaeological potential have a low sensitivity value. The magnitude of impact on the feature/ site would be considered to be medium, where be a direct impact on the newly discovered archaeological feature/ site leading to a loss of character, integrity and data about the feature/ site. Overall, the magnitude of the impact is Medium and the sensitivity of the impact if identified is Low, leading to an overall effect of Slight significance.

Therefore, the predicted effects on these AAP's will be negative, direct and permanent resulting in an overall effect of Slight significance.

Table 20.23: Potential Construction Effects in Zone B

AAP Ref.	Townland	Potential	Chainage	Construction Ref:	Sensitivity Rating	Impact	Significance
AAP9	Gallanstown, Ballyfermot Upper, Ballyfermot Lower	Greenfield and brownfield archaeological potential	13+350 to 12+100	Compounds between Cherry Orchard footbridge and Kylemore Road Bridge: 11.01, 11.04, 11.08, 11.09, 11.12, 11.15, 11.16 and 11.25	Low	Medium	Direct, Negative, Slight, Permanent
AAP10	Ballyfermot Lower, Jamestown, Inchicore South, Inchicore North	General archaeological potential and industrial heritage potential	11+800 to 11+600	All earthmoving works in this area	Low	Medium	Direct, Negative, Slight, Permanent
AAP11	Inchicore North Kilmainham	ZAP for City of Dublin (RMP DU018-020), St Johns Road Burial (RMP DU018-020284) Memorial Park	10+600 to 9+300	All earthmoving works in this area	Medium	Medium	Direct, Negative, Moderate, Permanent

AAP Ref.	Townland	Potential	Chainage	Construction Ref:	Sensitivity Rating	Impact	Significance
		(DU018-020272) Bully's Acre burial ground.					

20.5.1.4. Zone C – Heuston Yard & Station (incorporating New Heuston West Station)

20.5.1.4.1. Recorded Archaeological Sites / Monuments (RMP / SMR sites)

Zone C (AAP12) runs through the ZAP for the Historic City of Dublin (RMP DU018-020). Earthmoving works within the ZAP may impact on previously unknown archaeological sites or features that survive below ground. The RMP ZAP has a Medium sensitivity value, and the magnitude of impact of the proposed Project is considered to be Medium. Therefore, the overall predicted potential effect on any archaeological features that might be uncovered (including burials and stray finds) in this area be of Moderate significance.

Table 20.24: Potential Construction Effects in Zone C

AAP Ref.	Townland	Potential	Chainage	Construction Ref:	Sensitivity Rating	Impact	Significance
AAP12	Dublin South City, St James Ward	Dublin City ZAP (DU020-018) and Find spot for early medieval burials	9+300 to 8,900 and Heuston Station Lands	All earthmoving works in this area	Medium	Medium	Direct, Negative, Moderate, Permanent

20.5.1.5. Zone D - River Liffey Bridge to Glasnevin Junction (Phoenix Park Tunnel Branch Line)

20.5.1.5.1. Recorded Archaeological Sites/ Monuments (RMP/ SMR sites)

Where it crosses the river to the Conyngham Road, Zone D runs through the ZAP for the Historic City of Dublin (RMP DU018-020) and via the Phoenix Park Tunnel runs beneath the Phoenix Park recorded Deer Park (DU018-007001) (AAP14) a national monument. It is unlikely that archaeological features or finds would be identified in the tunnel given the depths of the tunnel, any archaeological features were likely to have been destroyed during the construction of the tunnel. The RMP ZAP (AAP13) has a Medium sensitivity value, and the magnitude of impact of the proposed Project is considered to be Low, therefore, the overall predicted potential effect the ZAP in this area is of Slight significance. Phoenix Park is of High sensitivity value, however given the low impact of the Project within the tunnel the overall significance of effect is also considered to be of Slight significance.

Table 20.25: Potential Construction Effects in Zone D

AAP Ref.	Townland	Potential	Chainage	Construction Ref:	Sensitivity Rating	Impact	Significance
AAP13	Conyngham Road	Dublin City ZAP (DU020-018)	8+900 to 8+800	All earthmoving works in this area	Medium	Low	Direct, Negative, Slight, Permanent
AAP14	Phoenix Park	Within the ZAP for Phoenix Park (DU018-007001) a national monument and	8+800 to 6+100	Tunnel Works	High	Low	Direct, Negative, Slight, Permanent

20.5.2. Potential Operational Impacts

No operational impacts are envisioned in relation to archaeology during the operational phase of the Project.

20.6. Mitigation Measures

20.6.1.1. Overview

An experienced and competent licence-eligible archaeologist will be employed by the appointed contractor to advise on archaeological heritage matters during construction, to communicate all findings in a timely manner to Iarnród Éireann and statutory authorities, to acquire any licenses/consents required to conduct the work, and to supervise and direct the archaeological measures associated with the proposed Project.

20.6.1.2. Zone A: Hazelhatch & Celbridge Station to Park West & Cherry Orchard Station

Full time archaeological monitoring under licence (as defined in Section 20.6.1.6 below) will take place during the earthmoving works located with the seven areas of archaeological potential (AAP1–AAP8).

