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**TII Cultural
Heritage Strategy**

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MetroLink Cultural Heritage Strategy

September 2022

CONTENTS

GLOSSARY OF KEY TERMS	1
1 INTRODUCTION.....	3
2 PROJECT BACKGROUND	6
2.1 Preferred Route	8
2.1.1 Albert College Park Tunnel Intervention Shaft	9
2.2 Project Programme	11
2.3 Railway Order Application and EIAR.....	11
3 CODE OF PRACTICE FOR ARCHAEOLOGY	15
3.1 Project Archaeologist.....	15
3.2 MetroLink Project Conservation Architect	16
3.3 Communications Protocol	17
4 METROLINK PROCUREMENT STRATEGY	18
5 LICENCE AND CONSENT REQUIREMENTS.....	21
5.1 Ministerial Consent for works within proximity to a National Monument.....	21
5.2 Archaeological licence requirements.....	23
5.3 Reporting.....	24
6 RECEIVING ARCHAEOLOGICAL AND HISTORICAL BASELINE ENVIRONMENT	26
6.1 Greenfield Land (AZ1 – AZ3: Estuary to Northwood).....	27
6.1.1 Potential Archaeological Remains	30
6.2 Suburban Dublin (AZ4: Northwood to Glasnevin)	30
6.2.1 Potential Archaeological Remains	31
6.3 Historic Town (AZ4: Glasnevin to Charlemont)	32
6.3.1 Potential archaeological remains	39



7	PACKAGE I: PRELIMINARY DESIGN AND RAILWAY ORDER APPLICATION PROCESS	40
7.1	Topographical, Aerial and Street Furniture Surveys	41
7.1.1	Licence and Consent Requirements	43
7.1.2	Archaeological Reporting.....	43
7.2	Archaeological Geophysical Survey	43
7.2.1	Licence and Consent Requirements	45
7.2.2	Archaeological Reporting.....	45
7.3	Archaeological Test Excavations	46
7.3.1	Archaeological Assessment of Proposed Station Locations (by others).....	48
7.3.2	Licence and Consent Requirements	49
7.3.3	Archaeological Reporting.....	49
7.4	Underwater and Wade Surveys	51
7.4.1	Licence and Consent Requirements	53
7.4.2	Archaeological Reporting.....	53
7.5	Geotechnical Investigations	53
7.5.1	Licence and Consent Requirements	55
7.5.2	Archaeological Reporting.....	55
7.6	Utility Surveys	58
7.6.1	Licence and Consent Requirements	59
7.6.2	7.6.2 Archaeological Reporting.....	59
7.7	Building Surveys	60
8	PACKAGES II-IV: PROPERTY OWNERS PROTECTION SCHEME	66
9	PACKAGE II: ADVANCE WORKS	68
9.1	M110: Environment, Structures and Land Access.....	68



9.2	M120: Heritage Works	69
9.3	M130: Archaeology	70
9.4	M140 and M150 contract – Utilities	71
9.4.1	Licence and Consent Requirements	72
10	PACKAGE III: ENABLING WORKS M300 SERIES.....	73
10.1	Charlemont Station.....	73
10.2	O’Connell Street Station.....	73
10.3	Cultural Heritage Requirements for M300 works	74
10.4	Licence and Consent Requirements	75
11	PACKAGE IV: MAIN WORKS.....	76
11.1	M400 Series.....	76
11.2	M500 Series.....	77
11.3	Cultural Heritage: M400 and M500 series contracts.....	77
11.3.1	Licence and Consent Requirements	78
12	REFERENCES.....	79
12.1	Websites Consulted	83
13	APPENDICES.....	84
	Appendix 1: List of PCA Structural and Condition Surveys	84
	Appendix 2: MetroLink Building/Structure Condition Surveys	87
	Appendix 3: Old Metro North Basement and Cellar Condition Surveys.....	96
	Appendix 4: Locations Requiring Archaeological Resolution during M130 contract.....	103
	Appendix 5: Cultural Heritage Mitigation Requirements per Contract Package.....	103



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GLOSSARY OF KEY TERMS

ABP	An Bord Pleanála
AWED	Advance Works Engineering Design
AWEDS	Advance Works Engineering Design Services
Code of Practice	Code of Practice for Archaeology agreed between the Minister for Arts, Heritage, Regional, Rural and Gaeltacht Affairs [now Housing, Local Government and Heritage] and Transport Infrastructure Ireland (2017)
DANP	Dublin Airport Northern Portal
DASP	Dublin Airport Southern Portal
DHLGH	Department for Housing, Local Government and Heritage
DCC	Dublin City Council
ED	Engineering Designer
EIAR	Environmental Impact Assessment Report
EPR	Emerging Preferred Route
ERO	Enforceable Railway Order
FCC	Fingal County Council
GIS	Geographic Information System
GPR	Ground Penetrating Radar
J/I	Jacobs Idom: Engineering Designer for MetroLink
LCC	Luas Cross City
MHLGH	Minister for Housing, Local Government and Heritage
NIAH	National Inventory of Architectural Heritage
NMI	National Museum of Ireland
NMS	National Monuments Service
NTA	National Transport Authority
OS	Ordnance Survey
OPW	Office of Public Works
Project Archaeologist	Under the Code of Practice for Archaeology, the Project Archaeologist will manage all archaeological aspects of the project. The Project Archaeologist (unless otherwise agreed by TII) is also responsible for managing all other heritage issues on the project



PCA	Project Conservation Architect
PR	Preferred Route
RMP	Recorded Monument and Place
RO	Railway Order
RPS	Record of Protected Structures
SMR	Sites and Monuments Record
The Scheme(s)	The MetroLink route, and all associated works and works packages associated with it
TII	Transport Infrastructure Ireland

1 INTRODUCTION

MetroLink is the development of a north-south urban railway service that will run between Swords and Charlemont, linking Dublin Airport, Irish Rail, DART, Dublin Bus and Luas services, creating fully integrated public transport along the 18.8km route. A large portion of the route will be underground including where it passes under the City Centre area and Dublin Airport. The underground section will terminate at Ranelagh to the south of Charlemont Station. There will be 16 new stations, c. 3,000 Park and Ride spaces and a journey time of approximately 25 minutes from Swords to the City Centre. MetroLink will cater for 20,000 passengers per direction per hour (ppdph) and carry up to 50 million passengers per annum.

This document has been prepared to inform and assist in the design of an approach to the evaluation and management of the impacts of MetroLink on the receiving cultural heritage baseline environment. It addresses the twin concerns of the proposed Project with regard to cultural heritage namely:

- The appropriate identification, recording and protection measures of cultural heritage constraints; and
- The efficient and timely delivery of the scheme.

This is in line with the principles set out in the Code of Practice for Archaeology agreed between the Minister of Arts, Heritage, Regional, Rural and Gaeltacht Affairs (now Minister for Housing, Local Government and Heritage; MHLGH) and Transport Infrastructure Ireland (TII) in 2017.

The preparation of a strategy document for the management of cultural heritage on Light Rail projects as a component of the Railway Order (RO) Application process commenced with old Metro North. This procedure has continued for all subsequent Light Rail projects. The incorporation of architectural heritage requirements into the Cultural Heritage Strategy is a continuation of the approach successfully adopted and implemented for Luas Cross City (LCC) works. Cultural Heritage Strategy documents are issued to the National Monuments Section of the Department of Housing, Local Government and Heritage (DHLGH) for internal distribution and comment and, where deemed appropriate, to relevant Local Authority Heritage Departments.

The MetroLink Cultural Heritage Strategy is a live iterative document, and it will continue to evolve on a phased basis to ensure that it remains appropriate and effective in managing cultural heritage risk up to and including the various construction and operational phases (refer to Sections 7 to 11). In order that the proposed project can securely provide a timely and appropriate level of provision for cultural heritage works without undue impact on programme the MetroLink Cultural Heritage Strategy addresses the known nature,



sequence, location and extent of cultural heritage constraints. It equally provides the details of preparatory investigations either undertaken to date, ongoing or proposed which are required to inform the design of the proposed project and the provisions within the Environmental Impact Assessment Report (EIAR) for the mitigation of arising likely significant construction and operational impacts on cultural heritage. Frequently, this is achieved by means of interfacing with civils investigative works, rather than by means of discrete heritage works packages.

The MetroLink Cultural Heritage Strategy also outlines the proposed procurement strategy and the likely cultural heritage requirements for each proposed contract package based on best available information. The findings and fine details of this section are likely to evolve over the lifetime of the proposed project in response to:

- Project design changes,
- Individual stakeholder agreements (statutory and non-statutory);
- Conditions that may be imposed by An Bord Pleanála (ABP) in a grant of a Railway Order (RO); and
- Revisions to the procurement strategy.

A draft MetroLink Construction Strategy has been prepared as a component of the EIAR by TII's Engineering Designers Jacobs/IDOM (J/I). This is based on current knowledge of comparable construction practices. Future iterations of the MetroLink Cultural Heritage Strategy will be updated in line with changes to this document, followed by updates incorporating unique construction methodologies devised by the various Contractors appointed to undertake MetroLink Works. This is to ensure the rapid, efficient progression of the cultural heritage mitigation measures and the investigative, construction and operational programmes side by side wherever possible.

This strategy will supplement the provisions of the EIAR and clarify how these will be implemented by future appointed Contractors. The strategy is embedded into the MetroLink EIAR, and RO approval and all arising project contract documentation.

The TII Project Archaeologist has prepared this document, with input from the MetroLink Project Team and J/I. Upon appointment, the MetroLink Project Conservation Architect (PCA) will be responsible for updating this strategy document as it relates to built heritage.



Figure 1: MetroLink Route

2 PROJECT BACKGROUND

The objective to provide a Metro connection between Dublin City Centre, Dublin Airport and onwards to Swords was identified in 2001 via *A Platform for Change: An integrated transportation strategy for the Greater Dublin Area 2000 to 2016* (ARUP 2018). To fulfil this objective Metro North was proposed for development as part of the Government's 'Transport 21' investment programme in 2005. Metro North was granted an RO in 2010, the approved scheme was approximately 16.5km in length and ran from St Stephen's Green to Estuary, to the north of Swords, via Dublin Airport (ARUP 2018). The granted RO excluded the originally proposed section of the route from Estuary to Belinstown Depot. An RO for the proposed Metro North Dardistown Depot was granted in 2011. In 2011 Metro North was deferred due to financial constraints (ARUP 2018).

In 2015, the National Transport Authority (NTA) published the Fingal/North Dublin Transport Study Report, which assessed the need for a metro solution against various alternative transport modes identified. It concluded that a metro scheme was the appropriate solution to meet the public transport needs of the Swords – Airport – City Centre corridor. Metros are fully segregated from other transport modes, often running in tunnels or on viaducts, to allow them to operate at reliable frequencies and speeds, unimpeded by the need to stop at traffic and pedestrian junctions.

The NTA's *Transport Strategy for the Greater Dublin Area, 2016-2035* (NTA 2016) identified MetroLink as the preferred public transport project to address the transport need of the Swords, Dublin Airport and Dublin City Centre corridor. The Irish Government's seven-year investment plan, *Building on Recovery: Infrastructure and Capital Investment 2016–2021* endorsed this recommendation and provided for the delivery of MetroLink (DPER 2015). TII are the sponsoring agency who in collaboration with the NTA, the approving authority, are engaged in the process of developing the MetroLink project.

The Government included MetroLink (from Swords to Sandyford) in the *National Development Plan 2018-2027*, with a planned completion date of 2027 (DPER 2018). The Project Objective for MetroLink, as agreed with the NTA, is as follows:

'To provide a safe, high frequency, high capacity, fast, efficient, fully segregated and sustainable public transport light rail service from the city centre to Dublin Airport and Swords'.

The route and extent of MetroLink was established following the completion of three specific studies. An 'Alignment Options' study (Arup 2018) was carried out to determine the optimum route for MetroLink from Dublin City Centre to Swords. The 'Green Line Tie-in' study (TII 2017a) was undertaken to establish the optimum location to join MetroLink to the existing Luas Green Line and the 'Green Line Metro Upgrade' study (TII 2017b) was carried out to determine the feasibility of upgrading the existing Luas Green Line to metro standard.



MetroLink is part of an integrated transport solution for Dublin that also includes BusConnects and the DART Expansion Programme – three of the major transport infrastructure projects included in Project Ireland 2040 (DHPLG 2018). Together they will enable the development of reliable, sustainable, affordable, integrated public transport that will support the economy, help Ireland meet its climate change targets and make Dublin a better place to live, work or visit.

The Emerging Preferred Route (EPR) for MetroLink was published in March 2018. At this time the proposed project was designed to be 26km long; inclusive of the upgrading of the existing Luas Green Line to metro standard from Charlemont to Sandyford. Twenty-six stations were proposed comprising 15 new stations, 10 existing Luas Green Line stations, and a future station at Dardistown. MetroLink was anticipated to have a journey time of approximately 50 minutes from Swords to Sandyford via Dublin Airport.

Seven thousand five hundred and ninety-one submissions were received on the MetroLink EPR. The largest number of submissions, total 5,136 are in relation to potential impacts on Na Fianna GAA club and the adjacent schools at the location of the proposed Griffith Park Station. The second largest number of submissions, total number 991, are in relation to potential impacts on Our Lady of Victories Church (NIAH 50130121) and the adjacent school at the proposed Collins Avenue Station. The other significant number of submissions, total 425, are in relation to impacts at the proposed upgrade of the Luas Beechwood Stop (on the Luas Green Line) to a metro station. The remaining submissions addressed individual concerns across all other proposed station locations and/or were related to scheme wide issues.

A report on the EPR consultation process is available from:

https://www.metrolink.ie/assets/downloads/Report_on_Consultation_on_Emerging_PREFERRED_Route.pdf

2.1 Preferred Route

The Preferred Route (PR) for MetroLink was published in March 2019 reflecting changes in response to submissions on the EPR, specialist advice and stakeholder liaison

The MetroLink PR is 18.8km and commences at Estuary Station north of Swords. This is also the location for the proposed Park and Ride incorporating 3000 car spaces. From Estuary, the route proceeds south, crossing the Broadmeadow and Ward Rivers and their associated floodplains in a 262m long 'Broadmeadow –Ward River Viaduct'. At the southern end of Balheary Park it enters a retained cut crossing to the east of the R132 to continue south with stations located at Seatown and Swords Central. The route continues along the R132 to Fosterstown Station at which point it enters a short tunnel running southwest beneath the R132, rising to travel at surface level through agricultural lands adjacent to the western boundary of the R132.

The route goes underground, into the first 2.3km section of tunnel (Dublin Airport Tunnel), immediately north of the Naul Road via the Dublin Airport North Portal (DANP). It will pass beneath Dublin Airport, between Terminals 1 and 2, where an underground station is proposed at the designated transportation hub. This will be located beneath the existing surface car park, east of Our Lady Queen of Heaven Church (FCC_RPS 0864). South of the Old Airport Road the route exits the tunnel via the Dublin Airport South Portal (DASP) and enters Dardistown where a maintenance depot and all ancillary services will be provided. A future retained-cut station is provided for at Dardistown, before crossing over the M50 Motorway in a viaduct just east of Junction 4 (Ballymun). The alignment between the viaduct and Northwood Station will be a combination of open cut and cut-and-cover before entering the second, 9.4km section of tunnel (the City Tunnel), via the Northwood Portal immediately south of Northwood Station. The station will be located on a northeast-southwest axial beneath the R108 (Ballymun Road). The route continues southwards in tunnel west of the R108 to Ballymun Station, which is located beneath the site of the old Ballymun Shopping Centre.

From Ballymun Station the route continues to Collins Avenue Station, located on the eastern side of the R108 under the existing open green area in front of the Church of Our Lady of Victories (NIAH Reg. No. 50130121), and then onwards via Albert College Park to Griffith Park Station. An Intervention Shaft will be located within the southeast corner of Albert College Park (refer to Section 2.1.1). Griffith Park Station will be located on the east side of St Mobhi Road beneath the Home Farm Football Club, sports field.

The route continues south, generally following the R108 passing to the western side of Botanic Road to enter Glasnevin Station where a major interchange station connecting with the Iarnród Éireann Maynooth and Kildare mainline services is proposed. The route then continues southeast to Mater Station located beneath the private park (known variously as the Mater Plot/Berkeley Road/Four Masters Park) and onwards to O'Connell Street Station



on O'Connell Street Upper, beneath the site of a proposed mixed-use development (refer to Section 10.2).

From O'Connell Street Station the route continues southeast, beneath the River Liffey to Tara Station where a major interchange station providing connections to Irish Rail and the DART system at Tara Street Station is proposed. MetroLink's Tara Station will require the demolition of the existing College Gate Apartment Complex, housing the Markievicz Leisure Centre and two adjacent properties. The alignment then progresses south west beneath the east side of Trinity College Dublin (TCD) and Leinster House (DCC_RPS 4198) to St Stephen's Green Station, which is located beneath the east side of St Stephen's Green Park National Monument (RMP DU018-020224-; DCC_RPS 7751-7761). From St Stephen's Green Station the tunnel continues southeast passing beneath the Grand Canal to Charlemont Station. This will be, located to the partially beneath and to the rear of No 2 Grand Parade (Carroll's Building DCC_RPS 3280; refer to Section 10.1). Charlemont Station will facilitate where direct passenger interchange with Luas Green Line services.

From Charlemont, the tunnel will extend to Manders Terrace to accommodate a turnback facility for metro services and a permanent termination point for the Tunnel Boring Machine (TBM). A separate mined access/ventilation tunnel to the side of the main running tunnel will connect from Charlemont Station to the end of the turnback facility.

There will be 34 Construction Compounds including 20 main Construction Compounds, 14 Satellite Construction Compounds required during the Construction Phase of the proposed Project. The main Construction Compounds will be located at each of the proposed station locations, the portal locations and the Dardistown Depot Location (also covering the Dardistown Station) with satellite compounds located at other locations along the alignment. Outside of the Construction Compounds there will be works areas and sites associated with the construction of all elements of the proposed Project including an easement strip along the surface sections.

2.1.1 Albert College Park Tunnel Intervention Shaft

Intervention points are provided at least every 1000m along the alignment of a single bored tunnel.

The tunnel intervention point has the following primary functions:

- Allows emergency services to access the underground system in an emergency situation;
- Provides a safe route for passengers to escape from the tunnel during an emergency;
- Enables the control and management of smoke extraction in emergency situations;
- Provides ventilation for passenger comfort in normal day-to-day operations; and

- Provides for draught relief during the normal operation of the line, enabling the movement of air in or out when a train passes through a section (Jacobs 2020).

In general intervention points are provided by the station itself, however where stations or other emergency exits are spaced at intervals greater than 1000m a discrete Intervention Shaft must be constructed. On MetroLink, this situation arises between the proposed Collins Avenue and Griffith Park Stations, where the distance between the stations, at 1,494m, is too long for effective ventilation and does not provide optimum access/egress access and egress arrangements in the event of an emergency.

TII held a public Consultation for the proposed Albert College Park Tunnel Intervention Shaft (Figure 2) in April/May 2020.



Figure 2: Artists impression of the proposed Intervention Shaft at Albert College Park



2.2 Project Programme

It is anticipated that the MetroLink Railway Order Application (and supporting EIAR) will be lodged with ABP in Q3 2022 . The proposed Construction Programme has been optimised to minimise the duration of the construction phase, where possible, in order to lessen the duration of any potential impacts, whilst ensuring that the areas surrounding the works sites remain operational and functional. The construction programme is proposed to be approximately nine years. Further information can be found within the MetroLink EIAR.

2.3 Railway Order Application and EIAR

J/I have been appointed by TII on behalf of the NTA to develop MetroLink from the EPR to final route selection phase and preparation of the RO Application.

A significant component of the RO Application is the supporting EIAR. Due to the scale of the project, the proposed route has been subdivided into four geographical areas AZ1-AZ4 running from north to south as set out in Table 1 a summary description of the stations for each area is set out in Table 1: MetroLink EIAR Geographical Areas

Table 1: MetroLink EIAR Geographical Areas

EIAR Area Ref.	Geographical Section	Description of Extent of Geographical Section
AZ1	Northern Section	Estuary Station to DANP. It includes the railway crossing on a viaduct over the Broadmeadow and Ward Rivers and associated flood plains. This section will include open, retained cut, and cut and cover sections. Section AZ1 includes the Park and Ride facility at Estuary Station as well as stations at Seatown, Swords Central and Fosterstown.
AZ2	Airport Section	Section AZ2 of the proposed Project includes the ESNB connection and the new substations, DANP, the tunnel underneath Dublin Airport, Dublin Airport Station and DASP and associated intervention and ventilation tunnels.
AZ3	Dardistown to Northwood	Section AZ3 of the proposed Project covers from south of DASP to the Northwood Portal. Section AZ3 includes Dardistown station, the Dardistown Depot, ESNB connection and substations, the M50 Viaduct, Northwood Station and the TBM launch site at Northwood. This section will include open, retained cut, and cut and cover sections of the alignment.
AZ4	Northwood to Charlemont	Section AZ4 extends from a location south of the Northwood Portal to the tunnel termination located south of Charlemont Station, ten underground stations, and the Albert College Park Intervention shaft.

Table 2: Summary of Proposed Stations per EIAR Geographical Area

AZ No.	Station Name	Level	Location
AZ1	Estuary	At surface	In farmland off the R132 adjacent to M1 Junction 4, north of the Broadmeadow River.
	Seatown	Retained-cut	On the eastern side of the R132 Swords Bypass, south of Seatown Road Roundabout.
	Swords Central	Retained-cut	On the eastern side of the R132 Swords Bypass, south-west of the Malahide Road Roundabout.
	Fosterstown	Retained-cut	At Airside Retail Park, adjacent to the R132 Swords Bypass.
AZ2	Dublin Airport	Underground	Under the existing surface carpark at Terminal 2
AZ3	Dardistown	Retained-cut	Located on an undeveloped site between Dublin Airport and M50 Motorway adjacent to the Dardistown Depot.
	Northwood	Underground	Under the R108 Ballymun Road near Northwood Avenue junction.
AZ4	Ballymun	Underground	On the west side of the R108 Ballymun Road, by the old Ballymun Shopping Centre (now demolished).
	Collins Avenue	Underground	To the east of the R108 Ballymun Road, south of the junction with Collins Avenue and in front of Our Lady of Victories Church.
	Griffith Park	Underground	Under the playing pitch of Home Farm Football Club, adjacent to the R108 St Mobhi Road at the entrance to Whitehall College of Education.
	Glasnevin	Underground	Just north of the Royal Canal along the R135 at Cross Guns Bridge. An Iarnród Éireann railway station will also be constructed here on the existing railway to provide for interchange between the Iarnród Éireann mainline and commuter services on the Midland Great Western Railway (Maynooth Line) and the Great Southern and Western Railway (Kildare Line).
	Mater	Underground	Under the Four Masters Park to the south west of the Mater Hospital.
	O'Connell Street	Underground	Under a development area between O'Connell Street, Moore Lane and Henry Place and south of Parnell Street. Directly west of the O'Connell Upper Luas Stop.



AZ No.	Station Name	Level	Location
	Tara	Underground	Under land adjacent to the existing Tara Street Station to provide for interchange to DART and mainline train services.
	St Stephen's Green	Underground	Under St Stephen's Green East roadway and park.
	Charlemont	Underground	Under an area of land linked to the Carroll's Building on Grand Parade, in close proximity to the Charlemont Luas Stop.

The following planned projects have been considered for their cumulative impacts and programming in the design and construction of the MetroLink scheme:

- Dublin City Council - Northwood Station, Ballymun Station – oversite development;
- Fingal County Council R132 Connectivity Project;
- NTA - BusConnects project;
- Irish Rail - Glasnevin Station (future oversite development) and Tara Street Station (future oversite development), integration of the MetroLink Tara Street Station and Tara Street Dart Station, and DART+;
- Dublin Airport - Dublin Airport Station (oversite development); and
- Irish Water - Greater Dublin Drainage Scheme.

The MetroLink EIAR will be prepared in the Group Format Structure in accordance with EPA Guidelines (EPA 2002; EPA 2012). Each environmental topic will be presented in a distinct chapter incorporating:

1. a description of the receiving baseline environment;
2. an identification and assessment of the likely significant impacts;
3. the identification of monitoring and mitigation proposals; and
4. the identification of residual and cumulative impacts.

The information presented within each chapter will have regard to the MetroLink geographical areas (Table 1).

J/I have appointed Irish Archaeological Consultancy Ltd (IAC Ltd) and Historic Building Consultants to undertake the Cultural Heritage Assessment component of the EIAR. For the purposes of the EIAR the cultural heritage assessment will be presented within two distinct chapters, one on Archaeology and Cultural Heritage (Chapter 25), the other on Architectural Heritage (Chapter 26).



It is currently anticipated that a Digital EIAR, comprising the Non-Technical Summary for MetroLink will also be prepared. This will facilitate an interactive review of the final proposed route and its likely significant environmental impacts. It will also facilitate greater public interaction with, and understanding of, the MetroLink EIAR.

3 CODE OF PRACTICE FOR ARCHAEOLOGY

As outlined in Section 1 TII has agreed a Code of Practice for Archaeology (2017) between the Minister HLGH. A copy of the Code of Practice, which outlines the respective roles of the Minister and of TII in safeguarding heritage while facilitating the design and construction of TII projects can be found at the following link:

<https://www.archaeology.ie/sites/default/files/media/publications/code-of-practice-agreed-between-tii-ahrrga-eng-1.pdf>

The above Code of Practice is applicable to all projects for which TII is the:

- Sanctioning authority and sponsoring agency for its own projects (e.g. Public Private Partnership projects and service areas);
- Sanctioning authority for projects implemented by local authorities (e.g. national roads); and
- Sponsoring agency where another organisation is the sanctioning authority (e.g. the NTA for light rail).