20.6.1.3. Zone B: Park West & Cherry Orchard Station to Heuston Station

Full time licenced archaeological monitoring will take place during earthmoving works located in AAP9 and AAP10 where there is a general archaeological potential.

At AAP11 full time archaeological monitoring will take place, at the preconstruction and early stages of construction, where any preparatory ground breaking or ground reduction works are required from the westernmost end of Islandbridge to Heuston Station (i.e., from War Memorial Park to Kilmainham which includes the area of the burial (DU018-302) on St Johns Road). The potential in this area relate to burials and stray finds, advanced test excavation within an existing rail corridor track or through the embankment could easily miss archaeological remains such as individual burials and stray finds at depth. Accordingly, site preparation and preliminary construction-related excavation works will be archaeologically monitored to establish if any archaeological remains exist at the site. This will include the monitoring of all removal of topsoil, together with ground reduction of the embankment of made

ground to the level of natural soil, the topsoil should be moved using a toothless grading bucket to enable the archaeologist to identify if any human remains are present. The archaeologist will have provision to inspect all excavation to natural soil level, to temporarily halt the excavation work, if and as necessary, and to be given provision to ensure the temporary protection of any features of archaeological importance identified. Once identified the archaeologist will be afforded sufficient time to record and remove any such features identified and if necessary, under advice from an osteoarchaeologist.

20.6.1.4. Zone C: Heuston Yard & Station (incorporating New Heuston West Station)

In a similar manner to AAP11, full time licenced archaeological monitoring of all earthmoving works (track lowering, drainage, roadworks etc.) will be carried out in AAP12 at Heuston Yard and Station.

20.6.1.5. Zone D: Liffey Bridge to Glasnevin Junction (Phoenix Park Tunnel Branch Line)

Intermittent archaeological monitoring of earthmoving works within the tunnel (AAP13 and AAP14) is suggested to establish the nature and depth of the original construction works to provide a record of the past.

20.6.1.6. Archaeological Monitoring Requirements

During the construction phase all mitigation measures will be undertaken in compliance with national policy guidelines and statutory provisions for the protection of the archaeological heritage. All methodologies will have to be agreed in advance with the National Monuments Section of the Department of Housing, Local Government and Heritage (DHLGH).

Archaeological mitigation measures can avoid, prevent, reduce or offset negative effects and these are achieved by preservation in-situ, by design and/ or by record.

Archaeological monitoring will be undertaken in order to establish the presence or absence, as well as the nature and extent, of any archaeological deposits, features or sites that may be present within the land-take of the Project. If archaeological features are identified, provision (time and funding) should be made for the full recording and, if necessary, excavation of the archaeological material in compliance with any measures that the DHLGH and the relevant local authority deem appropriate.

All construction work such as the clearance of land, new drainage track storage, the widening of culverts, the placement of maintenance tracks and topsoil stripping within the permanent and temporary land-take should be monitored. All other activities such as drainage, landscaping, access and maintenance roads and the provision of services and placement of compounds associated with the improvement of the railway will also have to be monitored by a licensed archaeologist.

Monitoring includes all groundwork associated with the development including the placement of construction compounds, access and maintenance roads, landscaping, drainage and topsoil stripping within the permanent and temporary land-take to ensure that no features are damaged or removed without proper recording.

Archaeological monitoring will be carried out under licence to the Department of Housing, Local Government and Heritage (DHLGH) and the NMI, and will ensure the full recognition of, and the proper

excavation and recording of, all archaeological soils, features, finds and deposits which may be disturbed below the ground surface.

The licensed archaeologist will have provision to inspect all excavation to the formation level for the proposed works and to temporarily halt the excavation work, if and as necessary. They will be given provision to ensure the temporary protection of any features of archaeological importance identified. The archaeologist will be afforded sufficient time and resources to record and remove any such features identified.

Archaeological excavation ensures that the removal of any archaeological soils, features, finds and deposits is systematically and accurately recorded, drawn and photographed, providing a paper and digital archive and adding to the archaeological knowledge of a specified area (i.e. preservation by record). As archaeological excavation involves the removal of the archaeological soils, features, finds and deposits, following this mitigation measure there is no further impact on the archaeological heritage.

Iarnród Éireann will make provision to allow for, and to fund, the necessary archaeological monitoring, inspection and excavation works that will be needed on-site during and prior to construction, either directly or indirectly via the appointed contractor.

20.7. Monitoring

A suitably qualified archaeologist will monitor in the areas outlined above during the construction phase to ensure that all archaeological heritage remains are identified and recorded.

20.8. Residual Effects

All archaeological and cultural heritage issues will be resolved by mitigation during the pre-Construction Phase or Construction Phase, in advance of the Operational Phase, therefore there will be no significant residual effects upon the archaeological and cultural heritage resource.

No significant residual impacts have been identified either in the Construction or Operational Stage of the proposed Project, whilst meeting the scheme objectives.

20.9. Cumulative Effects

The cumulative assessment of relevant plans and projects is undertaken separately in Chapter 26 of this EIAR.

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