In accordance with this Code of Practice there is a direct reporting relationship between TII and the Minister via the National Monuments Service of his Department (HLGH) on all archaeological aspects for all irrespective of the presence of a County or City Archaeologist within a Local Authority.

In accordance with the Public Spending Code (DPER 2019), the term sanctioning authority has been replaced with approving authority.

3.1 Project Archaeologist

In accordance with the Code of Practice, TII has appointed a Project Archaeologist (Emer Dennehy dated 30 June 2017) to MetroLink to oversee and manage the archaeological elements of the project. The role and responsibilities of the TII Project Archaeologist are set out in the Code of Practice for Archaeology.

Under the Code of Practice the TII Project Archaeologist, in consultation with the Minister (through the National Monuments Service of the DHLGH) is responsible for designing an appropriate archaeological strategy which will fulfil the commitments and mitigation requirements of MetroLink's preparatory works and the EIAR. TII is committed to carrying out all works on MetroLink in accordance with existing guidelines and best archaeological practice.

All Archaeological Consultant(s) appointed to MetroLink, either by TII or a TII appointed Contractor, shall comply with the Code of Practice and shall liaise directly with the TII Project Archaeologist in relation to all archaeological requirements.

3.2 MetroLink Project Conservation Architect

TII are in the process of appointing a PCA to and act on behalf of TII with reference to built heritage constraints. The contract is for a duration of 12.5 years. The PCA contract was awarded in Q4 2021, with works anticipated to commence in 2022.

The MetroLink PCA team will comprise the following:

1. a Lead PCA, who will be a Conservation Architect with a minimum of 10 years' experience at Grade 1;
2. a Lead PCA, who will be a Conservation Architect with a minimum of 7 years' experience at Grade 1;
3. a Chartered Engineer with 12 years' experience, including conservation works; and
4. a Chartered Surveyor with 7 years' experience, including conservation works.

The role of the PCA will entail the further development of the proposed project's Architectural Heritage Strategy in consultation with relevant stakeholders and the TII Project Archaeologist for inclusion in this Cultural Heritage Strategy.

The PCA will be required to undertake condition surveys of, and prepare specifications for, proposed works to built heritage constraints within or adjacent to the MetroLink construction environment (refer to Appendix 1) for inclusion within the relevant works contracts. These will be set out in this strategy document in due course and will include specifications for the preservation *in situ* of sensitive heritage constraints (e.g. plasterwork, stained glass windows, National Monuments), or removal to secure storage, cleaning, conservation and reinstatement of built heritage constraints.

In consultation with relevant stakeholders, the PCA will develop conservation strategies for key station locations. In consultation with MetroLink's core design and procurement team the PCA will have a role in the development of the project's detailed design, and contract and tender documentation for the M100, M300, M400 and M500 (Packages I-III) series contracts in relation to all built heritage matters (refer Section 4).

During the MetroLink construction phases the PCA will review all contractor documentation (including engineering drawings, specification, contractor management plans, method statements, programmes etc.) submitted to ensure that proposed works conform to contract requirements and best conservation practice. The PCA will participate at stakeholder and construction progress meetings. The PCA will also undertake regular site inspections and regular inspections and audits of the Heritage contractor's storage facility (refer to Section 9.2) to ensure all works are to standard and in compliance with contract requirements.

As for archaeological heritage, the implementation of the above tasks will be outlined in



subsequent revisions of this strategy document.

3.3 Communications Protocol

TII will provide regular updates on the progress of MetroLink cultural heritage works to the National Monuments Service of the DHLGH. At minimum such updates will be by means of the TII tracker, an excel sheet which details the status of each of TIIs archaeological contracts. This is issued to National Monuments Service of the DHLGH on a bi-monthly basis.

In accordance with the Code of Practice more frequent updates will be made as appropriate via telephone call and e-mail directly between:

- The TII Project Archaeologist and the nominated counterpart in the National Monuments Service of the DHLGH; and
- The TII Project Archaeologist and MetroLink PCA with the nominated counterpart in the Built Heritage, Architectural Policy and Strategic Infrastructure Section of the DHLGH.

TII and J/I have held, and will continue to arrange, stakeholder meetings with representatives from the DHLGH as appropriate during consultation on the Preferred Route and the development of the preliminary design and during the preparation and finalisation of the EIAR.

The TII Project Archaeologist (unless otherwise agreed by TII) is also responsible for managing all heritage issues on the project. The TII Project Archaeologist will therefore maintain the role as primary point of contact on all heritage issues.



4 METROLINK PROCUREMENT STRATEGY

MetroLink is categorised as a “megaproject” and the project represents a very significant capital investment for Ireland. It will rely on the mobilisation of a large and sophisticated supply chain. It will also offer substantial business opportunities for domestic contractors and suppliers. The scale of the project and the inherent risks involved in its construction and bringing into operation preclude its procurement as a single project. Instead, it will need it to be delivered as a series of discrete projects that, when combined, represent a fully functioning metro system.

The MetroLink Procurement Strategy currently comprises four main contract packages, which may run concurrently:

- Package I: Preliminary Design/Railway Order Application Process;
- Package II: Advance Works (M100 series);
- Package III: Enabling Works (M300 series); and
- Package IV: Main Construction Works (M400 and M500 series).

Currently, there are several consultants progressing the various elements of MetroLink to facilitate the Preliminary Design and Railway Order Application Process (Package I) including:

- J/I are the consultant providing Engineering Design Services and are responsible for producing the Preliminary Design, Reference Design, EIAR and preparing the submission of the RO Application to ABP;
- Barry Transportation and Tobin Engineering Consultants are undertaking detailed design for the relocation of multiple sports pitches impacted by the scheme;
- Mott MacDonald are undertaking detailed design of the Permanent High Voltage Power Supply for the Project;
- Third parties providing and responsible for producing the detailed design and build for M300 series contracts (Package III):
 - Grand Parade Property Trading Co. DAC at Charlemont Station;
 - Dublin Central GP Limited at O’Connell Street Station; and
 - ESNB for the temporary, permanent and high voltage connection for permanent power.
- Grimshaw Architects providing Concept Architecture services;
- SNC Lavalin providing Operations Advisory services;
- Turner and Townsend providing Commercial Advisory services; and
- A&L Goodbody and Pinsent Masons providing Legal Services.

There shall be other designers and consultants appointed by TII to progress with the design of the MetroLink Scheme including:

- A consultant providing Advance Works Engineering Design Services (AWEDS) and responsible for producing the detailed design, tender and contract documentation, and post contract engineering support for M100 series contracts (Package II; refer to Section 9):
- Client Partner (CP) supporting TII's programme management functions including a Programme Management Office (PMO), planning and programme integration, information management, procurement and producing the tender reference design for M400 series contract and M500 contracts (Packages II-IV);
- Programme Delivery Partner (PDP) providing TII with the contract management resources needed to effectively and efficiently manage the full range of advance (M100 series), enabling (M300 series), base infrastructure (M400 series), systems (M500 series) and rolling stock contracts to be awarded (Packages II-IV);
- Design & Build Contractors providing and responsible for producing the detailed design and build for M400 series contracts (Package IV; refer to Section 11.1):
- Design, Build & Operate Contractor providing and responsible for producing the detailed design, build and operate for M500 contract (Package IV; refer to Section 11.2).

For the purpose of the procurement strategy, the MetroLink route has been divided into three sections Southern, Central and Northern as shown on Figure 3.



Figure 3: MetroLink Contract Sections

Table 3 demonstrates how these contract sections relate to the EIAR geographical zones. A high-level overview of the scope of each major contract package required to deliver MetroLink is shown in Figure 4.



Table 3: MetroLink Contract Sections as they relate to EIAR Geographical Zones

Contract Section	EIAR Ref.	Description of Extent of Geographical Section
Northern Section (M401)	AZ1	Estuary Station to north of DANP
Central Section (M402)	AZ2 and AZ3	M50 to north of DANP.
Southern Section (M403)	AZ4	M50 (excluding the Viaduct) to south of Charlemont Station

Contract Packages	Scope
100 series contracts: Advance Works	<ul style="list-style-type: none"> • Baseline surveys • Utility diversions, strengthening and • Archaeological works and resolutions; Heritage works • Site clearance: demolitions, vegetation clearance and other environmental works
300 series contracts: Enabling Works	<ul style="list-style-type: none"> • Base infrastructure works developed and built by third parties at Charlemont, O'Connell Street and Glasnevin • HV Power connections
400-series contracts: Base Infrastructure	Design and build of base infrastructure along the entire route under an NEC4 ECC contract
<ul style="list-style-type: none"> • 401: Southern Section • 402: Central Section • 403: Northern Section 	<p>South of Charlemont Station to the M50 excluding the viaduct: approx. 11.40km (all tunnel)</p> <ul style="list-style-type: none"> • Bored tunnel and portal; evacuation / intervention shafts; and • All stations within the site boundaries and logistics associated with the works. <p>M50 to north of Dublin Airport Tunnel: approx. 4.5km (including 2.5km tunnel)</p> <ul style="list-style-type: none"> • M50 viaduct, surface route (retained cut, cut and cover) and at-grade sections; • preparation of the depot site and access roads • Bored tunnels and portals; evacuation / intervention shafts; and • All stations within the site boundaries and logistics associated with the works. <p>North of Dublin Airport Tunnel to Estuary: approx. 5.2km (no tunnels)</p> <ul style="list-style-type: none"> • All surface route structures and earthworks; • Stations that coincide with the surface route; and • Estuary Station and Park and Ride Facility (bulk earthworks and site preparation only)
500 contract: MetroLink Service Delivery Partner PPP (metro system provider and operator contract)	<ul style="list-style-type: none"> • On a line-wide basis: track slab (on foundation by the civils contractors), permanent way; • Power distribution, including sub-station fit-out; the traction and non-traction power installation and the overhead line equipment; • Mechanical and electrical services (tunnels and stations), tunnel and station ventilation; life-safety and evacuation systems; • Communications systems including railway, emergency services, and passenger communications (Wi-Fi, mobile, etc.); • Design and provision of GoA4 metro system (rolling stock manufacture and supply; Platform Screen Doors; fleet maintenance) • Depot construction and fit-out at Dardistown; P+R Facility at Estuary; • Command and Control Signaling (CCS) including control-centre construction and fit-out; testing and commissioning; and • Metro operator services, including operating the trains and other passenger services, stations facility management, asset monitoring, and routine and major maintenance of line wide infrastructure and systems.

Figure 4: Major Contracts: Package Scope

5 LICENCE AND CONSENT REQUIREMENTS

5.1 Ministerial Consent for works within proximity to a National Monument

Six national monuments are located within the study area for MetroLink; these comprise:

- St Stephen's Green Park National Monument (RMP DU018-020224-; DCC_RPS 7751-7761);
- O'Connell National Monument, O'Connell Street Lower (RMP DU018-423----; DCC_RPS 5990);
- O'Brien National Monument, O'Connell Street Lower (RMP DU018-424----; DCC_RPS 5997);
- Parnell National Monument; O'Connell Street Upper (RMP DU018-425----; DCC_RPS_6020);
- 14-17 Moore Street/8-9 Moore Lane National Monument (RMP DU018-390----; DCC_RPS 5282-5285); and
- Lissenhall Bridge, National Monument Balheary Demesne (RMP DU011-081----; FCC_RPS 0341).

In accordance with Section 5 of the National Monuments Act 1930 (as amended), 'the expression 'national monument' means a monument or remains of a monument the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic or archaeological interest attached thereto'. The extent of a national monument is not restricted to the monument itself but may also include 'the site of the monument and the means of access thereto and also such portion of land adjoining such site as may be required to fence, cover in, or otherwise preserve from injury the monument or to preserve the amenities thereof'.

Under the National Monuments Act 1930 (as amended), it is unlawful 'to excavate, dig, plough or otherwise disturb the ground within, around, or in proximity to any such national monument without or otherwise than in accordance with' a grant of Section 14(2) Ministerial Consent issued by the MHLGH. It is also unlawful 'to demolish or remove wholly or in part or to disfigure, deface, alter, or in any manner injure or interfere with any such national monument without or otherwise than in accordance with' the grant of Ministerial Consent. It is important to note that Section 14(2) Ministerial Consent is required for all works within proximity to a national monument, inclusive of advance enabling and main construction works, and not just archaeological investigations.

Ministerial Consent will be required for two of the six national monuments within the study area, namely St Stephen's Green Park and Lissenhall Bridge National Monuments.

In relation to St Stephen's Green Park National Monument, consent will be required for all MetroLink works within its proximity (i.e. within 30m of the perimeter kerb line) inclusive of

the following packages of works:

- **Geotechnical Investigations (Package I):** In May 2021 TII applied for Consent to excavate 3 no. cable percussive and rotary drilled boreholes (inclusive of associated trial pits), 2 no window sampling boreholes and the establishment of 2 no. temporary site compounds and associated temporary hoarding within the eastern boundary of St Stephen’s Green Park. The application, which included the metal detection of spoil was granted on 10 August 2021 (C0001054; E00538; R000557) subject to receipt of the appropriate permits from the Office of Public Works (OPW);
- **Utility Slit Trenches (Package I):** In May 2021 TII applied for Consent to excavate five utility slit trenches; four within the east and west footpaths and carriageway of St Stephen’s Green East (inclusive of St Stephen’s Green Park National Monument) and one within the carriageway of Hume Street The application was granted on 10 August 2021 (C0001054; E00538; R000557) ;
- **Heritage Works (Package II):** Consent will be required for the removal to secure storage of all heritage items on the Park’s external perimeter (e.g. bollards, light standards, Paving) in addition to all interior elements as present within the footprint of the proposed station box (e.g. statues railings and lawn guards). Upon completion of Main Construction works all elements will be reinstated by the Heritage Contractor;
- **Utility Diversion Works (Package II):** Consent will be required for the diversion of all utilities within proximity of the proposed station, inclusive of those within the park’s eastern extent (e.g. gas and water); and
- **Main Works (Package IV):** Consent will be required for the construction of the proposed station box inclusive of the establishment of compounds, hoarding, removal of trees and landscaping and all reinstatement works such as landscaping, planting and the construction of above ground station elements.

In relation to the Lissenhall Bridge National Monument, no direct impact on the proposed bridge is proposed but consent will be required for all works within its proximity (i.e. within 50m) inclusive of the following packages of works:

- **Archaeological Works (Package II):** Consent will be required for the archaeological preservation by record of any previously unrecorded sub-surface archaeological stratigraphy which may exist within proximity of the bridge; and
- **Main Works (Package IV):** Consent will be required for all construction works within proximity of the bridge, inclusive of all ground excavation works, the erection of site hoarding, felling of trees, location of temporary bailey bridges, construction of the Broadmeadow – Ward River Viaduct and for the permanent reinstatement of ground and landscaping. Consent will also be required for affixing monitors to the Bridge (e.g. vibration and deformation monitoring) to ensure no inadvertent damage to the national monument arises.

5.2 Archaeological licence requirements

Archaeological excavation and the use of detection devices are subject to strict control under the National Monuments Act 1930 (as amended).

Section 26 (2) of the 1930 Act (as amended) provides that, upon application being made to the MHLGH and him or her being furnished with such information in relation to the application as he or she may reasonably require, the Minister may, having consulted with the Director of the National Museum of Ireland (NMI), issue to any person “a licence to dig or excavate in or under any specified land for any specified archaeological purpose” (i.e. an archaeological excavation licence) and the Minister may insert in any such licence such conditions and restrictions as he or she thinks proper.

Archaeological test excavations and preservation by record (excavation) for MetroLink, in all areas other than those in proximity to a National Monument, will be carried out in accordance with a Section 26 (2) Excavation Licence.

Archaeological monitoring does not require a Section 26 (2) Excavation Licence; however, all MetroLink archaeological monitoring will be undertaken by a suitably qualified archaeologist(s) pursuant to such a licence to facilitate on site investigation in the event of an archaeological find.

All dive or wade surveys ‘at the site of a wreck (being a wreck which is more than 100 years old), or of another object (being an archaeological object), that is lying on, in or under the sea bed or on or in land covered by water’ shall be carried out pursuant to a Section 3 (5) Dive Survey Licence

All detection surveys e.g. geophysical or metal detection surveys shall and the Minister may insert in any such licence shall be carried out pursuant to a Section 2 (2) Detection Survey Licence and in compliance with such conditions and restrictions as the Minister thinks proper.

Consent to use a detection device or to undertake a dive or wade survey does not include permission to excavate for archaeological objects. If excavation or the recovery of archaeological objects is envisaged, or required, a separate Section 26 (2) Excavation Licence or Section 14 (2) Ministerial Consent must be applied for. All works must be carried out in accordance with the Method Statements submitted in support of the relevant licence or Ministerial Consent application and in compliance with such conditions and restrictions as the Minister thinks proper to impose on any such grant of same.

Following approval by the TII Project Archaeologist, the Contractor’s Archaeological Consultant shall submit these documents to the NMS, DHLHG. The documents shall be marked ‘Strategic Infrastructure’ and ‘For the Attention of Mark Keegan’. The Contractor’s Archaeological Consultant shall also submit a copy of the final method statement and licence application to the Keeper of Irish Antiquities, the NMI, Kildare Street, Dublin 2.

In accordance with the Code of Practice for Archaeology, applications for licences and



Ministerial Consent will respectively be processed within two and six weeks of receipt of an appropriate application.

TII issued an appropriate arrangements letter to NMS (dated 30/10/2019) confirming that *“TII has put in place all appropriate arrangements to ensure compliance with its undertakings (and those of the Project Archaeologist) under the Code of Practice for Archaeology (2017)”*. A copy of this letter will be included with all licence applications submitted to NMS.

It will be a requirement that each Contractor for Packages II-IV will provide their appointed Archaeological Consultants with a relevant Letter of Funding in accordance with the requirements of the National Monuments Service, DHLHG. Details on the content and format of this letter are available from:

<https://www.archaeology.ie/sites/default/files/media/publications/excavation-license-info-funding.pdf>.

5.3 Reporting

In order to fulfil licence conditions, a preliminary report and a final report on the findings are required. Reporting in relation to archaeology will be in accordance with the DoEHLG's Report Guidelines (October 2006). In accordance with the licence conditions, a preliminary report shall be submitted within 4 weeks of completion of archaeological fieldwork and a detailed report within 12 months of completion of archaeological fieldwork. The detailed report shall incorporate the results of any required radiocarbon dating and post-excavation analysis. The TII Project Archaeologist is required to ensure that the nature and quality of excavation reports are of a standard acceptable to the Minister and submitted within agreed timescales.

Each Contractor's Archaeological Consultant will provide draft copies to TII for review and comment by the TII Project Archaeologist. All comments must be incorporated into the revised report, and approved for issue to statutory stakeholders by TII. Each Contractor's Archaeological Consultant will issue copies of each approved report to the DHLGH and NMI in both hard and soft copy format and will be responsible for uploading .pdfs of each report, with all required accurate metadata to TIIs online Digital Heritage Collection (<https://repository.dri.ie/catalog/v9807h80j>). The unique URL for each final excavation report within the TII Digital Heritage Collection must also be uploaded to the relevant summary description on the Database of Irish Excavation Reports (www.excavations.ie).

It will be the responsibility of the Contractor's Archaeologist(s) to arrange for the appropriate deposition of the archaeological archive arising as a result of the above works. In accordance with the conditions of the archaeological licence granted by the DHLGH, the archaeological archive will be deposited in an approved format, and to an approved archive location, namely the National Monuments Service Archive in Swords, Co. Dublin.

Once formal agreement has been established on the destination of the archive, it will be the



responsibility of the Contractor’s Archaeologist to ensure that the archaeological archive is compiled in accordance with the *“Guidelines and Forms for the transfer of Excavation Archives to National Monuments Service Archive”* (DAHG 2012) and deposited appropriately and in a timely manner.

6 RECEIVING ARCHAEOLOGICAL AND HISTORICAL BASELINE ENVIRONMENT

The following is a summary of the receiving cultural heritage environment for MetroLink. At present the MetroLink Cultural Heritage Strategy addresses known cultural heritage constraints along the route of the proposed project from which information is publicly available from the:

- Record of Monuments and Places (RMPs);
- Sites and Monuments Record (SMR);
- Record of Protected Structures (RPS) for Fingal County Council (FCC) and Dublin City Council (DCC);
- National Inventory of Architectural Heritage (NIAH);
- Database of Irish Excavations;
- Dublin County Heritage Database;
- Topographic files of the NMI;
- Literary and Cartographic sources; and
- Information from archaeological works commissioned by TII from current and past projects has also been considered.

For the purposes of the final EIAR each cultural heritage constraint will be given an individual reference number and prefix indicating if they are of archaeological and cultural (AH) or architectural heritage (BH) significance. Corresponding maps illustrating their respective locations will also be provided. This will aid in the ease of identification of monuments, their predicted impacts and proposed mitigation measures. The MetroLink Cultural Heritage Strategy will be updated with these unique numbers in due course to facilitate cross-correlation with the EIAR and any arising MetroLink contract requirements.

The receiving archaeological heritage baseline environment can be divided into three broad categories each requiring its own unique mitigation strategy. These four categories and how they correspond with the geographical zones established for the MetroLink EIAR (refer to Section 2.3) are as follows:

1. **Greenfield land** (approximately 9km): The receiving environment is primarily greenfield land with high archaeological potential from Estuary in the north to the M50 Motorway in the south. A section of this receiving environment, measuring approximately c.3.2km in length will run parallel to the route of the existing R132, with an additional 2.3km comprising the Dublin Airport Tunnel. The required wayleaves, portal locations and construction compounds are primarily within greenfield land.

This environment predominantly corresponds with AZ1, AZ2 and AZ3 from Estuary Station and Park and Ride to Northwood Station. With the exception of the Dublin



Airport tunnel, MetroLink is primarily at-grade.

2. **Suburban Dublin** (approximately 4.1km): The receiving environment has been intensively developed from the late 18th to 20th century. Prior to this, it primarily comprised greenfield and demesne lands interspersed with small, nucleated settlements/villages. A number of these settlement sites have ecclesiastical origins dating to the 6th century with significant archaeological potential. This corresponds with the northern Section of AZ4 from the Northwood Station to Glasnevin Station. This is the City Tunnel section of the proposed project.
3. **Historic town of Dublin** (approximately 4.9km): The receiving environment traverses the historic town of Dublin, as housed between the Royal and Grand Canals, which is a Recorded Monument and Place (RMP; RMP DU018-020----). All ground disturbance works associated with utility diversions and station box construction, pose a potential to impact on the deep archaeological deposits which are known to exist within the historic town. South of the Grand Canal to the Ranelagh terminus/turnback (c.350m) there is little potential for deep deposits, with lands primarily being greenfield until the mid-19th century. This corresponds with the central and southern section of AZ4 from Glasnevin Station to Charlemont Station. This is the City Tunnel section of the proposed project.

6.1 Greenfield Land (AZ1 – AZ3: Estuary to Northwood)

Mesolithic evidence for the occupation of the receiving greenfield environment was identified in Santry to the east of the proposed project in the form of a number of stray finds, comprising a flint scraper, a flint flake, a flint Bann flake and a stone axe (NMI 1947:43; 1969:58-60). Evidence for Bronze Age activity within the environs of the proposed project principally comprises funerary remains in the form of cremation burials. These have been identified both as isolated cremation pits such as the example recorded in Ballystruan (RMP DU014-120----) and as cremation burials incorporated into ring ditches such as in Lissenhall Little (RMP DU011-130----). Burnt mound sites indicative of domestic/settlement related activity are recorded for Fosterstown South (RMP DU011-151----) and Miltonsfields (RMP DU011-153----). These Bronze Age sites are located on the alignment of the proposed scheme and were identified during test excavations associated with old Metro North (refer to Section 7.3).

Late Iron Age activity was identified through archaeological excavation of a multi-phase cemetery in Townspark, Swords, on lands now occupied by 'The Pavillions' Shopping Centre (ARUP2018; RMP DU011-101----).

A Holy Well site (RMP DU014-023----) in Toberbunny, just north of the Cuckoo stream, is believed to represent a probable 'station well'. As with all Holy Well sites there is a potential that this is of pre-Christian/ Iron Age date, though it could equally range from the early or



late medieval periods. The townland name which means 'Milk Well' was first recorded in 1547 (<https://www.logainm.ie/en/16950>) and the site is illustrated on Rocque's 1760 map of Dublin, in association with a bridge of the same name. An additional 'station well', marked on the 1st edition Ordnance Survey (OS) map of 1837 as 'Sunday Well; site of' and also associated with a bridge of the same name is recorded for Lissenhall Little, north of the Estuary Station. However, records state this was in-filled c.1974 during road works (RMP DU012-011----).

A number of enclosures have also been identified within the surrounding greenfield lands which may be prehistoric in date but are more likely to represent early medieval activity. An enclosure of late 6th/early 7th century date was identified in Lissenhall townland at the location of the proposed Estuary Station (refer to Section 7.3); a large enclosure in Fosterstown South (RMP DU011-116----) is currently interpreted as a bivallate ringfort and associated field system. Ringforts, indicative of early medieval activity have also been identified in Cloghran (RMP DU011-046----) with a possible early medieval rectangular enclosure identified through old Metro North archaeological test excavations at Ballystruan (RMP DU014-131----).

An early medieval church and graveyard was located in Cloghran (RMP DU014-009001- and DU014-009001-), to the immediate east of the R132/Naul Road intersection, approximately 550m east of the proposed project. The site is now occupied by an 18th century church.

The extensive 6th century monastic settlement of St Colmcille, Swords (RMP DU011-034002-), was established on high ground, adjacent to the Ward River to the west of the proposed project (Reeners 2014). The boundary of Swords Glebe, combined with the location of Brackenstown Road, Church Road and Rathbeale Road, delineate the original extent of the early monastic foundation. Located within the enclosure site is four-storey tall early medieval round tower (RMP DU011-034005-). Round towers are one of the earliest stone structures built in Ireland, and were generally positioned adjacent to the original monastic church. This is now the only surviving above-ground element of the early medieval site (Reeners 2014).

The northern portion of the proposed project lies within Fingal. The name derives from *Fine Gall* or 'territory of the strangers', indicating it was in the possession of the Vikings (Bolton 2008). The town of Swords is known to have been attacked by the Vikings of Dublin in the late 10th/early 11th century with both the *Annals of the Four Masters* and *Annals of Ulster* recording the burning of the town by the 'Danes' in 1012 and 1016 (Reeners 2014). Swords came into the possession of the Vikings who continued to have close ties with those of Dublin City. The town was consequently the subject of repeated retaliatory attacks by the Irish Kings of Meath throughout the 11th and 12th centuries (Reeners 2014).

Both Swords and Santry are examples of Anglo-Norman towns within which large



ecclesiastical houses were established. After the Anglo-Norman invasion of 1169, the property of the monastery of Swords was transferred to the See of Dublin and were confirmed to Archbishop Laurence O'Toole in 1179 (Reeners 2014). This resulted in the construction of Swords Castle (RMP DU011-034001-) in c. 1200 when the site was built as the manorial residence of the Archbishop of Dublin. The site, which is a National Monument, is not a castle but rather a manor house from which lands could be governed and courts held, and is enclosed by a substantial defensive curtain wall (Reeners 2014; Archaeological Survey Database). The medieval manor town developed to the south of these walls (RMP DU011-035----). It is known that in 1326 the manor of Swords held 16 '*burgagii forinseci*' or 'foreign burgess'; a term used to describe Ostmen/Viking settlements (Reeners 2014).

Additional Anglo-Norman settlement within Swords is represented through a possible moated site, located in Seatown West, 73m east of the R132 (RMP DU011-036----). The site was shown as an earthwork and marked as 'moat' on Duncan's map of 1821; however the site has been removed through development and no remains survive (Archaeological Survey Database).

The lands of Santry known as 'Santreff' were granted by Henry II to Hugh de Lacy, Lord of Meath in the twelfth century. De Lacy subsequently granted the lands to his Baron Adam de Fiepo (Archaeological Survey Database). The medieval manor of Santry was substantial and is known to have consisted of a hall, chambers, stables and a bakery all of which stood in association with over 30,000 trees. No above ground remains of the medieval manor survive, though it is likely to have once occupied the lands of Santry Demesne townland which directly borders the proposed Northwood Station. The demesne lands, also incorporated Santry Court (RMP DU014-030----), which was 'a stately mansion of brick' constructed in 1703 and destroyed by fire in 1941 (Archaeological Survey Database).

Lissenhall Bridge (RMP DU011-081----; FCC_RPS 0341), is a National Monument crossing the Broadmeadow River in Balheary Demesne to the east of the proposed project. The five arch limestone bridge, with triangular cutwaters is marked on the Down Survey (1655-1656) and is believed to incorporate late medieval fabric dating to c.1450-1550. A ground penetrating radar survey of Lissenhall Bridge and the adjacent Balheary Bridge (FCC_RPS 0340) on the River Ward was undertaken on behalf of TII in 2009 (Thebaudeau & Harrison 2009). This identified the presence of potential late medieval fabric below the existing bridge deck. The results of the survey also suggested that both Lissenhall and Balheary Bridges once formed a continuous structure (O'Keefe et. al. 2016, 216-222).

A late medieval castle, Corballis Castle, (RMP DU014-011----), was located on the grounds of Corballis House, on lands now occupied by Dublin Airport. It was annotated on the 1st edition OS map of 1837 as 'Corballis Castle; in ruins'. There are no surviving remains for this site.

A small number of industrial heritage sites are also present within this environment and annotated on various cartographic sources. These primarily relate to extraction activities as exemplified by the quarry and gravel pits in Balheary Demesne, Santry Demesne and Corballis. A Lime Kiln is also recorded within Lissenhall Little.

6.1.1 Potential Archaeological Remains

Analysis of the available documentary and cartographic sources indicate that the known archaeological constraints within Area 1 may have both upstanding and below ground registers; the remains of which may be substantial particularly within the environs of ecclesiastical enclosures, castle sites and demesne landscapes. As with all greenfield areas, and as indicated by the archaeological works undertaken to date for old Metro North and MetroLink (refer to Section 7.3) there is a high potential for previously undiscovered archaeological sites and features to be identified during the construction of MetroLink. In general, the archaeology of greenfield environments, for which there is no above ground register will typically be identified at the interface of topsoil and subsoil or c.0.25m to 0.80m below current ground levels.

6.2 Suburban Dublin (AZ4: Northwood to Glasnevin)

A ring ditch recorded in Claremont townland (RMP DU014-103----) in ploughed fields to the south of the Dublin City University Campus (DCU) may represent the remains of Bronze Age burial activity to the east of the proposed project. A mound (RMP DU014-072----) is also recorded in Claremont townland in the grounds of the former Claremont House/Poor Clare Convent located some 300m to the west of Ballymun Road. This has a diameter of 15m and height of 4m and may represent a barrow or similar prehistoric burial site.

There is extensive evidence for the early medieval occupation of the area centred on St Mobhi's ecclesiastical enclosure (RMPs DU018-005001- and DU018-005008-) which was founded in the sixth century. In the 13th century this site formed part of the home farm for the Priory of the Holy Trinity, Christchurch. The site, located to the west of St Mobhi Road, is occupied by an early 18th century Church of Ireland church and graveyard (RMP DU018-005002-).

In 1895 a burial, reputedly found in association with weaponry, was recovered during excavations for the foundations of Marlborough College in the grounds of the Meteorological Office (RMP DU018-005010-). A further six slab lined graves (RMP DU018-005006-) of probable early medieval date were recorded in 1914 within the grounds of the Meteorological Office. The remains were found in association with a bone scoop of unknown function (NMI 1915:42). In 1941 two skeletons were found on Church Avenue, with a further two skeletons found in 1956 a short distance to the east on Mobhi Lane (RMP DU018-005007-). The latter were found in association with an iron knife (NMI 1960:16). In 1951 a number of additional burials were recorded to the northeast on the site of the Bons Secours



Hospital (RMP DU018-005005-), but the date of these burials is unknown (RMP DU018-005005-). In 2008 the partial remains of an adult male were recovered from the Home Farm football pitch, to the east of St Mobhi Road on the site of the proposed Griffith Park Station. Subsequent archaeological investigations at this location for MetroLink have identified the remains of a late 6th/early 7th century enclosure (refer to Section 7.3)

An Anglo-Norman motte (RMP DU018-005009-) is located to the west of the proposed Griffith Park Station in the grounds of the former Carlingford House, now occupied by St Mobhi Drive/River Gardens. It is annotated on a 19th century map relating to Carlingford House as a 'battlement' (RMP DU018-005007-). Portions of the base of the site, which has a 15m diameter, are preserved by the outline of various walls, sections of which are recorded as having collapsed in March 2016 (Archaeological Survey Database).

A post-medieval settlement cluster in Glasnevin was recorded within 'The Hearth Money Rolls for County Dublin' (RMP DU018-005011-). In 1664 ten houses with hearths are recorded. This settlement had more than doubled in size by 1667, when 24 houses with hearths were recorded. Eighteenth century occupation within Glasnevin is recorded at the site of Delville house (RMP DU018-005003-; Archaeological Survey Database). The house was constructed in 1729 but is believed to mark the location of an even earlier dwelling.

Industrial Heritage sites within AZ4 (North) include the Royal Canal and associated elements, such as tow paths and lock gates, the Midland Great Western Railway (MGWR), the Great Southern and Western Railway, the site of a smithy (now Dalcassian Downs) and the site of a twentieth century tobacco factory on Botanic Road (now Botanic Business Centre; NIAH Reg. No. 50130163).

6.2.1 Potential Archaeological Remains

Analysis of the available documentary and cartographic sources indicate that the known archaeological constraints within the receiving archaeological environment have both upstanding and below ground registers. The most significant site within AZ4 (North) is the ecclesiastical enclosure of St Mobhi (RMPs DU018-005001- and DU018-005008-). Burial remains associated with this site radiate out from the inner enclosure, the location of which is indicated by Bons Secour Hospital's curving boundary, and suggest the site was quite substantial. The construction of the proposed Griffith Park Station and its ancillary services will have a direct impact on the sub-surface enclosure identified, and poses the potential to expose additional human remains. There is equally a chance that additional remains associated with the neighbouring St Mobhi ecclesiastical enclosure (such as dwelling sites and enclosing ditches) may also be preserved in this location. Furthermore the presence of the nearby Anglo-Norman motte (RMP DU018-005009-) and post-medieval settlement enclosure (RMP DU018-005011-) suggest the potential that remains related to late and post medieval activities within the environs of the River Tolka and Glasnevin Station may also be identified during the construction works. As with AZ1-3 the archaeology will generally be

confined to greenfield lands affected by the scheme, and, where there is no above ground register, will typically be identified at the interface of topsoil and subsoil or c.0.25m to 0.80m below current ground surface. Large associated features, such as boundary and drainage ditches, may extend to 2m in depth.

6.3 Historic Town (AZ4: Glasnevin to Charlemont)

The highest concentration of RMPs is present within the boundaries of historic town of Dublin, which extends from the Royal Canal in the north to the Grand Canal in the south. This reflects the continuous intensive occupation of a relatively confined area from the prehistoric period to the present day. Lying outside of the medieval core the archaeology of this area of the route is predominantly of post-medieval date, but significant medieval material and prehistoric remains have also been recorded. The continuous occupation of historic town of Dublin was greatly influenced by the presence of early and late medieval trade centres and the protection afforded to the citizens of Dublin by the town walls on the south banks of the River Liffey. The latter, in association with the Rivers Poddle, Dodder, Bradogue and Stein, were a focus of concentrated industry throughout the history of Dublin. The surviving archaeology comprises both upstanding and sub-surface RMPs, recently identified archaeological sites and areas of sub-surface archaeological potential. Previous archaeological investigations within the environs of the proposed scheme have identified archaeology at depths commencing at 0.45m and extending to over 3m below current ground level.

No Mesolithic activity has been identified within the environs of the proposed scheme with the closest Mesolithic site identified c.1.4km to the east at Spencer Dock, North Wall Quay. This site, which comprised a number of wooden fish traps, stake rows and worked wood was identified on lands that once formed the original shoreline of the River Liffey. It has been dated from 6090–5750BC (McQuaid 2004).

Approximately eight ‘Bowl Tradition’ burials have been identified within Dublin City including an example on Suffolk Street, located c. 500m west of the proposed scheme (RPA 2010). This burial was described as a cist-tomb containing a funerary urn and a skeleton and is of Late Neolithic/Early Bronze Age date. Stray Bronze Age finds, comprising a flat bronze axe head and a bronze palstave, were identified within the grounds of TCD which is located immediately adjacent to the proposed scheme, with two copper axes also found on Suffolk Street (RPA 2010).

During the prehistoric and medieval period, the route of the proposed scheme was located on the confluence of the Rivers Liffey, Stein, Bradogue, Poddle and Dodder. A key consequence of which, throughout the ages, has been the attempt by the occupants of the city to not only reclaim land for settlement, but to prevent developed lands from flooding through the construction of riverine revetments. The earliest riverine revetment identified, dates to the Iron Age (c. 160–60 BC), and was identified on Ormond Quay, c.480m west of



the proposed scheme at the confluence of the River Liffey and River Bradogue (Bolger 2011).

A number of early medieval ecclesiastical sites are also located within the city's medieval core. The early medieval settlement of Dublin City was established contemporaneously to that of Swords and Santry (refer to Section 6.1). Two settlements were established on the banks of the River Poddle known as 'Átha Cliath' and 'Dubhlinn', translating as 'the ford of the hurdles' and as 'Black Pool' respectively (Clarke 1990). The settlement names relate to topographic features with 'ford of the hurdles' referring to the lowest regular crossing point of the River Liffey (Clarke 2002). This crossing was located close to present day Fr Mathew Bridge (RMP DU018-020042-; DCC_RPS 897), between Church Street and Bridge Street, and was traditionally the only northern access route into medieval core. The associated settlement is believed to have most likely comprised a small fishing and farming community (Clarke 2002).

The settlement of 'Black Pool' refers to a tidal pool associated with the River Poddle, in the environs of which a late 6th or early 7th century ecclesiastical foundation was established; the site of which is now marked by the garden of Dublin Castle (Clarke 2002). This foundation would have attracted further settlers leading to the establishment of a small town, which eventually, and on foot of Viking and Anglo-Norman invasions, developed and expand into Ireland's capital city. In addition to this extended lay population, there is archaeological evidence to suggest that a number of churches were scattered outside as well as inside the ecclesiastical enclosure. Evidence for this early medieval ecclesiastical site is still evident in the current street pattern, extending from Stephen Street Lower to Aungier Street and was located approximately 690m southwest of the proposed scheme (Clarke 2002; RPA 2010).

A number of early medieval cross slabs and architectural fragments which are designated RMPs are also located within the study area; however these were relocated from Offaly and Tipperary to the NMI and are not indicative of activities along the route of the proposed scheme (Archaeological Survey Database).

Viking activity within the vicinity of the proposed scheme is known to have taken place in the vicinity of present day Parnell Street, College Green and Suffolk Street. Parnell Street is located within a large burial ground (RMP DU0180:020495-), encompassing Dominick Place/Denmark Street Great/Belvedere Place/Dorset Street Upper/Frederick Street North/Gardiner Lane/Gardiner Place/Gardiner Street Middle/Gardiner Street Upper/George's Street Great North/Granby Row/Greenville Street/Hill Street/Mountjoy Square/Parnell Square/Parnell Street/Rutland Place West and Temple Street. This represents the site of a potential Viking cemetery recorded in an essay in the Dublin Magazine in June of 1763. The essay refers to human remains, spears, rivets and swords discovered during construction associated with the Rotunda Gardens (now Parnell Square),

Cavendish Row and Granby Row.

The lands at College Green were known as ‘Hoggen Green’ which extended from the Thingmote (RMP DU018-020132-), across to the then edge of the River Liffey, with an eastern boundary along the course of the River Stein. This name is derived from the use of the area as a burial ground for kings and other important individuals; though subsequently during the late medieval period it was used as commonage for livestock grazing and recreation (Gilligan et. al. 2017).

The Thingmote which occupied lands at the intersection of present day Suffolk Street/Church Lane was a Viking assembly site, believed to have comprised a large earthen mound. The presence of an artificial mound at this general location was depicted on Charles Haliday’s 1682 ‘*Survey taken of the Mount neer St. Andrews church*’. The mound was levelled c.1685 and the material used to raise the height of present day Nassau Street to prevent flooding. Duffy (2005, 351-360) suggests that the Old Norse word Thing-mót means place or assembly, with no requirement for an associated mound and argues that Haliday’s pictorial map has, over the centuries, convinced people that this mound was that of the Thingmote. Two finds from the eastern extent of TCD grounds, and held by the NMI could relate to this activity. They comprise human skeletal remains (NMI IA/119/96) and an antler tine (NMI 1973:215). Alternatively, they may represent a later and unrelated phase of occupation of this area of Dublin.

The eastern boundary of Viking Dublin, as defined by the shoreline of the River Stein was historically marked by a Viking ‘Long Stone’ or Stein (RMP DU018-020129-) believed to have functioned as a navigational marker. Based on its depiction on an early Dublin Corporation lease maps, the Long Stone would have appeared to have survived until at least 1720 where a report attests that it was stolen c.1794. The tentative location of the Viking Long Stone was marked in 1986 by the erection of the 3.5m high ‘Steine Sculpture’. However, this sculpture was moved eastwards in 2017 to facilitate construction of LCC. The position of the Long Stone would indicate that the proposed project is on the outer eastern limits of Dublin’s Viking occupation, but the potential of finding associated remains should not be overlooked.

The majority of evidence for the late medieval occupation of AZ4 (South) is to be found within the historic walled town of Dublin to the west of the proposed scheme. Although the population of Dublin expanded considerably during the late medieval period, the populace were reluctant to build outside the confines and protection of the town walls. A factor greatly influenced by the devastation of the Bruce Invasion of 1317, and subsequently by the significant decrease in population as a consequence of the Black Death in 1348. Consequently, the lands of AZ4 (South), particularly those to the north of the River Liffey, remained effectively undeveloped and were primarily exploited for agricultural purposes.



Exceptions to the development outside the protection of the town walls could be made, particularly where the lands were granted to an ecclesiastical foundation. A prime example of which is the establishment of the Priory of All Hallows on College Green in 1166, three years prior to the Anglo-Norman invasion (RMP DU018-020044-; Simpson 2013). The priory was a substantial foundation and one of the wealthiest establishments in Dublin with the site at College Green known to have incorporated a stone house with vault, a steeple, cloister, vestry, bawn and tower, along with gardens and orchards (Simpson 2013). The site of the priory church is believed to have stood on the site of the present Campanile in Library Square in the grounds of TCD (Archaeological Survey Database).

The priory was dissolved in 1538 at which time its lands and holdings within Dublin, (which in addition to the priory buildings, included 12 acres of meadow, nine acres of pasture and seven orchards) were transferred to the Corporation of Dublin. Its additional lands, including lands in Drumcondra, amounted to 2,267 acres. The subsurface remains of elements of the priory have been identified during recent archaeological investigations (Simpson 2013).

A watermill, referred to as the *Steine Mill*, is recorded in various literary sources and is believed to have run to the west of the priory (RMP DU018-020099-). The first documented account of the mill dates to 1276, with the last reference to it in 1462 (Clarke 2002). It is recorded in various cartographic sources as belonging to the priory, and its location is marked by that of a millpond on Speed's map of 1610 (RPA 2010). A second mill on the River Stein was located 61m to the south on the intersection of College Green and Dame Street (RMP DU018-020401-) and may also be of late medieval date.

A tiled medieval pavement may indicate the location of an additional ecclesiastical site on College Street to the north of TCD (RMP DU018-020487-). No supporting structural evidence has been identified although some medieval finds were retrieved during subsequent archaeological investigations in the area including a late medieval spoon and a small quantity of medieval pottery. (Carroll & Desmond 1997). Wooden timbers, which possibly functioned as mooring posts on the course of the River Stein, were also identified at this site. An additional fragment of medieval pottery was found in the vicinity of this site during works associated with the construction of LCC (Giacometti & Gilligan 2015). Significantly, five burials were also found at the entrance to TCD at a depth of 1.5m below current ground level. These remains have been dated to the Tudor period ranging from 1485-1603.

A chapel known as the Chapel of St Clement was also possibly located within the vicinity of the Stein River between the River Liffey and the Augustinian Priory of All Hallows within lands now forming TCD (RMP DU018-020995-; Archaeological Survey Database).

Further east on what was once known as 'Lazers' or 'Lazy' Hill and now forming Townsend Street, stood the Hospital of St James (RMP DU018-020061-; Walsh 1998). The hospital



which also functioned as a hostel, was founded in 1216 by Henry Blund, Archbishop of Dublin, on what was then the shore of the Stein River. The hospital, dedicated to the patron saint of lepers, functioned as an embarkation point for pilgrims and the poor of Dublin, heading to the Cathedral of Santiago de Compostela in Galicia in North West Spain in hopes of a cure. It is from its treatment of these 'incurables' or lepers that the area derived its name (McCready 1892). Development works in 1992 unearthed a number of human bones on this site, with additional works in 1998 unearthing evidence for the site's subsequently redevelopment in 1753 as a lock hospital otherwise known as 'A hospital for incurables' (Walsh 1998; Channing 1992).

As for Dublin County, the mid-16th century Dissolution of the Monasteries released substantial tracts of land for development and facilitated the outwards expansion of the city which is well documented on various cartographic sources commencing with Speed's Map of 1610, Petty's *Down Survey* (c. 1655-1656) and Bernard de Gomme's *Map of Dublin City* (1673). These maps demonstrate that although the land of AZ4 (South) was undeveloped throughout most of the 17th century, reclamation of the River Liffey marsh tidal flats had commenced. Reclamation activities included the construction of revetment walls, quays and bridges and the culverting of the Stein, Poddle and Bradogue Rivers (RPA 2010). Archaeological evidence to support this reclamation activity has been identified through a large number of archaeological excavations, within which riverine deposits, infill layers, revetment walls, wharfs and slipways have been identified. Revetment walls have been along the alignment of the proposed project on O'Connell Street Lower (Baker 2005), Townsend Street (Walsh 1998) and Tara Street (Kehoe 2002). Further evidence of the reclamation of land has been identified on D'Olier Street, Pearse Street and Westland Row (Simpson 2002; Cryerhall 2004; Byrne 2004; Myles 2008 and Shine 2007).

Some of the reclaimed land was set out into lots for development for residential purposes but the quays became a focus of industrial activity, facilitated by the opportunity to moor and load boats directly from the quay walls. Industries along the city's quays included iron works, windmills (RMP DU018-020464-), glassworks (RMP DU018-020154-), brickworks (RMP DU018-020506-), prisons (RMP DU018-020461-) and shipyards, along with associated custom houses. A number of churches (RMPs DU018-020161-; DU018-020648- and DU018-020347-) were also constructed to cater for the new populace (Archaeological Survey Database).

Development also took place closer to the core of the medieval town. In 1592, the former lands of the Priory of All Hallows was granted by its new owners, Dublin Corporation, to Adam Loftus for a university known as the 'College of the Holy and Undivided Trinity of Queen Elizabeth' (now TCD), after which the area generally become known as College Green. Works commenced with the dismantling and reorganisation of the medieval foundation, already known to be in a poor condition. A small graveyard adjacent to the chapel in TCD and known as Challoner's Corner (RMP DU018-020411-), was established in



1613 upon the death of Luke Challoner, the first Provost of TCD.

Contemporary to these activities was the laying out of St Stephen's Green Park by Dublin Corporation to raise money for the city's funds. The park is both a Recorded Monument, a National Monument and a Protected Structure (RMP DU018-020334-). The park's footprint remains virtually unchanged since it was set out in 1664 to facilitate the lease of 96 plots for development around a green of 27 acres. In its earliest years, the park was surrounded by a perimeter wall constructed in 1669 and drained by a perimeter ditch. In 1818, the perimeter wall was replaced by railings, and the short granite posts that still line the outer pavement were installed (McCabe 2011) The park was transformed once again in the 1870s at the instigation of Arthur E. Guinness who engaged the architect J.E. Fuller and the landscape designer William Shepard to create the park's current picturesque landscaping. Substantial evidence for the seventeenth century perimeter ditch which was found during LCCCC works, with its revetment wall running beneath, and forming the foundations of, the perimeter wall.

The somewhat unregulated development and growth of the city during this era, coupled with a narrow medieval street pattern, left the city difficult to navigate, having a serious impact on commerce and trade (Lennon 2008). A 1757 Act of Parliament was therefore passed for the establishment of the 'Commissioners for the Making of Wide and Convenient Streets and Passages', otherwise known as the Wide Street Commissioners ('WSC'; Goodbody 2014). This organisation was responsible for the planning and construction of new streets on behalf of the city and for overseeing the planning and construction of all new streets by private developers. Their first act was the construction of Dame Street, as the city's new main thoroughfare, linking Parliament House (now Bank of Ireland) on College Green with Dublin Castle. Within the environs of the MetroLink alignment the WSC were influential in the setting out, widening and/or approval of the following streets: North Frederick Street, Cavendish Street/Rutland Square East (now Parnell Square East), Cavendish Row, Sackville (now O'Connell) Street, Carlisle (now O'Connell) Bridge, Great Brunswick (now Pearse) Street, and the expansion of, Leeson Street, Earlsfort Terrace and Hatch Street Lower (Goodbody 2014).

Meanwhile the construction of both the Royal and Grand Canals in Ireland took place on foot of a 1715 Act of Parliament to make the inland rivers of Ireland navigable. In 1751, a further Act was passed in order to establish a Navigational Board and in 1755, £20,000 was made available to promote a system of inland navigation from Dublin to the Shannon, commencing with the construction of the Grand Canal (Clarke 1993). In 1788, Parliament devised a grant system to promote the private construction of canals. The Royal Canal Company was established in order to fund and manage the construction of the Royal Canal, which commenced in 1790. A three-quarter mile spur line, known as the Broadstone Branch and Harbour, links into the Royal Canal at Cross Guns Bridge. In 1757 the same amount was made available for construction of the Grand Canal stretching over 131km from Grand Canal



Dock to the River Shannon. This canal was to serve a secondary purpose of supplying the city with water from the River Liffey. However, issues with the stability of the banks arose resulting in collapse upon initial infilling and requiring rebuilding. Today water from the Grand Canal continues to supply the water demands of St Stephen's Green and Guinness (Corcoran 2005, 18). The proposed project will tunnel beneath both the Royal and Grand Canals, in addition to the Broadstone Branch of the Royal Canal. The latter though infilled survives as a public linear park.

With the influence of the WSC and the development of large estates into residential areas dominated by Georgian terraces, the city's growth continued such that by 1800, Dublin was the sixth largest city in Western Europe (RPA 2010; Cullen 1995). The 1801 Act of Union had a significant negative impact on the city, with many influential landowners and developers returning to London (RPA 2010). This was to have a particularly negative influence on the development of the city's north side where many of the grand Georgian terraces were subsequently turned into tenements.

However, not all works stopped, for example, the General Post Office (GPO) was opened in 1818, and in the 1830s and 1840s the Dublin and Kingstown (D&KR; from Westland Row to Dún Laoghaire) and MGWR were established. The Harcourt Railway Line, an extension to the D&KR, opened on 17th December 1834. Due to the success of the D&KR, it was proposed to construct a second 12.5-mile (20km) railway from Harcourt Street to Bray to be known as the Dublin-Southeastern Railway Line. The railway line was constructed in 1854 and was later extended to Wicklow town and on to Wexford town. Harcourt Street Station was built in 1859 and the line was officially opened after the completion of the station. Much of the railway can still be seen including the nine arch viaduct at Milltown. The last train which ran from Harcourt Street to Bray left the station at 4:25pm on 31 December 1958. The rail tracks and sleepers were removed over the period January 1959 to September 1960. This rail line is now occupied by the Luas Green Line.

In the 1870s, Dublin's tramways were constructed, initially horse drawn but subsequently these were replaced with electric power. Tramlines dating from this period were present within AZ4 (South) on the following streets: Dorset Street Lower, North Frederick Street, Parnell Square East, O'Connell Street, O'Connell Bridge, Westmoreland Street, College Street, Pearse Street, Westland Row, Lincoln Place, Clare Street, Merrion Square, Merrion Street (Upper and Lower), Merrion Row, Hume Street, Ely Place, St. Stephen's Green (North, East and West), Leeson Street Lower and Earlsfort Terrace.

The early decades of the 20th century saw numerous historic conflicts which shaped the current political status of Ireland and influenced the surviving streetscape of Dublin city centre. Of particular importance in this context was the 1916 Easter Rising, the War of Independence of 1919–1921 and the Civil War of 1922–3. These conflicts resulted in widespread fighting and bombing on the streets of Dublin City Centre including those surrounding the National Monuments of Moore Street and St Stephen's Green Park.

Subsequently, in 1966, Nelson's pillar on O'Connell Street Upper was bombed. While the Troubles (1968 – 1998) led to the bombing of the Wolf Tone Statue on the northeast corner of St Stephens Green Park in 1971.

6.3.1 Potential archaeological remains

Analysis of the available documentary and cartographic sources indicate that there is a high potential for known or previously unrecorded archaeological stratigraphy to be encountered along the route of the proposed scheme.

Significant archaeological constraints, for which sub-surface stratigraphy is likely to be found include, but is not limited to, the Viking burial ground (RMP DU018-020495-) at Parnell Square, the brick works on O'Connell Street Upper (RMP DU018-020506-); the hospital (RMP DU018-020061-) and Church (RMP DU018-020648-) located in the vicinity of Tara Station (where not previously resolved), and St Stephen's Green Park (RMP DU018-020334-). Significant industrial heritage constraints include both the Royal Canal and the Broadstone Branch of the Royal Canal, the Grand Canal and their ancillary features (e.g. tow paths, lock gates and retaining banks). Deep reclamation features and deposits may also be identified.

This surviving stratigraphy may include human burials, early to post medieval deposits, perimeter ditches, organic remains including structural timbers and boat elements, Georgian and Victorian deposits, drainage features, culverted rivers, war related finds and architectural elements. The latter will include coal cellars, building foundations, boundary wall, pumps and wells. Works may affect upstanding industrial heritage items, such as railway and canal walls and embankments. In brownfield sites, such as O'Connell, Tara and Charlemont Station evidence of industrial archaeology from the late seventeenth to mid-twentieth century may be preserved below existing foundation levels.

Due to the extended period of occupation and redevelopment, archaeological stratigraphy throughout AZ4 (South) is likely to be found at depths of 0.00m to 4m+ below current ground levels. In areas of reclaimed land, particularly along the River Liffey, there is a potential for archaeological stratigraphy to substantially exceed these depths.

7 PACKAGE I: PRELIMINARY DESIGN AND RAILWAY ORDER APPLICATION PROCESS

A number of invasive and non-invasive surveys which have the potential for cultural heritage impacts or may contribute to our understanding and assessment of the receiving archaeological environment were either commissioned or are in the process of procurement in order to facilitate the progression of the design of the MetroLink PR and to inform both the EIAR and procurement strategy. The TII Project Archaeologist is required to review each contract for its appropriate cultural heritage requirements. The outputs of each contract are reviewed upon receipt by the TII Project Archaeologist, the EIAR Cultural Heritage Specialists and in due course by the MetroLink PCA.

Grimshaw Architects have also been engaged by TII as consultant architects to work with J/I. Their role is to create a coherent architectural vision for MetroLink and to ensure that the developed concept design and architectural vision for stations, bridges and tunnels is consistently followed throughout the project from preliminary design stage through to project completion (Packages I-III) and to develop a strategy for high quality landscaping and public realm works

The following surveys have been completed to inform the assessment:

- Topographical, Aerial and Street Furniture Surveys (Section Topographical, Aerial and Street Furniture Surveys 7.1) ;
- Geotechnical Investigations (Section 7.5);
- Archaeological Geophysical Survey (Section 7.2);
- Archaeological Test Excavations (Section 7.3);
- Underwater, Wade and/or Detection Surveys (Section 7.4);
- Building Surveys (Section 7.7); and;
- Utility Surveys (Section 7.6)

The scope of works for each survey was informed by the findings of those previously conducted for old Metro North (Figure 5).

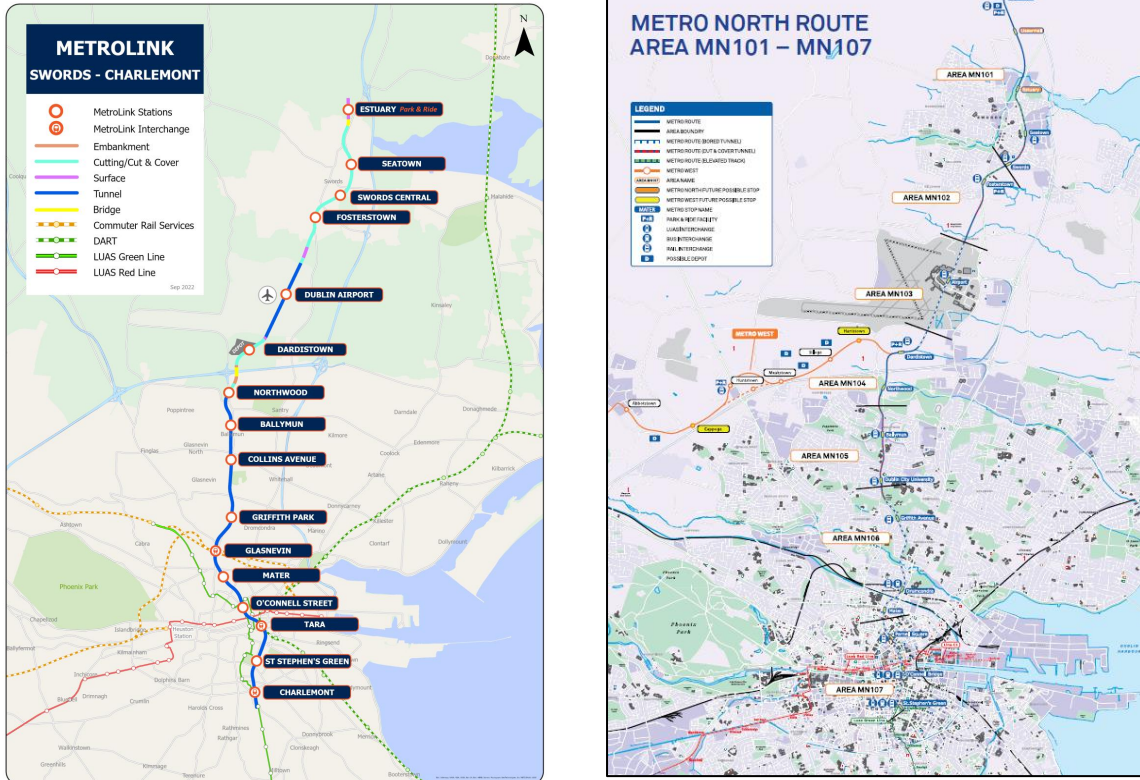


Figure 5: Proposed MetroLink Alignment; Proposed old Metro North Alignment

7.1 Topographical, Aerial and Street Furniture Surveys

A complete topographical and aerial survey of the route of the proposed Project was undertaken during Q2 and Q3 of 2018. Aerial surveys often pose an opportunity for the identification of archaeological sites through cropmarks.

Due to the unusually dry summer of 2018 a potential previously unrecorded archaeological complex as identified in the townland of Balheary Demesne, not in fact through the TII commissioned survey but Google Maps. Two circular enclosures were identified to the west of the MetroLink alignment. The northernmost enclosure is likely to represent a historic landscaping feature, namely a tree ring associated with the former demesne and represented on the 1st edition OS Map (Figure 6 and Figure 7), the southernmost enclosure may be archaeological in origin.

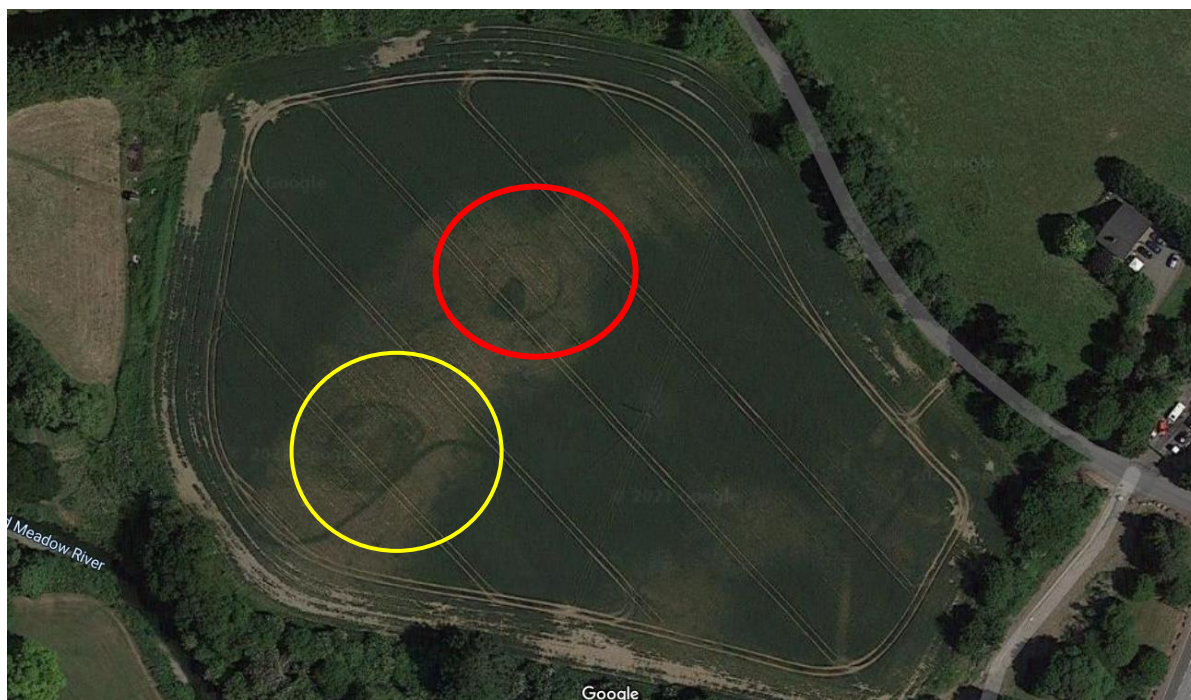


Figure 6: Extract from Google Maps. Probable Tree Ring indicated in red, possible archaeological enclosure in yellow

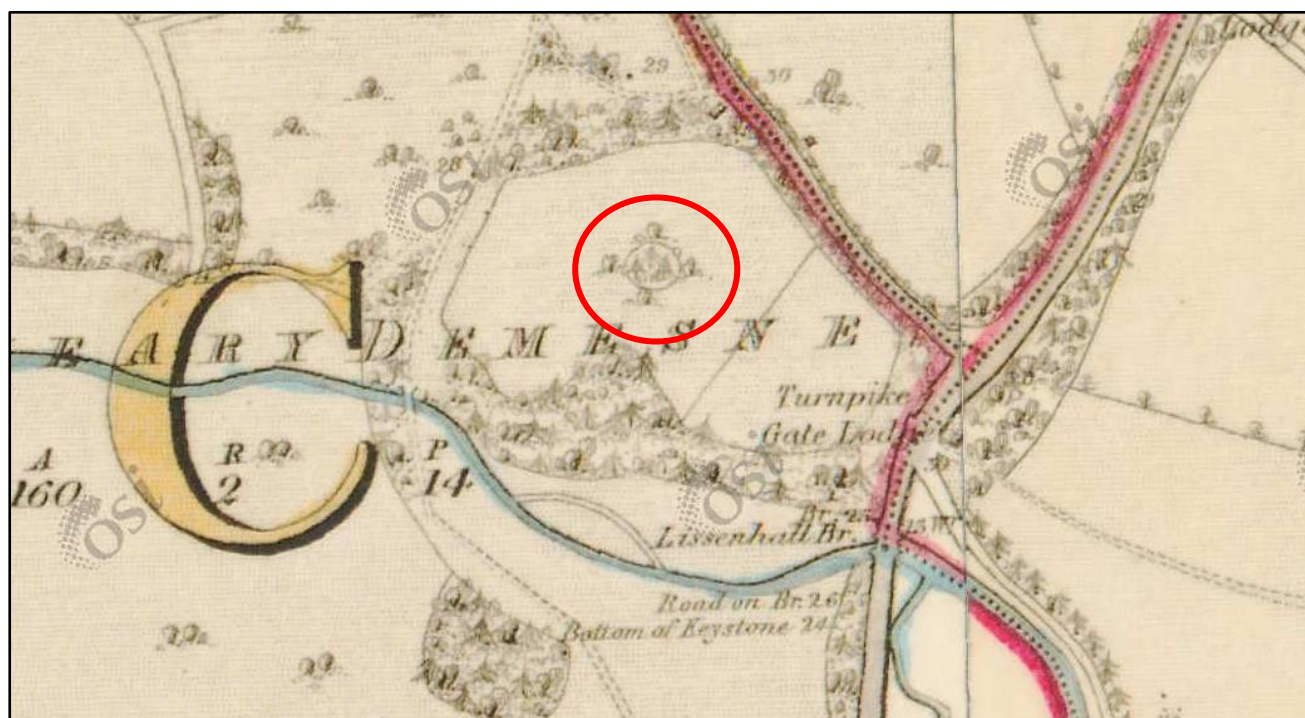


Figure 7: Extract from 1st edition 6" OS map showing probable tree ring within Balheary Demesne indicated in red (www.historicenvironmentviewer).



A measured, photographed and GIS indexed Street Furniture Survey for MetroLink was also undertaken building on the work of those undertaken for old Metro North and Luas Cross City. All Street furniture including but not restricted to paving, statues, lamp standards, bollards manholes, drains, light wells, keg drops and coal hole covers was surveyed, photographed, catalogued and given a unique identifier code on GIS.

7.1.1 Licence and Consent Requirements

All works were non-invasive and did not require an archaeological licence pursuant the National Monuments Act 1930 (as amended).

7.1.2 Archaeological Reporting

There are no archaeological reports arising from these works.

7.2 Archaeological Geophysical Survey

An extensive programme of geophysical survey of greenfield and parklands was undertaken as a component of the archaeological assessment of old Metro North (Thebaudeau & Harrison 2009), inclusive of a Ground Penetrating Radar (GPR) survey of Lissenhall Bridge National Monument. These survey works corresponded with large tracks of land scheduled to be impacted by MetroLink. A further section of land at the proposed Dardistown Depot and Station was surveyed as a component of old Metro West works (Target Geophysics 2010)

A gap analysis was therefore undertaken to identify greenfield and parkland located along the route of the proposed MetroLink project which deviated from areas not previously surveyed. This work was undertaken over four phases from September 2018-March 2021 at seven main station or compound locations which were identified as being suitable for or requiring additional geophysical surveys to inform the EIAR process. These are as follows:

- Estuary Station and Park and Ride: Greenfield land in Lissenhall Little and Balheary Demesne townlands (Phases I and IV);
- Naul Road ESNB Compound: Greenfield lands in Cloghran townland (Phase IV);
- Dardistown Depot and M50 Station: Greenfield Lands in Turnapin Great, Ballystruan and Ballymun townlands (Phases I, III and IV);
- Griffith Park Station: Sports Pitch in Bank Farm Townland (Phases I and II);
- Mater Station: Parkland in St Georges Ward (Phases I and II); and
- St Stephen's Green Station: Parkland – in St Stephen's Ward - St Stephen's Green Park National Monument (Phase I).

The survey works were undertaken using a combination of Magnetometer, EMI apparent electrical resistivity and Ground Penetrating Radar techniques as detailed in Table 4.

**Table 4: Geophysical Surveys undertaken for MetroLink**

Phase	Magnetometer Survey (per hectare)	EMI Survey (per hectare)	GPR Survey (per hectare)
Phase I (September 2018-November 2019)	20.5	6.9	N/A
Phase II (April 2019)	N/A	0.3	0.75
Phase III (September 2020)	12.2	6.1	N/A
Phase IV (March 2021)	13.59	8.1	N/A
Total (per hectare)	46.29	21.4	0.75

The results show extensive potential sub-surface archaeological remains surviving within the Estuary Station, Dardistown Depot and Griffith Park Station survey areas.

At Estuary Station, within the townland of Lissenhall Little, a diverse archaeological landscape was identified comprising numerous archaeological sites dominated in the east by a possible D-Shaped multi-ditched enclosure, and an oval ditched enclosure. A number of ring ditches (inclusive of RMP DU011-131----) and associated pits were identified in the west of the survey area. Linear ditches, pits, stone banks or areas of compacted earth were also noted. The survey area was previously impacted through the insertion of a large metal water pipe, and had also been partially investigated through geophysical surveys and the excavation of archaeological test trenches as a component of old Metro North works (Refer to Sections 7.2.2.1 and 7.3).

At the Naul Road, within Cloughran townland, the survey area was disturbed through the previous insertion of a large utility. a number of agricultural boundaries, potential archaeological features in the form of ditches (linear and arching) and pits were detected.

At Dardistown Depot, three potential enclosures containing possible pits in addition to other potential archaeological responses and relict boundary features were recorded at Turnapin Great. However, modern agricultural processes heavily impacted the site. Within Ballymun townland, the survey revealed a landscape heavily impacted by agricultural processes with multiple relict field boundaries and cultivation furrows detected. Potential archaeological remains were also identified with the detection of a number of arcing ditches, possible compacted earth or stone boundaries and pits. Three possible enclosures were also noted. This area and had also been partially investigated through geophysical surveys and the excavation of archaeological test trenches as a component of old Metro North and Metro West works (Thebaudeau and Harrison 2009; refer to Section 7.3)

At Griffith Park Station a series of probable archaeological enclosure ditches, with internal



pits and potential internal division features were identified underlying a system of intensive land drains. The GPR survey noted the potential for multiple grave cuts distributed across the playing pitch.

At Mater and St Stephens Green Stations, there was extensive magnetic interference from the existing landscaping. A number of potential ditches at St Stephen's Green may relate to landscaping and drainage activities with a large number of subsurface drains introduced to the east of the park in 1851 (McCabe 2011, 324).

At Swords Central Station a geophysical survey of the proposed station and compound location was commissioned by others in 2009 (Licence No. 09R0038; Thebaudeau 2009). The survey area comprised 11.9ha of land in Barrysparks and Crowcastle townlands, reduced from a proposed 19.5ha due to the previous topsoil stripping of c. 6.9ha; the presence of wheel rutting, overgrowth and spoil heaps also hampered the survey. A possible barrow was identified and was later confirmed to be a 13m diameter ring-ditch through archaeological test excavations (O'Hara and O'Connell 2010). This has been designated as an RMP (DU011-152----).

7.2.1 Licence and Consent Requirements

The archaeological geophysical survey was carried out by Earthsound Archaeological Geophysics under a consent to use a Detection Device (18R0196) pursuant to Section 2(2) of the National Monuments Act 1930 (as amended).

7.2.2 Archaeological Reporting

A report detailing the results of the archaeological geophysical surveys (old Metro North and MetroLink Phases I-IV) was prepared upon completion each phase of works and submitted to the relevant authorities.

7.2.2.1 *Archaeological Reports Issued*

Gimson, H. and Garner, U. (2019a) *MetroLink Dublin, Archaeological Geophysical Survey, Detection Licence No. 18R0196*. Unpublished Report by Earthsound Archaeological Geophysics for Jacobs Engineering on behalf of Transport Infrastructure Ireland.

Gimson, H. and Garner, U. (2019b) *St Stephen's Green to Lissenhall, MetroLink Dublin, Archaeological Geophysical Survey, Detection Licence No. 18R0196*. Unpublished Report by Earthsound Archaeological Geophysics for Jacobs Engineering on behalf of Transport Infrastructure Ireland.

Gimson, H. and Garner, U. (2020) *Dardistown Depot, Ballymun td, Surveyed as part of MetroLink Dublin, Archaeological Geophysical Survey, Detection Licence No. 18R0196*. Unpublished Report by Earthsound Archaeological Geophysics for Jacobs Engineering on

behalf of Transport Infrastructure Ireland.

Gimson, H. and Garner, U. (2021) Lissenhall Little, Balheary Demesne and Cloghran MetroLink Phase IV, Dublin, Archaeological Geophysical Survey, Detection Licence No. 18R0196. Unpublished Report by Earthsound Archaeological Geophysics for Jacobs Engineering on behalf of Transport Infrastructure Ireland.

Target Geophysics (2010) *Metro West Tallaght to Dardistown, Archaeological Geophysical Survey MW 7120_10, Co, Dublin. Licence No. 09R195.* Unpublished Report by Target Geophysics for IAC Ltd on behalf of Railway Procurement Agency. Available from: <https://www.tii.ie/tii-library/archaeology/Metro%20West/Geophysical%20Survey%20Report,%20Tallaght%20to%20Dardistown>

Thebaudeau, B. and Harrison, D. (2009) *Geophysical Survey Report, Metro North, Bellintown to St Stephen's Green, Dublin. Licence No. 08R0117.* Dublin: Unpublished Report by Margaret Gown & Co. Ltd for Railway Procurement Agency. Available from: <http://www.tii.ie/tii-library/archaeology/Metro%20North/Geophysical%20Survey%20and%20Ground%20Penetrating%20Radar%20Report#>

7.3 Archaeological Test Excavations

An extensive programme of archaeological test excavations of greenfield lands was undertaken as a component of the archaeological assessment of old Metro North. Fourteen Test Areas (Test Area 1-14) and the site of the then Dardistown Depot were assessed at 12%, of which the latter and Test Areas 4-14 correspond in full or in part to the MetroLink alignment (refer to Section 7.3.3).

Three areas of archaeological potential as identified through the MetroLink Geophysical Surveys (refer to Section 7.2) were selected for advance targeted archaeological test excavations to both ground proof the survey findings, and determine the archaeological significance of the potential remains.

At Estuary Station (Area 1; Murphy 2020a) the assessment site was located in greenfield land within the townlands of Lissenhall Little and Balheary Demesne. The site was subdivided into three separate assessment areas – Area 1A in the north-eastern corner, Area 1B along the western side (assessing RMP DU011-131----) and Area 1C in the southern end, 50m to the west of Lissenhall Bridge National Monument. Area 1B was ultimately excluded from the assessment due to crop coverage.

In Area 1A the works confirmed the presence of an enclosure or ring ditch that was previously identified in the geophysical survey (Gimson & Garner 2019). The enclosure was



oval in plan measuring 46m NE-SW by 36m NW-SE externally and defined by a single ditch. An additional ditch extended north-westwards from the northern part of the enclosure and may represent an annexe or attached field on the northern slope of the hill. A number of smaller features were also identified in the immediate vicinity of the enclosure including a small charcoal spread, a possible pit and a small narrow linear. The enclosure was RadioCarbon dated to AD 598 - 669 (2 sigma calibration).

In Area 1C the test trenches targeted several geophysical anomalies and also the proximity to two recently sites identified in 2018 through aerial photography. These sites are located to the immediate west of the proposed land take and comprised of a possible tree ring (demesne feature) and possible enclosure (refer to Section 7.1). Two ditches aligned with demesne landscape boundary elements indicated on the 1st edition OS map were identified within the footprint of the proposed project and produced pottery of 19th/20th century date. No archaeological features were exposed.

At Dardistown Depot (Area 2; Murphy 2021), the assessment site was located in greenfield land within the townland of Ballymun. The site was subdivided into two separate areas on either side of an access road (Silloge Green) off the R108 – Licence Area 2A to the north and Licence Area 2B to the south. Area 2A was ultimately excluded from the assessment due to crop coverage. The works within Area 2B targeted the remains of a possible enclosure identified during geophysical survey. No enclosure was identified but four archaeological features inclusive of pits and a kiln were recorded. The kiln was RadioCarbon dated to AD 1045-1252 (2 sigma calibration).

At Griffith Park Station (Area 3; Murphy 2020b), the assessment site was located in a sports field within the townland of Bank Farm. The Advance Targeted Test Excavations strategy was designed to assess the archaeological nature of high potential anomalies (i.e. a probable enclosure and annex) detected during the geophysical surveys inclusive of the potential location of burials, while maintaining the integrity of the sports facilities. To this end the excavation and reinstatement works were undertaken by a specialist pitch contractor under the direct supervision of the archaeological consultant.

Twenty-four test trenches (Test Trench 1-24) were excavated across the footprint of the site. Test Trenches 16-24 which were excavated in the vicinity of the southern goal posts/fence line, where human remains were found in 2008 (NMI file IA/182/2008; Eamon Mahon pers comm). The purpose of the latter was to determine the presence or absence of additional human remains related to this find. The test excavations did however confirm the presence of a number of slightly curving ditches/linear features, most of which were consistent with anomalies identified in the geophysical survey. Most of the ditches contained animal bone and charcoal. Two RadioCarbon dates were obtained, one from the ditch of the probable enclosure (C.17), the other from a linear ditch related to the probable annex (C.12). These features produced dates of AD 574 – 657 and AD 538 - 645 (2 sigma calibration)

respectively.

No human remains were identified in any of the excavated test trenches, suggesting the human remains may have been isolated find. A RadioCarbon date from a sample of human bone returned a date of AD 585-651(2 sigma calibration). This suggests that the burial and the enclosure and related features are contemporary, and despite a lack of supporting evidence in the limited targeted test excavations, there is high potential for identifying further human remains at this location.

An additional ditch identified in the south of the site, coincided with the alignment for the original entrance laneway to Whitehall College (DCC_RPS 77456; NIAH 50130149) as shown on the 25" OS map of 1911.

7.3.1 Archaeological Assessment of Proposed Station Locations (by others)

At Swords Central Station archaeological test excavations within the station and compound environs was commissioned by others in 2010 to assess the findings of a previous geophysical survey (refer to Section 7.2). Two phases of test excavations were undertaken focusing on the private developers planned and proposed road network (O'Hara and O'Connell 2010). On archaeological site was identified in the south of the site comprising a 13m diameter ring barrow; RMP DU011-152----). This is approximately 340m southwest of the proposed MetroLink Station and compound.

At O'Connell Station, archaeological test excavations were commissioned by the oversight developer (Dublin Central GP Ltd.) in 2020 to assess the archaeological potential and archaeological impact of the basement area associated with their proposed development. The test excavations took place within the footprint of four derelict properties: No's 40-41 and 50-51 O'Connell Street Upper (Simpson 2020).

The archaeological assessment of 40-41 O'Connell Street Upper entailed the attempted excavation of five test trenches which could not be completed due to the presence of a 1.4m+ deep reinforced concrete slab. Previous archaeological monitoring both within the former basement area of No's 40-42, and of MetroLink boreholes to the rear of No 41 (refer to Section 7.5) did not identify any *in situ* archaeological stratigraphy (Simpson 2009). The excavation of a MetroLink borehole at this location was abandoned at a depth of 0.70m due to this concrete slab (Breen 2020a)

The archaeological assessment of 50-51 O'Connell Street Upper entailed the excavation of three test trenches two of which correspond with the proposed O'Connell Street Station location (Trenches 1 and 2), the other with the proposed compound location (Trench 3). Up to 3.8m of fill deposits overlying natural gravel were recorded across the assessment area. Deposits of fire reddened clay, potentially related to the former 16th/early 17th century brickfield were identified within Trench 1 which is within the area required for deep

excavations for the MetroLink Station.

A limestone wall (probable) was found in Trench 3 at a depth of 2.7m below current ground surface. This is 1.2 meters (minimum) below the depth of excavation required to accommodate the establishment of the MetroLink O'Connell Street Compound or piling platforms and this feature will therefore not be impacted by MetroLink works.

7.3.2 Licence and Consent Requirements

The MetroLink targeted archaeological test excavations were carried out by ACSU Ltd under three separate Excavation Licences pursuant to Section 26 (2) of the National Monuments Act 1930 (as amended): Licence Nos 19E0768, 19E0757 and 20E0002.

7.3.3 Archaeological Reporting

Reports detailing the results of the archaeological test excavations (old Metro North and MetroLink) were prepared upon completion each phase of works and submitted to the relevant authorities.

7.3.3.1 Archaeological Reports Issued

Channing, C. (2009a) *Assessment Report on the Results of Metro North Advance Archaeological Test Trenching, Testing Area 5, Lissenhall Little townland, Co. Dublin, Licence No. 09E0463*. Unpublished Report by Headland Archaeology Ltd for Railway Procurement Agency. Available from: <https://www.tii.ie/tii-library/archaeology/Metro%20North/Advance%20Archaeological%20Testing%20Report,%20Area%2005>

Channing, C. (2009b) *Assessment Report on the Results of Metro North Advance Archaeological Test Trenching, Testing Area 13, Ballymun and Balcurris townlands, Co. Dublin, Licence No. 09E0481*. Unpublished Report by Headland Archaeology Ltd for Railway Procurement Agency. Available from: <https://www.tii.ie/tii-library/archaeology/Metro%20North/Advance%20Archaeological%20Testing%20Report,%20Area%2013>

Channing, C. and Frazer, W.O. (2009) *Assessment Report on the Results of Metro North Advance Archaeological Test Trenching, Testing Area 4, Belinstown and Lissenhall Little townlands, Co. Dublin, Licence No. 09E0462*. Unpublished Report by Headland Archaeology Ltd for Railway Procurement Agency. Available from: <https://www.tii.ie/tii-library/archaeology/Metro%20North/Advance%20Archaeological%20Testing%20Report,%20Area%2004>

Channing, C. and Hession, J. (2009) *Assessment Report on the Results of Metro North Advance Archaeological Test Trenching, Testing Area 6 Lissenhall Little and Balheary*



Demesne townlands, Co. Dublin, Licence No. 09E0464. Unpublished Report by Headland Archaeology Ltd for Railway Procurement Agency. Available from: <https://www.tii.ie/tii-library/archaeology/Metro%20North/Advance%20Archaeological%20Testing%20Report,%20Area%2006>

Fagan, B. (2009a) *Assessment Report on the Results of Metro North Advance Archaeological Test Trenching, Testing Area 12 Blymun townland, Co. Dublin, Licence No. 09E0480.* Unpublished Report by Headland Archaeology Ltd for Railway Procurement Agency. Available from: <https://www.tii.ie/tii-library/archaeology/Metro%20North/Advance%20Archaeological%20Testing%20Report,%20Area%2012>

Fagan, B. (2009b) *Assessment Report on the Results of Metro North Advance Archaeological Test Trenching, Testing Area 14 Hampstead South townland, Co. Dublin, Licence No. 09E0482.* Unpublished Report by Headland Archaeology Ltd for Railway Procurement Agency. Available from: <https://www.tii.ie/tii-library/archaeology/Metro%20North/Advance%20Archaeological%20Testing%20Report,%20Area%2014>

Fagan, B. and Frazer, W.O. (2009) *Assessment Report on the Results of Metro North Advance Archaeological Test Trenching, Testing Area 7 Swords Demesne and Miltonsfield: townlands, Co. Dublin, Licence No. 09E0465.* Unpublished Report by Headland Archaeology Ltd for Railway Procurement Agency. Available from: <https://www.tii.ie/tii-library/archaeology/Metro%20North/Advance%20Archaeological%20Testing%20Report,%20Area%2007>

Fagan, B. and Hession, J. (2009) *Assessment Report on the Results of Metro North Advance Archaeological Test Trenching, Testing Area 9 Fosterstown South and Cloghran townlands, Co. Dublin, Licence No. 09E0467.* Unpublished Report by Headland Archaeology Ltd for Railway Procurement Agency. Available from: <https://www.tii.ie/tii-library/archaeology/Metro%20North/Advance%20Archaeological%20Testing%20Report,%20Area%2009>

Frazer, W.O. (2009) *Assessment Report on the Results of Metro North Advance Archaeological Test Trenching, Testing Area 10 Ballystruan townland, Co. Dublin, Licence No. 09E0478.* Unpublished Report by Headland Archaeology Ltd for Railway Procurement Agency. Available from: <https://www.tii.ie/tii-library/archaeology/Metro%20North/Advance%20Archaeological%20Testing%20Report,%20Area%2010>

Frazer, W.O. and Hession, J. (2009) *Assessment Report on the Results of Metro North Advance Archaeological Test Trenching, Testing Area 11 Ballystruan and Blymun townlands, Co. Dublin, Licence No. 09E0479.* Unpublished Report by Headland Archaeology

Ltd for Railway Procurement Agency. Available from: <https://www.tii.ie/tii-library/archaeology/Metro%20North/Advance%20Archaeological%20Testing%20Report,%20Area%2011>

Hession, J. (2009) *Assessment Report on the Results of Metro North Advance Archaeological Test Trenching, Testing Area 8 Fosterstown South townland, Co. Dublin, Licence No. 09E0466*. Unpublished Report by Headland Archaeology Ltd for Railway Procurement Agency. Available from: <https://www.tii.ie/tii-library/archaeology/Metro%20North/Advance%20Archaeological%20Testing%20Report,%20Area%2008>

Kyle, J. and Bayley, D. (2011) *Assessment Report on Results of Metro North Dardistown Depot Archaeological Test Trenching, Ballymun and Ballystruan townlands, Co. Dublin Licence No. 11E0039*. Unpublished Report by IAC Ltd for Railway Procurement Agency. Available from: <https://www.tii.ie/tii-library/archaeology/Metro%20North/Dardistown%20Depot%20Archaeological%20Testing>

Murphy, D. (2020a) *MetroLink – Estuary Park & Ride, Lissenhall Little/Balheary Demesne, Swords, Dublin. Targeted Archaeological Test Excavations (Licence No. 19E0757)*. Unpublished Report by ACSU Ltd. for Jacobs Engineering on behalf of Transport Infrastructure Ireland.

Murphy, D. (2020b) *MetroLink – Griffith Park Station, St Mobhi Road, Dublin 9. Targeted Archaeological Test Excavations (Licence No. 19E0738)*. Unpublished Report by ACSU Ltd. for Jacobs Engineering on behalf of Transport Infrastructure Ireland.

Murphy, D. (2021) *MetroLink – Dardistown and M50 Station, Ballymun, Dublin. Targeted Archaeological Test Excavations (Licence No. 20E0002)*. Unpublished Report by ACSU Ltd. for Jacobs Engineering on behalf of Transport Infrastructure Ireland.

7.4 Underwater and Wade Surveys

A wade and metal detection survey of the Broadmeadow and Ward Rivers, in proximity to Lissenhall National Monument (RMP DU011-080---; FCC_RPS 0341) and Balheary Bridge (FCC_RPS 0340) respectively was undertaken as a component of the archaeological assessment of old Metro North. The archaeological assessment comprised a systematic detailed survey of both bridges, and a 60m section of riverbed and attendant banks of both the Broadmeadow and Ward Rivers. The survey, informed by the findings of detailed cartographic analysis concluded that Balheary Bridge and Lissenhall Bridge are part of the same continuous structure that was built across both rivers. This was subsequently substantiated through a GPR survey (refer to Section 7.2).

The report also highlighted an adjacent single-arched culvert (Feature 2) and several riverine



features including, a weir location and associated walling (Feature 4), five sections of river revetment wall that are located upstream of Balheary Bridge (Feature 5), and a single-arched bridge structure located 91m west of Balheary Bridge (Feature 6). The report authors confirmed these features as being ‘of historic and architectural interest and, in common with Features 1-3, they retain an inherent archaeological significance’ (ADCO 2009).

The proposed redline boundary for MetroLink incorporates a larger extent of the Broadmeadow River than that surveyed for old Metro North, as present to the west of Lissenhall Bridge. A new wade and detection survey of the previously unassessed riverbed and banks, which amounted to 180 linear meters, was undertaken in March 2020 (Brady 2020). The report found that the ‘existing environment indicates that the north bank of the present-day river was an islet around which the Broadmeadow River flowed and the principal channel of the river was to the north. The southern channel is what survives as the active river today. In addition, it appears that a small mill-race was cut into the north bank of the south channel during the nineteenth century and has since been abandoned’. The survey was impeded at two locations where rock armour had been introduced by others to impede erosion of the riverbed. No archaeological or cultural heritage features were visible.

The construction of the proposed MetroLink Glasnevin Station will have a direct short term impact on the Royal Canal between the fifth and sixth locks. TII are engaging with Waterways Ireland to determine the feasibility of undertaking an underwater survey at this location to assess the condition of the canal chamber walls. TII have been informed by Waterways Ireland that an unauthorised utility pipe insertion caused damage to the northern chamber wall and that no maintenance of the canal at this location has taken place in recent years. MetroLink works proposed the temporary draining of the canal chamber, the *in situ* protection of the canal walls and the insertion of a temporary pile wall within the canal chamber. The proposed survey will allow TII to determine if the canal chamber wall can be protected *in situ*, and if any immediate repairs are required (by appropriate specialists using appropriate materials) to achieve this. TII will engage with the National Monuments Service, DHLGH to determine if a Dive licence pursuant to Section 3 (5) of the National Monuments Act 1930 (as amended) is required for this survey.

MetroLink requires the construction of a tunnel below the River Liffey between Eden Quay (at the intersection with Marlborough Street) in the north and Burgh Quay (at the intersection with Corn Exchange Place) in the south. This section of the River Liffey, 100m west of O’Connell Bridge (DCC_RPS 901) to Butt Bridge (NIAH Reg. No, 50060554) comprising approximately 19978m² was subject to a detailed underwater and inter-tidal archaeological assessment as a component of old Metro North works (ADCO 2008). The survey area incorporated the nineteenth-century quayside structures (Burgh Quay and Eden Quay; NIAH Reg. Nos 50060553 and 50020256), the late eighteenth and nineteenth-century O’Connell Bridge and a 19th century timber revetment associated with Burgh Quay. In addition, a possible fording-point was identified and recorded during the survey, 40m west

of O'Connell Bridge.

7.4.1 Licence and Consent Requirements

The MetroLink wade and detection surveys were carried out by ADCO Ltd under two separate Dive and Detection Licences pursuant to Sections 3(5) and 2(2) of the National Monuments Act 1930 (as amended): Licence Nos 19D0107 and 19R0255.

7.4.2 Archaeological Reporting

Reports detailing the results of the underwater, wade and detection surveys (old Metro North and MetroLink) were prepared upon completion each phase of works and submitted to the relevant authorities.

A report on the underwater survey of the Royal Canal will be prepared and submitted to the relevant authorities in due course.

7.4.2.1 Archaeological Reports Issued

ADCO (2008) *Underwater and Inter-tidal Archaeological Assessment, River Liffey, 100m west of O'Connell Bridge to Butt Bridge, Dublin City. 08D094, 08R310*. Unpublished Report by ADCO Ltd for IAC Ltd on behalf of Railway Procurement Agency. Available from:

<https://www.tii.ie/tii-library/archaeology/Metro%20North/Underwater%20Archaeological%20Survey,%20River%20Liffey>

ADCO (2009) *Broadmeadow River, Lissenhall Bridge, Balheary Demesne/Lissenhall Great, Swords, Co. Dublin 08D093, 08R311 and Baheary Bridge, Balheary Demesne, Swords, Co. Dublin 08D092, 08R312*. Unpublished Report by ADCO Ltd for IAC Ltd on behalf of Railway Procurement Agency. Available from:

<https://www.tii.ie/tii-library/archaeology/Metro%20North/Underwater%20Archaeological%20Survey,%20Broadmeadow%20and%20Ward%20Rivers>

ADCO (2020) *Archaeological Impact Assessment MetroLink Route Corridor 19D0107 and 19R0255, Waded Assessment and Metal Detection Survey, Broadmeadow River*.

Unpublished Report by ADCO Ltd for Jacobs Engineering on behalf of Transport Infrastructure Ireland.

7.5 Geotechnical Investigations

Three phases of Geotechnical Investigations (GI) were undertaken as a component of old Metro North works. These predominantly coincided with the proposed MetroLink alignment. Archaeological monitoring of culturally sensitive locations was undertaken for each phase of works (Collins 2010, McQuade 2010 and Ward 2011).



Five phases (Phase I-V) of GI works, comprising the excavation of new boreholes (NBH) and trial pits (TP) were undertaken for MetroLink from January 2019 to May 2021 (**Figure 8**). Phases I-IV were required to inform the preliminary design and EIAR of MetroLink. Phase V works were required to supplement an application to the Environmental Protection Agency (EPA) to determine if the MetroLink production residue is a by-product or waste in accordance with Article 27 of the European Communities (Waste Directive) Regulations 2011.

A review of each of the proposed NBH and TP locations was undertaken by the TII Project Archaeologist to identify which locations required archaeological monitoring. This decision process was informed by an analysis of archaeological information available from existing TII schemes, the proximity of the works to a known RMP and the receiving baseline environment (e.g. greenfield or brownfield land). The depth of required archaeological monitoring varied from a minimum of 0.5m in greenfield land to 4m in urban areas. Where archaeological stratigraphy or other heritage feature was recorded, it was a requirement that it be cleaned and recorded, and if possible that the borehole be moved to a new location. Table 5 sets out the archaeological monitoring requirements for Phase I-V.

All the above MetroLink works are now.

Table 5: Archaeological Monitoring Requirements for Phase I-V GI works

Phase	No of Trial Pits/Boreholes	No Requiring Archaeological Monitoring
I	51 No Boreholes 2 No Trial Pits	35 No Boreholes 2 No Trial Pits
II	30 No Boreholes 5 No Trial Pits	24 No Boreholes 5 No Trial Pits
III	10 No Boreholes	9 No Boreholes
IV	31 No Boreholes(incorporating 24 window sampling (WS) boreholes) 19 No Trial Pits 14 Foundation Inspection Pits 2 Inspection Pits	8 No Boreholes 12 No Trial Pits
V	67 boreholes (incorporation 9 WS boreholes) 51 Trial Pits 5 Inspection Pits	29 No Boreholes 21 No Trial Pits

A small number of cultural heritage features were identified inclusive of historic surfaces (Glasnevin and Berkeley Street); cellars (Parnell Street [Rotunda Hospital] and Hume Street); brick sewers (Berkeley Avenue) and made ground/demolition deposits. A number of small finds comprising 19th and 20th glass and ceramics and a possible prehistoric flint (analysis pending) were recovered.

7.5.1 Licence and Consent Requirements

The archaeological monitoring and excavation of MetroLink GI works was carried out under an Excavation Licence pursuant to Section 26(2) of the National Monuments Act 1930-2014 (as amended): Licence No 19E0152.

A Consent for works within and in proximity to St Stephen's Green Park was granted on 10 August 2021 (refer to Section 5.1).

7.5.2 Archaeological Reporting

A report detailing the results of the archaeological monitoring of the ground investigations was prepared upon completion of the Phase I-IV fieldwork and submitted to the relevant authorities. A report on the Phase V fieldwork has been completed and is being submitted to the relevant authorities.

A discrete report on the associated archaeological monitoring and metal detection of spoil within St Stephen's Green Park National Monument has been prepared and submitted to the relevant authorities upon completion of the works.

7.5.2.1 Archaeological Reports Issued

Breen, T. (2020a) *Report on the Archaeological Monitoring and Excavation of Preliminary Ground Investigations, MetroLink (Phase I), Dublin. Licence No. 19E0152.* Unpublished Report by ShanArc Archaeology for Causeway Geotechnical on behalf of Transport Infrastructure Ireland.

Breen, T. (2020b) *Report on the Archaeological Monitoring and Excavation of Preliminary Ground Investigations, MetroLink (Phase II), Dublin. Licence No. 19E0152.* Unpublished Report by ShanArc Archaeology for Causeway Geotechnical on behalf of Transport Infrastructure Ireland.

Breen, T. (2020c) *Report on the Archaeological Monitoring and Excavation of Preliminary Ground Investigations, MetroLink (Phase III), Dublin. Licence No. 19E0152.* Unpublished Report by ShanArc Archaeology for Causeway Geotechnical on behalf of Transport Infrastructure Ireland.

Breen, T. (2020d) *Report on the Archaeological Monitoring and Excavation of Preliminary Ground Investigations, MetroLink (Phase IV), Dublin. Licence No. 19E0152.* Unpublished



Report by ShanArc Archaeology for Causeway Geotechnical on behalf of Transport Infrastructure Ireland.

Collins, A. (2010) *Metro North, Metro West and Luas BXD, Archaeological Monitoring Report. Licence No. 09E0537*. Dublin: Unpublished Report by CRDS Ltd for WYG on behalf of Railway Procurement Agency.

McQuade, M. (2011) *Archaeological Monitoring Geotechnical Site Investigations, MN107 Mater Hospital to St Stephen's Green. Licence No. 10E0152*. Dublin: Unpublished Report by Margaret Gown & Co. Ltd for IGSL on behalf of Railway Procurement Agency.

Ward, K. (2011) *Archaeological Monitoring Report, Metro West and Metro North Dardistown Depot, Co. Dublin. Licence No. 10E0410*. Dublin: Unpublished Report by ADS Ltd for Geotechnical Specialists Ltd on behalf of Railway Procurement Agency.

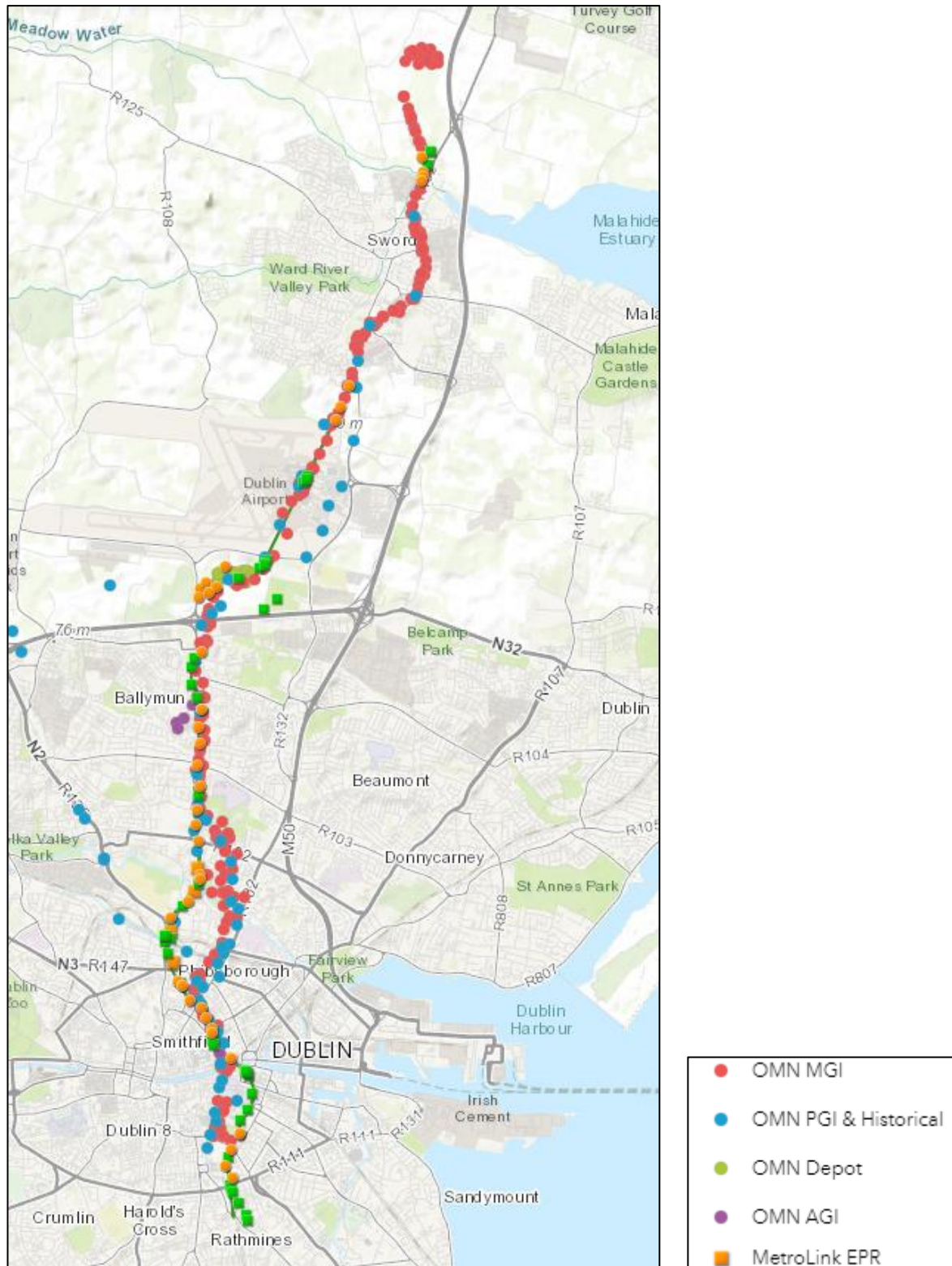


Figure 8: Map of Geotechnical Investigations on MetroLink, old Metro North and environs

7.6 Utility Surveys

Utility Surveys, entailing the excavation of utility slit trenches were undertaken as a component of Metro North works in 2009 and 2011. Utility slit trenches were excavated on North Circular Road, Leo Street, Parnell Square East, O'Connell Street, D'Olier Street, Westmoreland Street and St Stephen's Green (Doyle 2009a, 2009b, 2009c, 2009d; Dennehy 2011).

The Utility Survey for MetroLink initially comprised the undertaking of a desktop assessment, site reconnaissance (visual verification) followed by extensive non-invasive GPR survey along the route of the proposed project.

TII are currently preparing a procurement package to verify the presence or absence of underground utilities through the excavation of exploratory utility slit trenches. The number and location of proposed utility slit trenches is currently being determined with an intention to procure the Contractor for the works to commence in Q4 2022.

A review of the proposed survey locations will be undertaken by the TII Project Archaeologist in due course to identify which utility slit trenches have the potential to expose or impact upon previously unrecorded sub-surface archaeological features or deposits and will required movement to a revised location and/or archaeological monitoring.

TII will also review the slit trench layout to determine which investigations have the potential to inform TIIs Cultural Heritage Strategy. For example the archaeological monitoring of a slit trench in an area of unknown archaeological potential can provide similar results to an archaeological test trench providing information on the presence or absence of archaeological stratigraphy, and on the composition and depth of the underlying deposits (natural or manmade).

Alternatively, TII may use this contract to commission the excavation of a trench for strict archaeological purposes, where the excavation of a bespoke archaeological test trench might not otherwise be possible. For example in an area of high archaeological potential such as the proposed Tara Station and St Stephen's Green Station where the presence of numerous utilities, and the requirement for road closure notices, road and/or footpath excavation and reinstatement would otherwise prohibit archaeological test excavations.

The decision process will, as for the Geotechnical Investigations (refer to Section 7.5) be informed by an analysis of archaeological information available from existing TII schemes, the proximity of the works to a known RMP and the receiving baseline environment (e.g. greenfield or brownfield land).

Upon completion of the internal review process, and in advance of publication of tender



documents, the TII Project Archaeologist will liaise with the NMS, DHLGH to determine the final number of licences /archaeological teams required to facilitate the archaeological monitoring of these works. As three Contract Lots are currently envisaged, a minimum of three archaeological licences (1 per Contract lot) will be required.

Initial assessments have identified the requirement to excavate 5 No utility slit trenches within proximity of St Stephen's Green National Monument which will require archaeological monitoring and Ministerial Consent.

7.6.1 Licence and Consent Requirements

All archaeological monitoring and any required preservation by excavation will be subject to an Excavation Licence pursuant to Section 26(2) of the National Monuments Act 1930 (as amended). For each Contract Lot/required excavation licence the Contractors Archaeological Consultant will prepare the draft application form and method statement for the required licences, to be reviewed and approved by the TII Project Archaeologist in advance of submission to NMS, DHLGH.

A Section 14(2) application for Ministerial Consent to undertake the excavation of boreholes within St Stephen's Green Park was prepared by TII and lodged with DHLGH on 30 April 2021 (refer to Section 7.5.1).

7.6.2 Archaeological Reporting

A report detailing the results of the archaeological monitoring (per licence) of any utility slit trenching undertaken will be prepared upon completion of the fieldwork analysis and submitted to the relevant authorities.

7.6.2.1 *Archaeological reports issued*

Dennehy, E. (2011) *Archaeological Monitoring Report, Fusiliers Arch, St Stephen's Green National Monument, Metro North (MN107), Dublin 2*. Dublin: Railway Procurement Agency

Doyle, T. (2009a) *Archaeological Monitoring of Metro North Utility Slit Trenching, Dublin City. Licence Number 08E956*. Unpublished Report by Headland Archaeology Ltd for Railway Procurement Agency.

Doyle, T. (2009b) *Archaeological Monitoring of Metro North Utility Slit Trenching at St. Stephens Green, Dublin*, Ministerial Consent Registration Number. E3963. Unpublished Report by Headland Archaeology Ltd for the Railway Procurement Agency.

Doyle, T. (2009c) *Archaeological Monitoring of Metro North Utility Slit Trenching, O'Connell Street, Dublin. Ministerial Consent Registration Number E3964*. Unpublished Report by Headland Archaeology Ltd. for the Railway Procurement Agency

Doyle, T. (2009d) *Archaeological Monitoring of Metro North Utility Slit Trenching, O’Connell Street, Dublin. Ministerial Consent Registration Number E3965*. Unpublished report, Headland Archaeology Ltd. for the Railway Procurement Agency

7.7 Building Surveys

In order to inform the likely significant impact of the proposed project in terms of settlement, vibration, demolition and heritage, a representative survey of the buildings and structures along the proposed route of MetroLink was undertaken addressing either:

- 1) a specific type of building stock (e.g. Protected Structures, domestic dwellings, industrial or retail buildings);
- 2) structures of public importance (e.g. Government Buildings, Airports, Hospitals, Churches, Schools and Colleges); or
- 3) structures that may be impacted by proposed works (e.g. those directly above the tunnel alignment or adjacent to a proposed station location).

The appointed Consultants, ORS and Thorntons Chartered Surveyor’s, were required to identify general information on the building or structure, comment on its structural condition, list any defects, and highlight any features that could be particularly sensitive to ground movement or vibration. Each inspection was recorded using a Record Sheet Template and where possible each building / structure along the route was appraised and reported on in accordance with the criteria set out in Table 6. Where cracks or other defects were noted these were recorded and categorised in accordance with the BRE Digest 251 (1995) *Assessment of damage in low-rise buildings, with particular reference to progressive foundation movement*. The BRE Categorisation of damage with reference to cracking is set out in Table 7.

Table 6: Information to be gathered during the course of each building/structure survey

Criteria	Accuracy of Information Gathered
Property ID#	ID# to correspond with buildings / structures listed in Appendix 2.
Property Address	Address of Property / Structure
Property Owner / Occupier Details	Name : Contact No: Address if different to above:
Building Type / use	Residential / office / retail / other
Area	Corresponds to the buildings / structures location along the alignment.



Criteria	Accuracy of Information Gathered
Photographs	Photographs of building / structure cross-referenced to drawings so it is clear from where the building / structure is viewed in the photographs.
Age	What is the date of construction? If date is not known please give an estimate based on similar building stock in the area, and state clearly that an estimate has been given.
Structural Form	For the purpose of this survey, the Consultant is to ask the owner what type of structural form the building / structure has. If the owner is not able to produce this information then the Consultant is to establish the nature and structural form based on professional experience of similar building stock in the area. Where this judgement has been used this shall be recorded.
Height & No. of Stories	Building height is to be estimated to the nearest meter. The number of floors and form of construction is to be recorded.
Foundations	For this survey, the Consultant is to ask the owner what type of foundations exist beneath the building / structure and to what depth. If the owner is not able to provide this information, the Consultant is to make an assessment based on experience and knowledge of the building / structure type. Where judgement has been used this shall be recorded.
Basements	The report must confirm or exclude the presence of a basement. The depth of any basements can be estimated to within the nearest meter. The report must show if basements extend horizontally from the building in any direction. Dimensioned sketches and photographs shall be used to demonstrate this. The current use of the basement must be confirmed together with any access routes from outside of the building.
Building Extension	The Consultant is required to confirm or exclude the existence of any extensions including age, form of construction, form of connection to main building, extension foundations and approximate extension dimensions.
BRE Classification	The Consultant shall categorise the building in accordance with BRE 251 (1995) Damage Classification as outlined in Table 7 below. Where condition of building / structure is variable, the Consultant shall highlight areas of poor condition.



Criteria	Accuracy of Information Gathered
Comments	<p>The Consultant shall add any comments that may be relevant including:</p> <ul style="list-style-type: none"> - If owner/resident/agent has knowledge of information in relation to the building / structure, and state where the information is held. - Any local knowledge owner/resident/agent has made comment on with regards to their own or other buildings / structures in the vicinity. - Issues the owner/resident/agent has identified as relevant to the MetroLink Project including sensitive features. - Any major past or planned reconstruction of the building / structure. - Any features of the building /structure which may render the building / structure sensitive to ground movement - Report any difficulties encountered in accessing the building / structure including dates and times of denied access.
Checked by	The Consultant shall have sheets checked and signed by a suitably qualified engineer or surveyor before submitting to TII for approval.

Table 7: BRE Categorisation of Damage

Category of damage	Normal degree of severity	Limiting tensile strain (ϵ_{lim}) (%)	Description of typical damage
0	Negligible	0 - 0.05	Hairline cracks less than 0.1mm
1	Very Slight	0.05 - 0.075	Fine cracks easily treated during normal decoration
2	Slight	0.075 - 0.15	Cracks easily filled. Redecoration may be required. Some re-pointing may be required.
3	Moderate	0.15 - 0.3	Cracks require some opening up and can be patched by a mason. Re-pointing of external brickwork and possibly a small amount of brickwork to be replaced.
4	Severe	> 0.3	Extensive repair work involving breaking out and replacing sections of walls.
5	Very Severe	> 0.3	Requires a major repair job involving partial or complete rebuilding.



In addition to a physical survey of buildings and structures to comply with the criteria as set out in Table 6, the Consultants were required to search, source, and provide copies of available records and information in relation to foundation and structure details of each building / structure for inclusion in the Survey Report. At minimum, this was to include:

- 1) a search of the institutions and organisations identified in Table 8; and
- 2) enquiring of and obtaining records from building/structure owners or representatives.

Table 8: Institutions and Organisations to search for As-Constructed records

Institution / Organisation Name	Address
An Foras Forbartha	Organisation no longer exists. Records are available from The National Archives and Irish Architectural Archive.
Dublin City Council Building Control Office, and Planning Department	Dublin City Council, Civic Offices, Wood Quay, Dublin 8.
Dublin City Council Conservation Section	Development Department, Dublin City Council Block 3, Floor 3, Civic Offices, Dublin 8
Dublin City Library and Archive	Dublin City Library and Archive, 138 - 144 Pearse Street, Dublin 2.
Fingal City Council Conservation Section	Fingal County Council, Planning Department, County Hall, Swords, Co. Dublin
Irish Architectural Archive	Irish Architectural Archive, 45 Merrion Square, Dublin 2.
National College of Ireland	National College of Ireland, Mayor Street, Dublin 1.
Office of Public Works	Office of Public Works, Jonathan Swift Street, Trim, Meath, C15 NX36
The National Archives	National Archives, Bishop Street, Dublin 8.
The National Inventory of Architectural Heritage (NIAH)	NIAH, Department of the Housing, Local Government and Heritage and Local Government, Custom House, Dublin D01 W6X0



In all TII sought to survey 219 buildings or structures 190 of which were ultimately surveyed with a number of access issues encountered due to either restrictions imposed by the COVID19 pandemic, difficulties in identifying property owners or owners refusing permission to allow their property to be surveyed. A complete list of all buildings surveyed or for which TII endeavoured to surveyed is provided in Appendix 2. The Building Survey Reports were made available to all relevant specialists on the J/I EIAR team.

Table 9 sets out the buildings or structures of Cultural Heritage, for which access for survey was sought and/or granted.

Table 9: MetroLink condition surveys of buildings or structures of Cultural Heritage Merit

Description	No. for which access sought	No. for which access could not be gained or was refused	No. Surveyed
Building or Structure on the RPS only	19	8	11
Building or Structure on the NIAH only	19	1	18
Building or Structure on both the RPS and NIAH (excluding National Monuments)	78	N/A	78
National Monuments	2		2
Total Surveyed	118	9	109

Basement and Cellar Condition Surveys were undertaken for city centre properties referenced within the old Metro North RO. One hundred and twenty eight of these properties are within the MetroLink study area; a complete list for which provided in Appendix 3. Of these 128 properties, 33 were also surveyed for MetroLink as outlined in Table 9. The number cultural heritage merit of the properties surveyed as a component of old Metro North works are set out in Table 10.



Table 10: Old Metro North condition surveys of basements/cellars of Cultural Heritage Merit

Description	No. Surveyed
Property on the RPS only	4
Property on the NIAH only	32
Property on both the RPS and NIAH	67
Property not listed on either the RPS or NIAH	25
Total Surveyed for old Metro North	128
Properties Surveyed for both MetroLink and old Metro North	33

8 PACKAGES II-IV: PROPERTY OWNERS PROTECTION SCHEME

In order to safeguard properties during the construction of MetroLink, TII will facilitate private property owners in the undertaking of voluntary condition surveys. This will be facilitated through a contract known as the Property Owners' Protection Scheme ('POPS'). The premise of the scheme is that any owner of a private property located within the scheme area, may voluntarily sign up to the POPS and avail of free, independent condition surveys of their property. The purpose of the condition surveys is to ascertain the condition of properties before and after the completion of the MetroLink works in order to:

- Determine whether there has been any deterioration of any of the properties surveyed;
- Whether this deterioration may be attributable to the MetroLink works; and
- To recommend appropriate repairs.

POPS will be facilitated through a panel of three independent survey companies known as the Panel Surveyors. Participating property owners can ask one Panel Surveyor of their choosing to undertake a condition survey on their property, under instruction from TII. The POPS scheme area extends to properties up to 30m from the outer tunnel edge and 50m from the edge of a station box excavation. The survey information will be used to assist the property owner and TII in the swift and accurate verification of any property damage claims.

Condition surveys will take the form of:

- Pre-works Condition Surveys;
- Interim-works Condition Surveys (if required);
- Interim-works Condition Surveys (Post-repair works if required); and
- Post-works Condition Surveys.

In terms of Cultural Heritage, where the property is included on the RPS, condition surveys must be undertaken by the Panel Surveyor in the company of a Conservation Specialist who is:

- At minimum a Royal Institute of the Architects of Ireland (RIAI) Grade 2 Conservation Architect (or equivalent); or
- A member of the Royal Institution Chartered Surveyors (RICS) Building Conservation Accreditation Scheme (or equivalent); or
- Accredited on the Conservation Register for Engineers (CARE).

Where an RPS is of national or international importance or is a National Monument the Panel Surveyor shall ensure that all condition surveys are carried out by a Grade 1



Conservation Specialist (or equivalent).

For properties that are not designated as Protected Structures but have been identified as being of cultural heritage value, for example are on the NIAH, heritage elements shall be identified in the condition survey report prepared by the Panel Surveyor and must be surveyed by a Grade 2 or Grade 1 Conservation Specialist (or equivalent) as appropriate.

If defects are noted in pre-condition surveys it may be necessary to install crack monitors and undertake ongoing monitoring of effected properties.

Where repairs are deemed to be required as a result of significant cracking caused by MetroLink, a Repairs Recommendation Report shall be prepared and a property owner can apply to have their property rectified. Generally, significant cracking shall be defined as that in excess of Category 2 in accordance with the BRE classification provided in Table 7. However, for elements of properties of cultural heritage significance, a significant crack shall be that in excess of Category 1.

Where any repair works relate to Protected Structures, a Structural Engineer with relevant experience in relation to managing repairs to historic buildings, in consultation with a RIAI Conservation Architect (minimum Grade 2 or equivalent), shall be responsible for determining:

- Whether repairs are necessary,
- Whether the repairs are compatible to those generally outlined in the MetroLink EIAR; and
- If not, if such repairs constitute exempted development in accordance with Section 57 of the Planning and Development Act 2000 (as amended).

The POPS is currently in tender phase and work will commence upon receipt of an ERO.

9 PACKAGE II: ADVANCE WORKS

TII are in the process of procuring a consultant to provide Advance Works Engineering Design Services (AWEDS). The AWEDS will be and responsible for producing the detailed design, tender and contract documentation, and post contract engineering support for M100 series contracts (Advance Works). The TII Project Archaeologist and MetroLink PCA will work in collaboration with the AWEDS in the design of bespoke cultural heritage contracts (namely the M120 and M130 contracts) and will review all other contracts for their relevant Cultural Heritage requirements. The M100 series contracts currently comprise the following:

- M110 contract – Environment, Structures (including Demolition) and Land Access;
- M120 contract – Heritage Works;
- M130 contract – Archaeology Works;
- M140 (Central and Southern Section) – Utilities Works; and
- M150 (Northern) contracts – Utilities Works.

The detail of these contracts and their associated cultural heritage requirements is not yet finalised but the likely implications are set out in Section 9 below. The likely sequence for the execution of the Advance Works Contracts is set out in Figure 9.

Detail that is more exact will be provided in future revisions of this Cultural Heritage Strategy upon finalisation of the PR, receipt of the EIAR Cultural Heritage Chapters and upon receipt of any conditions that may be imposed by ABP within a granting of a RO.

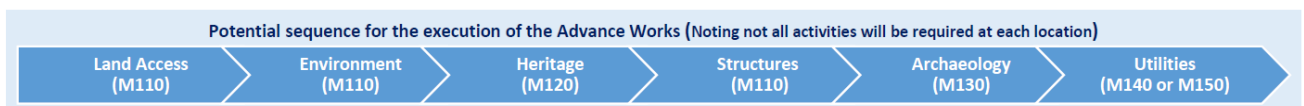


Figure 9: Potential Sequence of MetroLink Advance Works

9.1 M110: Environment, Structures and Land Access

MetroLink shall acquire land and property on a temporary and permanent basis to construct and operate MetroLink. The draft preliminary design has identified building and structures that need to be demolished, invasive and protected species that must be removed or relocated (respectively) and permanent and temporary fencing that must be erected to facilitate construction and operation of the project.

With reference to properties that are of cultural heritage value which must be demolished in whole or in part, TII at minimum pending the outcome of the EIAR will:

- Ensure the property, inclusive of known cellars, is comprehensively recorded by the PCA in advance of demolition;



- Ensure the requirements for structural monitoring of adjacent properties in advance and during the demolition works at each demolition site are in place;
- Ensure the archaeological requirements for monitoring any proposed removal of basement slabs are in place and that an Archaeological Consultant is engaged by the appointed Contractor; and
- Ensure protection methods, temporary works and/or permanent works required to preserve adjacent or adjoining structures or sites; are appropriate and in place prior to the commencement of demolition.

With reference to properties, which require the removal of invasive species and/or the erection of fencing, TII at minimum pending the outcome of the EIAR will:

- Ensure appropriate archaeological investigations take place in tandem with the environmental and fencing works to ensure that no inadvertent damage to known or potential archaeological stratigraphy occurs;
- Ensure that any required hoarding at culturally sensitive locations will be of the highest standard and clad with appropriate imagery the nature of which is to be agreed with relevant stakeholders.

9.2 M120: Heritage Works

A variety of heritage items are located along the MetroLink route from Estuary to Charlemont including National Monuments, RMPs, Protected Structures and items of cultural heritage value. These items must be removed to secure storage before certain Advance Works (e.g. M140 Utilities; Package II) or Main Works (Package IV) commence on site. TII will procure a bespoke Heritage Works Contractor to undertake this work and to maintain a secure storage facility:

The MetroLink PCA will input into the detailed design of the heritage works, which will include:

- Preparing specifications and draft methodologies for undertaking the conservation and heritage works to protect and safe guard all built heritage in accordance with best conservation practice;
- Consulting with various statutory and prescribed bodies to ensure approval of proposed specifications; and
- Advising on appropriate specialists.

With reference to cultural heritage constraints that must be removed to secure storage, TII will pending the outcome of the EIAR and recommendations of the PCA, at minimum:

- Ensure the Heritage Works Contractor is supported in all aspects of their works by a Conservation Architect;
- Ensure that all works are undertaken by appropriately skilled craftsperson;

- Ensure the Method Statements for each aspect of works are to appropriate standard and that all works are undertaken in strict accordance with said Method Statements;
- Ensure there is adequate liaison with all stakeholders;
- Ensure the storage facility is of appropriate scale, appropriately fit out with shelving, fire prevention systems and has 24 hour security;
- Ensure the PCA undertakes regular inspections of site works and inspections and audits of the Heritage Contractor's storage Facility;
- Ensure all items are appropriate will also ensure all items are appropriately cleaned, repaired and conserved (where necessary) and reinstated by the Heritage Works Contractor upon completion of the M400 and M500 contracts; and
- Ensure appropriate reporting on the Heritage Contractor's works is undertaken – including detailing of all cleaning, repair and conservation works undertaken.

9.3 M130: Archaeology

The archaeological investigation and resolution of archaeological constraints in greenfield land (from Estuary to Dardistown and M50 Station) and, where feasible, park land (Albert College Park: Intervention Shaft) and sports facilities (namely Griffith Park Station: Home Farm Football Club) will be required at various locations and these have been included in the Advance Enabling Works programme. These works will comprise a variety of techniques dependent on:

- 1) the nature of the receiving heritage constraint; and
- 2) the archaeological works already undertaken at the location to date, either as a component of MetroLink, old Metro North or as a component of an oversite development.

The archaeological techniques likely to be used will include archaeological geophysical surveys, underwater and detection surveys, archaeological test excavations, archaeological monitoring and, where necessary, preservation by record (excavation). This work will be carried out by specialist Archaeological Contractor(s).

The AWEDS will work with the TII Project Archaeologist to identify all archaeology constraints along the entire length of MetroLink as a component of the EIAR and create a series of scaled plans showing at each site location the required combination of archaeological investigations.

The M130 works can only commence on site upon receipt of an ERO and having the necessary land access arrangement in place. The TII Project Archaeologist will manage the M130 works.

9.4 M140 and M150 contract – Utilities

There are significant utilities works to be undertaken to facilitate MetroLink. The type of utilities impacted by MetroLink include:

- Water services (potable water mains, combined sewers, foul water pipes);
- Surface water drainage pipes;
- Low voltage, medium voltage and high voltage electricity cables (buried and overhead);
- Gas mains; and
- Broadband (including masts) and communication cables (buried and overhead).

The purpose of the utilities works are:

- Diversion: to divert a utility so that it is moved to outside the footprint of the main works and does not impact on progressing with the main works;
- Permanent strengthening: to strengthen an existing utility that could collapse (fully or partially) or be damaged due to the construction of the main works or the presence of the new works; and
- Provision: to provide new connections that are required for 1) operation of MetroLink and 2) main works (temporary power).

It is envisaged that for diversion of utilities, there may be a requirement to undertake a number of temporary diversions before the permanent diversion can be undertaken because the permanent diversion can only be undertaken once the main works are complete at the specific location.

The required excavations for MetroLink Utility works have the potential to expose previously unrecorded archaeological stratigraphy (inclusive of Georgian coal cellars). It is anticipated that the location of proposed utility diversions within greenfield environments will primarily have been resolved as a component of the M130 Archaeological Contract.

The Scope of Services for the M140 and M150 Utility Works will be reviewed by the TII Project Archaeologist for their potential archaeological impact and of particular archaeological potential are those works proposed within the southern section of the alignment from the Royal Canal to south of Charlemont which incorporates the zone of archaeological potential for the historic town of Dublin (RMP DU018-020----). This area incorporates the Georgian core where there is a potential to expose and impact upon coal cellars associated with both the Georgian buildings, and any earlier 17th and 18th century building they may have replaced.

The appointed M140 and M150 Utility Works Contractors will be required to appoint an Archaeological Consultant(s) as a component of their team to monitor all new ground works (excluding the lifting of existing hard landscaping surfaces). In the event that archaeological



stratigraphy or a cellar is identified, they will be required to determine if the material can be preserved in situ, and if not archaeological excavation within the utility impact zone will be required.

The Scope of Services for the M140 and M150 Utility Works will be reviewed by the PCA to determine the proximity of works to cultural heritage constraints that require protection *in situ*. TII will pending the outcome of the EIAR and recommendations of the PCA, at minimum:

- Ensure the M140 and/or M150 utility works contractor engages a Conservation Architect to implement the MetroLink PCAs specifications for any protection *in situ* works;
- The PCA will review all relevant Method Statements prepared by the M140 and/M150 Conservation Architect and
- The PCA will undertake all necessary site inspections of the works.

9.4.1 Licence and Consent Requirements

Each M100 series Contractor's Archaeological Consultants will be required to obtain the requisite Section 26(2) Excavation Licences and/or Section 14 Ministerial Consents pursuant to the National Monuments Act 1930 (as amended) in advance of commencement of site works. The number of Excavation Licences and Consents required will be determined in discussion with the TII Project Archaeologist and the National Monuments Service in advance of the procurement of each Contract.

10 PACKAGE III: ENABLING WORKS M300 SERIES

The M300 series package relates to base infrastructure works developed and built by third parties at Charlemont and O'Connell Street Stations.

As outlined in Section 3, all works at these locations that are sanctioned by TII are subject to the Code of Practice for Archaeology, irrespective of the planning process.

10.1 Charlemont Station

At Charlemont the station is to be located at No. 2 Grand Parade, partially beneath the Carroll's/Irish Nationwide building (DCC_RPS 3280) to north and extending to Dartmouth Road to south. The site is currently undergoing redevelopment by Grand Parade Property Trading Company DAC in accordance with a Bord Order issued by ABP (ABP-300873-18; DCC Planning Ref: 2373/17; 4755/19; 3505/20; 3486/20). As a component of these works the developer is constructing secant piled walls and a roof slab to accommodate and facilitate the MetroLink Works. The MetroLink related works at this location are scheduled for completion in September 2021.

10.2 O'Connell Street Station

At O'Connell Street Upper from No 43 in the north to 60 in the south. However in order to safeguard the overlying heritage properties the station design has been altered from the Preferred Route such that the primary buildings fronting onto Nos 59 and 60 O'Connell Street Upper, plus the associated reading room of No 59 will now be excluded from, and not directly impacted by the station works.

The oversite development at this location is to be provided by Dublin Central Ltd and will comprise a multi storey retail and office complex over multi-storey basement. The track level of the MetroLink station will be located at a depth of 26m at below current ground level incorporated into the proposed development and directly accessed from O'Connell Street Upper.

The oversite developer will complete the MetroLink Enabling Works that would accommodate the future station, but which would also ensure that the oversite developer's project was structurally independent of, and not prejudicial to, the MetroLink project. These Enabling Works comprise the provision of a structural 'box' positioned below ground, within which the MetroLink project can be positioned and above which the Developer's project can be constructed. The fit out of the station box will be undertaken by the M500 series contractor (refer to Section 11.2). In the event that the oversite developer does not receive planning permission for their development, then the necessary works will be undertaken by the MetroLink project.

10.3 Cultural Heritage Requirements for M300 works

At Charlemont Station, the developer engaged IAC Ltd to monitor all ground disturbance works associated with the construction of Planning Ref. 2373/17. The archaeological monitoring of these works was undertaken in two phases from May-July 2020 and from March to April 2021. The site was archaeologically monitored to a formation level of 11.8m O.D., which represented a 3.7m-4m reduction from the existing ground level, well into the underlying natural boulder clay (Duffey and Finney 2021)).

Overall, the site was found to be largely devoid of archaeological features, though a build-up of 19th century infill and clinker material was identified across the site. This deposit varied between 1m and 1.5m in depth. Towards the centre of the site, a stretch of wall comprising rubble coursed calp limestone constructed on a beam of concrete survived for a length of 4.9m. A brick lined ope within this wall measured 1m wide by 1.85m high. Extensive concrete foundations from a former warehouse were encountered along the western side of the site.

Additional ground reduction works to complete the construction of Charlemont Station will be required across the northern extent of this site. These works will be undertaken by the M401 Contractor's Archaeological Consultant (refer to Section 11.1)

At O'Connell Street Upper/Moore Street as a component of the Dublin Central Masterplan, the oversight developer commissioned Molloy & Associates Conservation Architects to:

- Compile an inventory of all building stock;
- Undertake an impartial assessment of the significance of the extant architectural heritage;
- Develop a Conservation Strategy for their proposed redevelopment of O'Connell Street Upper/Moore Street inclusive of the MetroLink Station; and
- Prepare all relevant architectural heritage impact assessment reports and EIAR Chapters.

In terms of archaeological and cultural heritage, the oversight developer commissioned Courtney Deery Heritage Consultancy Ltd. to undertake the archaeological and cultural heritage impacts assessments related to the Dublin Central Masterplan Area.

As TII is the Sponsoring Agency, the TII Project Archaeologist and MetroLink PCA have a role in the:

- Review of all cultural heritage documentation, inclusive of archaeological and architectural Method Statements prepared for M300 works; and
- Execution of all cultural heritage mitigation measures, inclusive of all archaeological monitoring, preservation by record (excavation) and post-excavation analysis.



10.4 Licence and Consent Requirements

Each M300 series Contractor's Archaeological Consultant will be required to obtain the requisite Section 26(2) Excavation Licences pursuant to the National Monuments Act 1930 (as amended) in advance of commencement of site works.

The Charlemont Station Enabling Works were carried out by IAC Ltd under Licence No 20E0394.

11 PACKAGE IV: MAIN WORKS

The Main Construction works for MetroLink will be procured as two main contract packages the M400 and M500 series contracts.

The M130 Heritage Contract will continue to operate in tandem with the Main Works, including:

- The continued operation of the secure storage facility,
- The repair, conservation and cleaning of heritage constraints
- The reinstatement of heritage constraints in tandem with the reinstatement of works areas by the M400 or M500 contractors; and
- If contractually required, the free issue of historic pavement for reinstatement by the M400 and M500 contractors.

11.1 M400 Series

As set out in Section 4 the M400 series contracts relate to the concurrent appointment of three Contractors, providing and responsible for producing, the detailed Design and Build for MetroLink Base Infrastructure comprising:

- Tunnelling works, surface route (cut and cover and retained cut sections) and at-grade sections;
- Underground and surface stations;
- Viaduct crossings of the M50 and Broadmeadow/ Ward Rivers; and
- Bulk earthworks at Dardistown Depot, at Estuary Station and Park and Ride Facility and at all underground station locations.

The M400 series contract packages cover three geographical Design and Build sections - Southern Central and Northern - as follows:

- **M401 contract – Southern Section (Northwood to Charlemont):**
 - Charlemont Station to the M50 excluding the viaduct
 - Bored tunnel and portal; evacuation / intervention shafts; and
 - All stations within the site boundaries and logistics associated with the works.
- **M402 contract – Central Section (Portal North of Dublin Airport to Northwood):**
 - M50 to north of Dublin Airport Tunnel
 - M50 Viaduct, surface route (retained cut, cut and cover) and at-grade sections;
 - Preparation of the depot site and access roads
 - Bored tunnels and DANP and DASP portals; evacuation/intervention shafts and two parallel mined tunnels; and
 - All stations within the site boundaries and logistics associated with the works.



- **M403 contract – Northern Section (Estuary to Portal North of Dublin Airport):**
 - North of Dublin Airport Tunnel to Estuary
 - All surface route structures and earthworks;
 - Stations that coincide with the surface route; and
 - Estuary bulk earthworks and preparation of site.

11.2 M500 Series

As set out in Section 4 M500 works relate to the appointment of a single PPP Design, Build & Operate Contractor providing and responsible for producing the detailed design, build and operation of MetroLink infrastructure and systems. These works will comprise:

- On a line-wide basis: track slab (on foundation by the civils contractors), permanent way;
- Power distribution, including sub-station fit-out; the traction and non-traction power installation and the overhead line equipment;
- Mechanical and electrical services (tunnels and stations), tunnel and station ventilation; life-safety and evacuation systems;
- Communications systems including railway, emergency services, and passenger communications (Wi-Fi, mobile, etc.);
- Design and provision of Grade of Automation (GoA4) metro system (rolling stock manufacture and supply and Platform Screen Doors; fleet maintenance
- Depot construction and fit-out;
- Estuary Station and Park & Ride Facility;
- Command and Control Signalling (CCS) including control-centre construction and fit-out; testing and commissioning; and
- Metro operator services, including operating the trains and other passenger services, stations facility management, asset monitoring, and routine and major maintenance of line wide infrastructure and systems.

11.3 Cultural Heritage: M400 and M500 series contracts

During M400 and M500 series works, archaeological monitoring and preservation by record (excavation) will be required in areas previously not accessible (e.g. parks, carriageway, city centre stations), or those not fully resolved during the AW M100 series contracts and for which preservation *in situ* is not possible. These works will be undertaken by the relevant Contractor's appointed Archaeological Consultants.

The M400 and M500 series Contractors will appoint Consultant Conservation Architects to implement required protection *in situ* works in line with the specifications prepared by the MetroLink PCA.



11.3.1 Licence and Consent Requirements

Each M400 and M500 series Contractor's Archaeological Consultants will be required to obtain the requisite Section 26(2) Excavation Licences and/or Section 14 Ministerial Consents pursuant to the National Monuments Act 1930 (as amended) in advance of commencement of site works. The number of Excavation Licences and Consents required will be determined in discussion with the TII Project Archaeologist and the National Monuments Service in advance of the procurement of each Contract.

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13 APPENDICES

Appendix 1: List of PCA Structural and Condition Surveys

Station	Architectural Heritage Constraint: Structural and Condition Survey Required	Proposed Work Specifications	New Foundation Design
Charlemont Station	Railway embankment walls	Protect in situ	N/A
Charlemont Station	Dartmouth Square Road / Mountpleasant Terrace Historic kerbing (intermittent)	Remove / Store / Reinstale	Required
Charlemont Station	Railings of 32-34 Dartmouth Road (DCC_RPS 2144-2146)	Protect in situ	N/A
Charlemont Station	Rear boundary walls of 1-17 Dartmouth Square West (DCC_RPS 2147-2163)	Protect in situ	N/A
Charlemont Station	19 and 19A Dartmouth Road	Protect in situ	N/A
Charlemont Station	Dartmouth Square ACA access steps from Grand Parade and historic lamp standard	Remove / Store / Reinstale	Required
St Stephen's Green Station	Railings, plinth walls and gates (entrance and wicket) on east perimeter of St Stephen's Green Park National Monument (DCC_RPS 7751)	Remove / Store / Repair / Reinstale	Required
St Stephen's Green Station	Wolfe Tone Monument, St Stephen's Green Park National Monument (NIAH Reg. No. 50100265)	Remove / Store / Repair / Reinstale	Required
St Stephen's Green Station	Tone Henge (granite monoliths to rear of Wolfe Tone), St Stephen's Green Park National Monument (NIAH Reg. No. 50100265)	Remove / Store / Repair / Reinstale	Required
St Stephen's Green Station	Hungry Heart Famine Memorial, St Stephen's Green Park National Monument (NIAH Reg. No. 50100264)	Remove/ Store/ Repair/ Reinstale	Required
St Stephen's Green Station	All paving and kerbs on the perimeter of St Stephen's Green Park National Monument, and all historic paving /kerbs and coal hole covers on St Stephen's Green East / North / South, Merrion Row and Hume Street (where present)	Remove/ Store/ Repair/ Reinstale	Required
St Stephen's Green Station	Granite and metal bollards, St Stephen's Green Park National Monument (DCC_RPS 7752)	Remove/ Store/ Repair/ Reinstale	Required
St Stephen's Green Station	Lamp standards St Stephen's Green Park National Monument (DCC_RPS 7752), St Stephen's Green East / North / South, Merrion Row and Hume Street	Remove/ Store/Repair/ Reinstale	Required
St Stephen's Green Station	Interior Railings (including Victorian lawn guards), St Stephen's Green Park National Monument	Remove/ Store/ Repair/ Reinstale	Required
St Stephen's Green Station	The Three Fates, St Stephen's Green Park National Monument (NIAH Reg. No. 50100276)	Protect <i>in situ</i>	N/A
St Stephen's Green Station	Fan detail paving and cobble paving to northeast and southeast entrances)	Remove/ Store/ Reinstale	Required
Tara Station	Countess Marckievicz Statue	Remove/ Store/ Repair/ Reinstale	Required
Tara Station	Historic kerbs / paving (where present on Townsend Street)	Remove/ Store/ Repair/ Reinstale	Required
Tara Station	Railings and gate adjacent to 22 Luke Street	Remove/ Store/ Novate	N/A
Tara Station	Fluted, flat top Cast iron bollards	Remove/ Store/ Repair/ Reinstale	Required
Tara Station	22-24 Luke Street	Demolish	N/A
Tara Station	Irish Rail – Loop Line bridge footing (where parallel to station box)	Protect <i>in situ</i>	N/A
Mater Station	Historic railings, gates, plinth walls and pillars to Mater Park and St Joseph's Church (DCC_RPS 736 and 737)	Remove/ Store/ Repair/ Reinstale	Required
Mater Station	Four Masters Statue, Mater Park (DCC_RPS 737)	Remove/ Store/ Repair/ Reinstale	Required
Mater Station	Healing hands sculpture, Mater Pak (DCC_RPS 737)	Remove/ Store/ Repair/ Reinstale	Required
Mater Station	Grotto in grounds of St Joseph's Church (DCC_RPS 736)	Remove/ Store/ Repair/ Reinstale	Required
Mater Station	St Joseph's Church (DCC_RPS 736)	Protect <i>in situ</i> / Required building and stained glass window conservation works	N/A
Mater Station	Dedicatory/Marker stone St Joseph's Church (DCC_RPS 736)	Remove/ Store/ Repair/ Reinstale	Required



Station	Architectural Heritage Constraint: Structural and Condition Survey Required	Proposed Work Specifications	New Foundation Design
Mater Station	Historic paving, kerbstones and cobblestones on Berkeley Road / Eccles Street / O'Connell Avenue (where present)	Remove/Store/Repair/Reinstate	Required
Mater Station	Historic post box, Berkeley Road	Remove/ Store/ Repair/ Reinstate	Required
Mater Station	Historic style lamp standards, Mater Station	Remove/ Store/ Repair/ Reinstate	Required
Mater Station	Mater Misericordiae Hospital boundary wall, gates, entranceway and windows (DCC_RPS 2437)	Protect <i>in situ</i>	N/A
Mater Station	20-21 Berkeley Road (NIAH Reg. No. 50060272 and 50060273)	Protect <i>in situ</i>	N/A
Glasnevin Station	Hedigan/Brian Boru Public House and curtilage (NIAH Reg No.50130022)	Demolish	N/A
Glasnevin Station	Heritage retaining railway walls, tunnels, bridges (Cross Guns Bridge NIAH Reg. No.50060185; Cross Guns Tunnel NIAH Reg. 50060112/OBD221 and OBD222; Cross Guns/Prospect Road Bridge OBO11) and any surviving historic elements e.g. lamp standards, telegraph poles, mile markers, platforms	Remove/ Store/ Repair/ Reinstate where applicable	Required
Glasnevin Station	Historic street furniture Glasnevin Station (lamp standards, bollards, post box, bins and approximately 20m granite kerbs)	Remove/ Store/ Repair/ Reinstate where applicable	Required
Glasnevin Station	Royal Canal including canal furniture (mooring rings/bollards, tow paths, locks and gates (NIAH Reg. Nos 50060184 and 50060182), canal walls, coping, paving and canal boundary walls	Remove/ Store/ Repair/ Reinstate where applicable	Required
Glasnevin Station	Railings, gates, pillars and plinth wall of St Vincent's Orphanage, Prospect Road (DCC_RPS 8698)	Remove/ Store/ Repair/ Reinstate where applicable	Required
Glasnevin Station	Historic MGWR bridge abutments (former railway line crossing, Royal Canal 6th lock)	Reuse as bridge footings	N/A
Glasnevin Station	Prospect Cemetery Bridge	Protect <i>in situ</i>	N/A
Glasnevin Station	Prospect Cemetery Walls (interior only)	Protect <i>in situ</i>	N/A
Glasnevin Station	Five Arch Bridge, MGWR	Protect <i>in situ</i>	N/A
Griffith Park Station	Historic railings, gates, plinth walls of Whitehall College, including historic railings as present on St Mobhi Road and surrounding Home Farm Football pitch (DCC_RPS 7746)	Remove/ Store/ Repair/ Reinstate	Required
Griffith Park Station	Vehicular and pedestrian entrance gates, piers and lanterns to Whitehall College (DCC_RPS 7746)	Remove/ Store/ Reinstate	Required
Griffith Park Station	Dean Swift Bridge and lamp standards (NIAH Reg. No. 50130053)	Protect <i>in situ</i>	N/A
Griffith Park Station	Historic Lamp Standards at entrance to St Mobhi Drive	Protect <i>in situ</i>	N/A
Griffith Park Station	Tolka Park entrance gates and railings, St Mobhi Road	Protect <i>in situ</i>	N/A
Albert College Park Intervention Shaft	Masonry boundary wall and gate, Ballymun Road / Hampstead Avenue	Remove/Store/Reinstate	Required
Collins Avenue Station	Our Lady of Victories: Building, stained glass windows and priest's grave (NIAH Reg. No. 50130121)	Protect <i>in situ</i>	N/A
Northwood Station to Dardistown Depot	Charter School: Gates, railings and curtilage walls, Old Ballymun Road	Remove/ Store/ Reinstate	Required
Northwood Station to Dardistown Depot	Charter School: Gate Lodge and out building, Old Ballymun Road	Demolish	N/A
Northwood Station to Dardistown Depot	Two storey house, Old Ballymun Road	Demolish	N/A
Northwood Station to Dardistown Depot	Stone wall on Old Ballymun Road	Demolish	N/A
Dublin Airport	Church of Our Lady Queen of Heaven (incorporating stained glass windows; FCC_RPS 0864)	Protect <i>in situ</i>	N/A
Fosterstown	Milestone Marker: Pinnock Hill, Swords Road (FCC_RPS 0866)	Protect <i>in situ</i>	N/A
Pinnock Hill Roundabout	Grotto, Veterinary Clinic	Remove/ Store/ Repair/ Reinstate	Required



Station	Architectural Heritage Constraint: Structural and Condition Survey Required	Proposed Work Specifications	New Foundation Design
Estuary Park and Ride	Balheary Demesne wall, Ennis Lane	Protect <i>in situ</i>	N/A
Estuary Park and Ride	Lissenhall Bridge National Monument (FCC_RPS 0341; RMP DU011-081----	Protect <i>in situ</i>	N/A
Estuary Park and Ride	Balheary Bridge (FCC_RPS 0340)	Protect <i>in situ</i>	N/A



Appendix 2: MetroLink Building/Structure Condition Surveys

Note: To be updated as project progresses

Note: Grey cells indicate properties identified for a condition survey for which TII representative could not gain or were refused access.

EIAR Zone	TII Ref.	EIAR Ref	Name/Property Type	Street No	Street/Townland	Area Code	Local Authority	RPS/RMP	NIAH
AZ1	B---		Woodies		Seatown Road, Swords	Dublin	FCC	N/A	N/A
AZ1	B000				Alan Dunne Fitness Swords	Dublin	FCC	N/A	N/A
AZ4	B-001		Permanent TSB Head Office	56-60	St Stephen's Green East	Dublin 2	DCC	DCC 7789	N/A
AZ4	B-002		Loreto College	53	St Stephen's Green East	Dublin 2	DCC	DCC 7786	50920301
AZ4	B-003		OPW	52	St Stephen's Green East	Dublin 2	DCC	DCC 7785	50920302
AZ4	B-004		Dept. of Justice and Equality	51	St Stephen's Green East	Dublin 2	DCC	DCC 7784	50920304
AZ4	B-005		Australian Embassy / Aralez Pharmaceuticals / IPUT PLC / Royal London Assurance	47-49	St Stephen's Green East	Dublin 2	DCC	N/A	N/A
AZ4	B-006		Housing Finance Agency	46	St Stephen's Green East	Dublin 2	DCC	N/A	N/A
AZ4	B-007		Ivor Fitzpatrick and Co.	44-45	St Stephen's Green East	Dublin 2	DCC	N/A	N/A
AZ4	B-008		Boston College / BC Active Research Ltd / Century Ireland / / Eoghan P. Clear Solicitors	42-43	St Stephen's Green East	Dublin 2	DCC	DCC 7782	50100289
AZ4	B-009		Forty One Restaurant	41	St Stephen's Green East	Dublin 2	DCC	DCC 7781	50100288
AZ4	B-010		Bank of Ireland	39	St Stephen's Green East	Dublin 2	DCC	DCC 7780	50100279
AZ4	B-011		Huguenot House -Various Businesses	35-38	St Stephen's Green North	Dublin 2	DCC	N/A	N/A
AZ4	B-012		The Spa at the Shelbourne	27	St Stephen's Green North	Dublin 2	DCC	DCC 7778 DU018-020646-	50100243
AZ4	B-013		Shelbourne Hotel	27	St Stephen's Green	Dublin 2	DCC	DCC 7778 DU018-020646-	50100243
AZ4	B-014		Department of Agriculture, Food & Marine		Merrion Street Upper	Dublin 2	DCC	DCC 5207	50100242
AZ4	B-015		Government Buildings (Department of Finance)		Merrion Street Upper	Dublin 2	DCC	DCC 5207	50100242
AZ4	B-016		Leinster House		Merrion Street Upper	Dublin 2	DCC	DCC 5207	50100242
AZ4	B-017		Leinster House		Kildare Street	Dublin 2	DCC	DCC 4198	50100221
AZ4	B-018		National Museum of Ireland - Archaeology		Kildare Street	Dublin 2	DCC	DCC 4199	50100222
AZ4	B-019		National Museum of Ireland - Natural History Museum		Merrion Street Upper	Dublin 2	DCC	DCC 5186	50100238
AZ4	B-020		National Library of Ireland		Kildare Street	Dublin 2	DCC	DCC 4197	50100219



EIAR Zone	TII Ref.	EIAR Ref	Name/Property Type	Street No	Street/Townland	Area Code	Local Authority	RPS/RMP	NIAH
AZ4	B-021		National Gallery of Ireland		Merrion Square West	Dublin 2	DCC	DCC 5191 - 5193	50100233
AZ4	B-022		Trinity Point	7-9	Leinster Street South (TCD)	Dublin 2	DCC	N/A	N/A
AZ4	B-023		Trinity Point	10-11	Leinster Street South (TCD)	Dublin 2	DCC	N/A	N/A
AZ4	B-024		Trinity Point	7-9	Leinster Street South (TCD)	Dublin 2	DCC	N/A	N/A
AZ4	B-025		Student Counselling Service	6	Leinster Street South (TCD)	Dublin 2	DCC	DCC 4786	50100204
AZ4	B-026		National Gallery of Ireland		Clare Lane/Merrion Square West	Dublin 2	DCC	DCC 51919 - 5193	50100341
AZ4	B-027		National Gallery of Ireland		Leinster Street South	Dublin 2	DCC	DCC 5191 - 5193	50100233
AZ4	B-028		Department of Transport Tourism and Sport	22	Clare Street	Dublin 2	DCC	N/A	N/A
AZ4	B-029		Commercial	1	Clare Street	Dublin 2	DCC	DCC 1878	50020453
AZ4	B-030		Insomnia	3	Leinster Street South	Dublin 2	DCC	DCC 4783	50020423
AZ4	B-031		Trinity College	20	Lincoln Place	Dublin 2	DCC	N/A	N/A
AZ4	B-032		Dept of Mechanical Manufacturing Engineering -Trinity College		Leinster Street South (TCD)	Dublin 2	DCC	N/A	50020419
AZ4	B-033		Dublin Dental University Hospital	22-28	Lincoln Place	Dublin 2	DCC	DCC 4828	500204240
AZ4	B-034		Dublin Dental University Hospital	22-29	Lincoln Place	Dublin 2	DCC	DCC 4828	500204240
AZ4	B-035		School of Chemistry - Trinity College		Leinster Street South (TCD)	Dublin 2	DCC	N/A	50020415
AZ4	B-036		Trinity College Zoological Museum, Trinity College Dublin - Anatomy & Physiology, School of Religions, Theology and Ecumenics		Leinster Street South (TCD)	Dublin 2	DCC	N/A	50020413
AZ4	B-037		Fitzgerald Building, School of Physics, Trinity College & SNIAM Building Trinity College		Leinster Street South (TCD)	Dublin 2	DCC	N/A	N/A
AZ4	B-038		Trinity College-Laser Unit		Leinster Street South (TCD)	Dublin 2	DCC	N/A	N/A
AZ4	B-039		Trinity College - Botany		Leinster Street South (TCD)	Dublin 2	DCC	N/A	50020411
AZ4	B-040		Luce Hall Trinity College		Leinster Street South (TCD)	Dublin 2	DCC	N/A	N/A
AZ4	B-041		Civil Engineering - Trinity College & Simon Perry Building Trinity College		Leinster Street South (TCD)	Dublin 2	DCC	N/A	50020410
AZ4	B-042		Trinity Business School		Pearse Street	Dublin 2	DCC	N/A	50020409
AZ4	B-043		St Marks Church	42A	Pearse Street	Dublin 2	DCC	DCC 6503 DU018-020347-	50020352
AZ4	B-044		The Trinity Inn/Dental University	37b	Pearse Street	Dublin 2	DCC	DCC 6502	50020348
AZ4	B-045		O'Neills Whiskey Bonders	37	Pearse Street	Dublin 2	DCC	DCC 6502	50020333



EIAR Zone	TII Ref.	EIAR Ref	Name/Property Type	Street No	Street/Townland	Area Code	Local Authority	RPS/RMP	NIAH
AZ4	B-046		O'Neills Town House	36	Pearse Street	Dublin 2	DCC	DCC 6501	50020332
AZ4	B-047		The School Tour Company	35	Pearse Street	Dublin 2	DCC	DCC 6500	50020331
AZ4	B-048		Sweeny O'Rourke Ltd	34	Pearse Street	Dublin 2	DCC	DCC 6499	50020330
AZ4	B-049		McCarty Centre	30-32	Pearse Street	Dublin 2	DCC	DCC 6497	50020328
AZ4	B-050		Solvar Fields Ltd	155	Townsend Street	Dublin 2	DCC	N/A	N/A
AZ4	B-051		Dublin Fire Brigade & Commercial Buildings	165-169	Townsend Street	Dublin 2	DCC	N/A	N/A
AZ4	B-052		National Concert Hall	National	Earlsfort Terrace	Dublin 2	DCC	DCC 2425	50920271
AZ4	B-053		Commercial (Eversheds Sutherland)	1	Earlsfort Terrace	Dublin 2	DCC	N/A	N/A
AZ4	B-054		The Irish Times	24-28	Tara Street	Dublin 2	DCC	N/A	50020524
AZ4	B-055		Commercial & Residential	17	Earlsfort Terrace	Dublin 2	DCC	DCC 2420	50110448
AZ4	B-057		George's Quay Apartments	George's	George's Quay	Dublin 2	DCC	N/A	N/A
AZ4	B-059		Eden House	15-17	Eden Quay	Dublin 1	DCC	DCC 2486	50010311
AZ4	B-060		Abbey Theatre	26-27	Abbey Street Lower	Dublin 1	DCC	N/A	N/A
AZ4	B-061		Lanigan's Plough	9	Abbey Street Lower/Marlborough Street	Dublin 1	DCC	DCC 2	50010272
AZ4	B-065		Clerys	18-27	O'Connell Street Lower	Dublin 1	DCC	DCC 6003	50010520
AZ4	B-067		GPO	GPO	O'Connell Street Lower	Dublin 1	DCC	DCC 6010	50010528
AZ4	B-070		Carlton Theatre	54	O'Connell Street Upper	Dublin 1	DCC	DCC 6025	50010543
AZ4	B-074		O'Connell Street Garda Station	44	O'Connell Street Upper	Dublin 1	DCC	DCC 6024	50010552
AZ4	B-075		Ned Kellys	43	O'Connell Street Upper	Dublin 1	DCC	DCC 6023	50010553
AZ4	B-076		Catholic Community Club	42	O'Connell Street Upper	Dublin 1	DCC	DCC 6022	50010554
AZ4	B-077		AIB	37-38	O'Connell Street Upper	Dublin 1	DCC	DCC 6021	50010558
AZ4	B-078		Parnell National Monument	Parnell	Parnell Street	Dublin 1	DCC	DCC 6020 DU018-425----	50010552
AZ4	B-079		Rotunda Hospital	Rotunda	Parnell Square	Dublin 1	DCC	DCC 6419 - 6420	50010619
AZ4	B-080		Rotunda IVF Clinic	Rotunda	Parnell Square	Dublin 1	DCC	DCC 6419 - 6420	50010620
AZ4	B-081		The Ambassador Theatre		Parnell Square	Dublin 1	DCC	DCC 6437	50010618
AZ4	B-082		Gate Theatre		Parnell Square East	Dublin 1	DCC	DCC 1338	50011031
AZ4	B-083		Netprint café	4	Cavendish Row	Dublin 1	DCC	DCC 1334	50011024
AZ4	B-084		Cassidys Hotel	6-8	Cavendish Row	Dublin 1	DCC	DCC 1336	50011022



EIAR Zone	TII Ref.	EIAR Ref	Name/Property Type	Street No	Street/Townland	Area Code	Local Authority	RPS/RMP	NIAH
AZ4	B-085		Cassidys Hotel	6-8	Cavendish Row	Dublin 1	DCC	DCC 1336	50011022
AZ4	B-086		Mandate Trade Union, O'lehan House	9	Cavendish Row	Dublin 1	DCC	DCC 1337	N/A
AZ4	B-087		Gaelscoil Cholaiste Mhuire & The Charles Stewart Dublin - Guest Accommodation	4-6	Parnell Square East	Dublin 1	DCC	DCC 6369 - DCC 6371	50011018
AZ4	B-088		Youthreach Transition Centre	10-10A	Parnell Square East	Dublin 1	DCC	DCC 6375	50011012
AZ4	B-089		The Competition Authority, Parnell House	13-15	Parnell Square East	Dublin 1	DCC	N/A	N/A
AZ4	B-090		Abbey Presbyterian church & Deaf Hear	17	Parnell Square North	Dublin 1	DCC	DCC 6379	50010910
AZ4	B-091		Castle Hotel	2-5	Frederick Street North/Gardiner Row	Dublin 1	DCC	DCC 2961	50010909 - 50010906
AZ4	B-092		Commercial & Residential	29	Frederick Street North	Dublin 1	DCC	DCC 2978	50010895
AZ4	B-093		Commercial & Residential	22	Frederick Street North	Dublin 1	DCC	DCC 2975	50010881
AZ4	B-094		Commercial & Residential	16-16A	Frederick Street North	Dublin 1	DCC	N/A	N/A
AZ4	B-095		Sackville Court Apartments & Commercial	74	Blessington Street	Dublin 7	DCC	N/A	N/A
AZ4	B-096		Commercial & Residential	6	Blessington Street	Dublin 7	DCC	DCC 772	50070437
AZ4	B-097		Commercial & Residential	14	Blessington Street	Dublin 7	DCC	DCC 779	N/A
AZ4	B-098		Commercial & Residential	15	Blessington Street	Dublin 7	DCC	DCC 780	50070432
AZ4	B-099		Commercial & Residential	4	Berkeley Street	Dublin 7	DCC	DCC 741	N/A
AZ4	B-100		Residential	4	Nelson Street	Dublin 7	DCC	N/A	N/A
AZ4	B-101		St Joseph's church		Berkeley Road	Dublin 7	DCC	DCC 736	50070414
AZ4	B-102		Mater Misericordia Hospital		Eccles Street	Dublin 7	DCC	DCC 2437	50060275
AZ4	B-103		Commercial & Residential	22A	Berkeley Road	Dublin 7	DCC	N/A	N/A
AZ4	B-104		Residential	2	St Vincent Street North	Dublin 7	DCC	N/A	50060611
AZ4	B-105		Residential	51	Goldsmith Street	Dublin 7	DCC	N/A	N/A
AZ4	B-106		Residential	2	Goldsmith Street	Dublin 7	DCC	N/A	N/A
AZ4	B-107		Commercial & Residential	384	North Circular Road/1 Goldsmith Street	Dublin 7	DCC	N/A	N/A
AZ4	B-108		Residential	380	North Circular Road	Dublin 7	DCC	N/A	N/A
AZ4	B-109		Commercial & Residential	377	North Circular Road	Dublin 7	DCC	N/A	N/A
AZ4	B-110		Residential	3	Library View Villas	Dublin 7	DCC	N/A	N/A



EIAR Zone	TII Ref.	EIAR Ref	Name/Property Type	Street No	Street/Townland	Area Code	Local Authority	RPS/RMP	NIAH
AZ4	B-111		Phibsborough Library		Royal Canal Bank, North Circular Road	Dublin 7	DCC	N/A	50060231
AZ4	B-113		McDonalds	144-145	Phibsborough Road	Dublin 7	DCC	N/A	N/A
AZ4	B-114		Commercial	141-142	Phibsborough Road	Dublin 7	DCC	N/A	N/A
AZ4	B-115		Residential	137	Phibsborough Road	Dublin 7	DCC	N/A	N/A
AZ4	B-116		Residential	101	Phibsborough Road	Dublin 7	DCC	N/A	N/A
AZ4	B-117		Commercial		Cross Guns Quay	Dublin 7	DCC	N/A	N/A
AZ4	B-118		Commercial & Residential	1-8	Cross Guns Quay	Dublin 7	DCC	N/A	N/A
AZ4	B-119		Residential	19	Prospect Avenue, Glasnevin	Dublin 9	DCC	N/A	N/A
AZ4	B-120		Residential	48	Prospect Avenue, Glasnevin	Dublin 9	DCC	N/A	N/A
AZ4	B-121		Commercial & Residential	4-5	Finglas Road	Dublin 11	DCC	N/A	N/A
AZ4	B-122		Sunnybank Hotel	68-70	Botanic Road	Dublin 9	DCC	N/A	N/A
AZ4	B-124		Our Lady of Victories Church		Ballymun Road	Dublin 9	DCC	N/A	50130121
AZ4	B-125		Ballymun Library	9	Ballymun Road	Dublin 11	DCC	N/A	N/A
AZ4	B-126		CEBT-Adult Education Service		Ballymun Road	Dublin 11	DCC	N/A	N/A
AZ4	B-127		Mixed use commercial & Residential - Ballymun Community Swimming Pool		Silloge Road	Dublin 11	DCC	N/A	N/A
AZ3	B-131		Dublin Airport Terminal 2		Dublin Airport	Dublin	FCC	N/A	N/A
AZ3	B-132		Dublin Aerospace Hangars		Dublin Airport	Dublin	FCC	N/A	N/A
AZ2	B-134		Smyths Toys Superstores / Commercial Centre		Airside Retail Park	Dublin	FCC	N/A	N/A
AZ2	B-136		Fujitsu Ireland Ltd		Airside Retail Park, Swords	Dublin	FCC	N/A	N/A
AZ1	B-137		Balheary Bridge		Balheary Park, Swords, Co. Dublin	Dublin	FCC	FCC 0340	11335018
AZ1	B-138		Lissenhall Bridge National Monument		Swords	Dublin	FCC	FCC 0341 DU011-081----	11335019
AZ4	B-139		Residential	54	Prospect Avenue	Dublin 9	DCC	N/A	N/A
AZ4	B-140		Residential	56	Prospect Avenue	Dublin 9	DCC	N/A	N/A
AZ4	B-141		Residential	24	St Teresa's Place	Dublin 9	DCC	N/A	N/A
AZ4	B-142		Residential	70	St Mobhi Road	Dublin 9	DCC	N/A	N/A
AZ4	B-143		Whitehall College of Further Education		St Mobhi Road	Dublin 9	DCC	DCC 7746	50130149
AZ4	B-145		Residential	114	Ballymun Road	Dublin 9	DCC	DCC 478	50130127



EIAR Zone	TII Ref.	EIAR Ref	Name/Property Type	Street No	Street/Townland	Area Code	Local Authority	RPS/RMP	NIAH
AZ4	B-147		Apartments 1-16, Earl Court		Adelaid Road	Dublin 2	DCC	N/A	N/A
AZ4	B-148		Commercial & Residential	22	Harcourt Terrace	Dublin 2	DCC	DCC 3572	50110476
AZ4	B-149		Commercial & Residential	6-7	Harcourt Terrace	Dublin 2	DCC	DCC 3566	50110468
AZ4	B-150		Residential	15	Dartmouth Square West	Dublin 6	DCC	DCC 21261	N/A
AZ4	B-151		Residential	32	Dartmouth Road	Dublin 6	DCC	DCC 2144	N/A
AZ4	B-155		Residential	48	Oakley Road	Dublin 6	DCC	DCC 5987	N/A
AZ4	B-157		Residential	19-36	Dalcassian Downs	Dublin 11	DCC	N/A	N/A
AZ4	B-158		Bank of Ireland	112	St Mobhi Road	Dublin 9	DCC	N/A	N/A
AZ4	B-159		Residential	41	Botanic Avenue	Dublin 9	DCC	N/A	N/A
AZ4	B-160		Residential	43	Botanic Avenue	Dublin 9	DCC	N/A	N/A
AZ4	B-161		Residential	18	St Mobhi Road	Dublin 9	DCC	N/A	N/A
AZ4	B-162		Residential	20	St Mobhi Road	Dublin 9	DCC	N/A	N/A
AZ4	B-163		Glasnevin Appliances	3-3a	St Mobhi Road	Dublin 9	DCC	N/A	N/A
AZ4	B-164		Rom Massey & Sons Funeral Home	1	St Mobhi Road	Dublin 9	DCC	N/A	N/A
AZ4	B-165		Linnbhla	1-29	Santry Cross	Dublin 11	DCC	N/A	N/A
AZ2	B-166		Dublin Airport Terminal 2 Gates 407 - 426		Dublin Airport	Dublin	FCC	N/A	N/A
AZ2	B-167		Terminal 2 Short Term Multi-storey car park		Dublin Airport	Dublin	FCC	N/A	N/A
AZ4	B-172		Emerald Casino	9	Eden Quay	Dublin 1	DCC	DCC 2482	50010315
AZ4	B-173		Clifton Court Hotel	10-11	Eden Quay	Dublin 1	DCC	DCC 2483 - 2484	50010314 - 50010313
AZ4	B-174		Lefroy House	12-14	Eden Quay	Dublin 1	DCC	DCC 2485	50010312
AZ4	B-175		Samaritans	112	Marlborough Street	Dublin 1	DCC	see Eden House	50060582
AZ4	B-176		Photocare	31	Abbey Street Lower	Dublin 1	DCC	N/A	50010280
AZ4	B-177		EuroGiant	32-33	Abbey Street Lower	Dublin 1	DCC	N/A	50010279
AZ4	B-178		Amplifon	34	Abbey Street Lower	Dublin 1	DCC	N/A	50010278
AZ4	B-179		Spar	35	Abbey Street Lower	Dublin 1	DCC	DCC 7	50010277
AZ4	B-187		Ladbrokes	73	Abbey Street Middle	Dublin 1	DCC	N/A	50010376
AZ4	B-188		Madigans	4	Abbey Street Lower	Dublin 1	DCC	N/A	50060530
AZ4	B-189		Boojum	3	Abbey Street Lower	Dublin 1	DCC	N/A	50060529



EIAR Zone	TII Ref.	EIAR Ref	Name/Property Type	Street No	Street/Townland	Area Code	Local Authority	RPS/RMP	NIAH
AZ4	B-190		Permanent TSB Bank	1-2	Abbey Street Lower	Dublin 1	DCC	N/A	50060527 50060528
AZ4	B-191		Permanent TSB Bank	12-13	O'Connell Street Lower	Dublin 1	DCC	N/A	50010517
AZ4	B-192		Paddywagon	14	O'Connell Street Lower	Dublin 1	DCC	DCC 5999	50010518
AZ4	B-193		Londis	15	O'Connell Street Lower	Dublin 1	DCC	DCC 6000	50010518
AZ4	B-194		Unity Building, Indulge, Tourist Office	16	O'Connell Street Lower	Dublin 1	DCC	DCC 6001	N/A
AZ4	B-195		Dublin Visitors Centre	17	O'Connell Street Lower	Dublin 1	DCC	DCC 6002	50010268
AZ4	B-198		Standard Life Assurance	65-66	O'Connell Street Upper	Dublin 1	DCC	DCC 6032	50010531
AZ4	B-199		Spar, Anna Livia Hotel	63-64	O'Connell Street Upper	Dublin 1	DCC	DCC 6031	50010532
AZ4	B-200		McDonald's	62	O'Connell Street Upper	Dublin 1	DCC	DCC 6030	50010531
AZ4	B-201		Residential Apartments	28-51	St Peters Square	Dublin 7	DCC	N/A	N/A
AZ4	B-202		North City Flour Mills		Cross Guns Quay	Dublin 7	DCC	DCC 6732	50060183
AZ4	B-203		Residential	20	Elmwood Avenue Upper	Dublin 6	DCC	N/A	N/A
AZ4	B-204		Residential	21	Elmwood Avenue Upper	Dublin 6	DCC	N/A	N/A
AZ4	B-205		Residential	22	Elmwood Avenue Upper	Dublin 6	DCC	N/A	N/A
AZ4	B-206		Residential	50	Oakley Court, Oakley Road	Dublin 6	DCC	DCC 5989	N/A
AZ4	B-207		Residential	41	Elmwood Avenue Lower	Dublin 6	DCC	N/A	N/A
AZ4	B-208		Residential	42	Elmwood Avenue Lower	Dublin 6	DCC	N/A	N/A
AZ4	B-209		Commercial - Bodyfirst Nutrition, Eamonn O'Boyle & Associates	51	Cullenswood Road	Dublin 6	DCC	N/A	N/A
AZ4	B-212		Residential	9	Manders Terrace	Dublin 6	DCC	DCC 4871	N/A
AZ4	B-213		Residential	8	Manders Terrace	Dublin 6	DCC	DCC 4870	N/A
AZ4	B-214		Commercial / Residential	11	Ranleagh Road	Dublin 6	DCC	N/A	N/A
AZ4	B-215		Commercial / Residential	13	Ranleagh Road	Dublin 6	DCC	N/A	N/A
AZ4	B-216		Ranelagh Luas Station		Ranleagh Road	Dublin 6	DCC	N/A	N/A
AZ4	B-217		Commercial	47	Ranelagh Road	Dublin 6	DCC	N/A	N/A
AZ4	B-218		Church and Hall	47a	Ranelagh Road	Dublin 6	DCC	N/A	N/A
AZ4	B-219		Ferney		Orchard Lane	Dublin 6	DCC	N/A	N/A
AZ4	B-220		Dexter Terrace,	41-42	Northbrook Road	Dublin 6	DCC	N/A	N/A
AZ4	B-221		Dexter Terrace,	43-44	Northbrook Road	Dublin 6	DCC	N/A	N/A



EIAR Zone	TII Ref.	EIAR Ref	Name/Property Type	Street No	Street/Townland	Area Code	Local Authority	RPS/RMP	NIAH
AZ4	B-222			19 & 20	Dexter Terrace, Northbrook Road	Dublin 6	DCC		N/A
AZ4	B-223		Dexter Terrace,	21-22	Northbrook Road	Dublin 6	DCC	N/A	N/A
AZ4	B-224			3	Northbrook Villas, Northbrook Road	Dublin 6	DCC		N/A
AZ4	B-225		Residential	4	Northbrook Villas, Northbrook Road	Dublin 6	DCC	N/A	N/A
AZ4	B-226			19 - 25	Dartmouth Road	Dublin 6	DCC	DCC 2165-2171	N/A
AZ4	B-227		Cosy Lodge Café	19A	Darthmouth Road	Dublin 6	DCC		N/A
AZ4	B-228		Nationwide House/Carrols building	2	Grand Parade	Dublin 6	DCC	DCC 3280	N/A
AZ1	B-230		Hertz		Swords Business Park	Dublin	FCC	N/A	N/A
AZ4	B-231		Our Lady Queen of Heaven		Corballis Road North, Dublin Airport	Dublin	FCC	FCC 0864	11349001
AZ4	B-232		The Sentinel Building	1-8	Gateway View	Dublin 11	DCC	N/A	N/A
AZ4	B-233		Residential	40-42	Gateway View	Dublin 11	DCC	N/A	N/A
AZ4	B-234			52	Dalcassian Downs	Dublin 11	DCC	N/A	N/A
AZ4	B-235		Residential	54	Goldsmith Street	Dublin 7	DCC	N/A	N/A
AZ4	B-236		Commercial & Residential	15	Berkeley Road	Dublin 7	DCC	N/A	N/A
AZ4	B-237		Commercial & Residential	8	Berkeley Road	Dublin 7	DCC	N/A	N/A
AZ4	B-238		Arthur Cox Building	10	Earlsfort Terrace	Dublin 2	DCC	N/A	N/A
AZ4	B-239		Commercial	1a	St Mobhi Road	Dublin 9	DCC	N/A	N/A
AZ4	B-240		Presbytery		Corballis Road North	Dublin	FCC	N/A	N/A
AZ4	B-241		Wynn's Hotel	36-38	Abbey Street Lower	Dublin 1	DCC	DCC 8	50010276
AZ4	B-242			2	Ranelagh Road	Dublin 6	DCC	N/A	N/A
AZ4	B-243		Prospect Lodge		Dalcassian Downs	Dublin 11	DCC	DCC 2097	50130020
AZ4	B-245		Science Gallery Building		Pearse Street	Dublin 2 (TCD)	DCC	N/A	N/A
AZ4	B-246		Hamilton Building		Westland Row (TCD)	Dublin 2	DCC	N/A	N/A
AZ4	B-249		Dental School	20	Lincoln Place (TCD)	Dublin 2	DCC	N/A	N/A
AZ4	B-251		Finn's Hotel	2	Leinster Street South (TCD)	Dublin 2	DCC	DCC 4782	50020422
AZ1	N/A		Footbridge		Estuary Roundabout, R132 Swords	Dublin	FCC	N/A	N/A
AZ1	N/A		Footbridge		Seatown Road Rouandabout R132 Swords	Dublin	FCC	N/A	N/A
AZ1	N/A		Footbridge		Chaple Lane R132 Swords	Dublin	FCC	N/A	N/A



EIAR Zone	TII Ref.	EIAR Ref	Name/Property Type	Street No	Street/Townland	Area Code	Local Authority	RPS/RMP	NIAH
AZ1	N/A		Footbridge		Malahide Road Roundabout	Dublin	FCC	N/A	N/A

Appendix 3: Old Metro North Basement and Cellar Condition Surveys

Note: To be updated as project progresses

EIAR Zone	TII Ref. Condition Survey	EIAR Ref	Name	Street No.	Street	Area Code	Local Authority	RPS	NIAH	Area Surveyed
AZ4	N/A		Abbey Capital	1	Cavendish Row	Dublin 1	DCC	DCC 1332	50011026	Basement/Cellar
AZ4	N/A		Mandate	9	Cavendish Row	Dublin 1	DCC	DCC 1337	50011021	Basement/Cellar
AZ4	N/A		Irish Nationwide	1	O'Connell Street Lower	Dublin 1	DCC	DCC 5991	50010318	Basement/Cellar
AZ4	N/A		Ulster Bank	2	O'Connell Street Lower	Dublin 1	DCC	DCC 5992	50010512	Basement/Cellar
AZ4	N/A		Ulster Bank	3	O'Connell Street Lower	Dublin 1	DCC	DCC 5992	50010511	Basement/Cellar
AZ4	N/A		Ulster Bank	4	O'Connell Street Lower	Dublin 1	DCC	DCC 5992	50010511	Basement/Cellar
AZ4	N/A		Hamilton Long Pharmacy	5	O'Connell Street Lower	Dublin 1	DCC	DCC 5993	50010510	Basement/Cellar
AZ4	N/A		Grand Central Cinema	6	O'Connell Street Lower	Dublin 1	DCC	DCC 5994	50010509	Basement/Cellar
AZ4	N/A		Grand Central Cinema	7	O'Connell Street Lower	Dublin 1	DCC	DCC 5994	50010510	Basement/Cellar
AZ4	N/A			8	O'Connell Street Lower	Dublin 1	DCC	DCC 5995	50010508	Basement/Cellar
AZ4	N/A			9	O'Connell Street Lower	Dublin 1	DCC	N/A	50010507	Basement/Cellar
AZ4	N/A			10	O'Connell Street Lower	Dublin 1	DCC	DCC 5996	50010275	Basement/Cellar
AZ4	N/A			11	O'Connell Street Lower	Dublin 1	DCC	DCC 5996	50010276	Basement/Cellar
AZ4	B-191		Permanent TSB Bank	12	O'Connell Street Lower	Dublin 1	DCC	N/A	50010517	Basement/Cellar
AZ4	B-191		Permanent TSB Bank	13	O'Connell Street Lower	Dublin 1	DCC	N/A	50010518	Basement/Cellar
AZ4	B-192		Paddywagon	14	O'Connell Street Lower	Dublin 1	DCC	DCC 5999	50010518	Basement/Cellar
AZ4	B-193		Londis	15	O'Connell Street Lower	Dublin 1	DCC	DCC 6000	50010518	Basement/Cellar
AZ4	B-194		Unity Building, Indulge, Tourist Office	16	O'Connell Street Lower	Dublin 1	DCC	DCC 6001	N/A	Basement/Cellar
AZ4	B-195		Dublin Visitors Centre	17	O'Connell Street Lower	Dublin 1	DCC	DCC 6002	50010268	Basement/Cellar



EIAR Zone	TII Ref. Condition Survey	EIAR Ref	Name	Street No.	Street	Area Code	Local Authority	RPS	NIAH	Area Surveyed
AZ4	B-065		Cleary's	18	O'Connell Street Lower	Dublin 1	DCC	DCC 6003	50010520	Basement/Cellar
AZ4	B-065		Cleary's	19	O'Connell Street Lower	Dublin 1	DCC	DCC 6003	50010520	Basement/Cellar
AZ4	B-065		Cleary's	20	O'Connell Street Lower	Dublin 1	DCC	DCC 6003	50010520	Basement/Cellar
AZ4	B-065		Cleary's	21	O'Connell Street Lower	Dublin 1	DCC	DCC 6003	50010520	Basement/Cellar
AZ4	B-065		Cleary's	22	O'Connell Street Lower	Dublin 1	DCC	DCC 6003	50010520	Basement/Cellar
AZ4	B-065		Cleary's	23	O'Connell Street Lower	Dublin 1	DCC	DCC 6003	50010520	Basement/Cellar
AZ4	B-065		Cleary's	24	O'Connell Street Lower	Dublin 1	DCC	DCC 6003	50010520	Basement/Cellar
AZ4	B-065		Cleary's	25	O'Connell Street Lower	Dublin 1	DCC	DCC 6003	50010520	Basement/Cellar
AZ4	B-065		Cleary's	26	O'Connell Street Lower	Dublin 1	DCC	DCC 6003	50010520	Basement/Cellar
AZ4	B-065		Cleary's	27	O'Connell Street Lower	Dublin 1	DCC	DCC 6003	50010520	Basement/Cellar
AZ4	N/A			28	O'Connell Street Lower	Dublin 1	DCC	DCC 6004	50010521	Basement/Cellar
AZ4	N/A			29	O'Connell Street Lower	Dublin 1	DCC	DCC 6005	50010522	Basement/Cellar
AZ4	N/A			31	O'Connell Street Lower	Dublin 1	DCC	DCC 6006	50010524	Basement/Cellar
AZ4	N/A			32	O'Connell Street Lower	Dublin 1	DCC	DCC 6007	50010525	Basement/Cellar
AZ4	N/A		Carrolls Irish Gifts	33	O'Connell Street Lower	Dublin 1	DCC	DCC 6008	50010526	Basement/Cellar
AZ4	N/A			34	O'Connell Street Lower	Dublin 1	DCC	DCC 6009	50010261	Basement/Cellar
AZ4	N/A		Penney's	35	O'Connell Street Lower	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A		Supermacs	45	O'Connell Street Lower	Dublin 1	DCC	DCC 6014	50010375	Basement/Cellar
AZ4	N/A		Supermacs	46	O'Connell Street Lower	Dublin 1	DCC	DCC 6014	50010375	Basement/Cellar
AZ4	N/A		Schuh	47	O'Connell Street Lower	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A		Schuh	48	O'Connell Street Lower	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A		Foot Locker	49	O'Connell Street Lower	Dublin 1	DCC	N/A	50010506	Basement/Cellar
AZ4	N/A		McDonalds	50	O'Connell Street Lower	Dublin 1	DCC	N/A	50010505	Basement/Cellar
AZ4	N/A		McDonalds	51	O'Connell Street Lower	Dublin 1	DCC	N/A	50010504	Basement/Cellar



EIAR Zone	TII Ref. Condition Survey	EIAR Ref	Name	Street No.	Street	Area Code	Local Authority	RPS	NIAH	Area Surveyed
AZ4	N/A		Eddie Rockets	52	O'Connell Street Lower	Dublin 1	DCC	N/A	50010503	Basement/Cellar
AZ4	N/A		Burger King	53	O'Connell Street Lower	Dublin 1	DCC	N/A	50010502	Basement/Cellar
AZ4	N/A		Burger King	54	O'Connell Street Lower	Dublin 1	DCC	N/A	50010503	Basement/Cellar
AZ4	N/A		Hickey's Pharmacy	55	O'Connell Street Lower	Dublin 1	DCC	N/A	50010501	Basement/Cellar
AZ4	N/A		The Daniel O'Connell	56	O'Connell Street Lower	Dublin 1	DCC	DCC 6015	50010321	Basement/Cellar
AZ4	N/A		Kylmore Café	1	O'Connell Street Upper	Dublin 1	DCC	DCC 6016	50010248	Basement/Cellar
AZ4	N/A		Kylmore Café	2	O'Connell Street Upper	Dublin 1	DCC	DCC 6016	50010248	Basement/Cellar
AZ4	N/A		McDowells Jewellers	3	O'Connell Street Upper	Dublin 1	DCC	N/A	50010536	Basement/Cellar
AZ4	N/A			4	O'Connell Street Upper	Dublin 1	DCC	N/A	50010537	Basement/Cellar
AZ4	N/A			5	O'Connell Street Upper	Dublin 1	DCC	N/A	50010538	Basement/Cellar
AZ4	N/A			6	O'Connell Street Upper	Dublin 1	DCC	N/A	50010538	Basement/Cellar
AZ4	N/A		Beshoffs	7	O'Connell Street Upper	Dublin 1	DCC	N/A	50010539	Basement/Cellar
AZ4	N/A		SPAR	8	O'Connell Street Upper	Dublin 1	DCC	N/A	50010247	Basement/Cellar
AZ4	N/A		Burger King	9	O'Connell Street Upper	Dublin 1	DCC	N/A	50010544	Basement/Cellar
AZ4	N/A		Burger King	10	O'Connell Street Upper	Dublin 1	DCC	N/A	50010544	Basement/Cellar
AZ4	N/A		Hammam Building	11	O'Connell Street Upper	Dublin 1	DCC	N/A	50010545	Basement/Cellar
AZ4	N/A		Hammam Building	13	O'Connell Street Upper	Dublin 1	DCC	N/A	50010546	Basement/Cellar
AZ4	N/A			14	O'Connell Street Upper	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A			15	O'Connell Street Upper	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A			16	O'Connell Street Upper	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A			17	O'Connell Street Upper	Dublin 1	DCC	DCC 6018	N/A	Basement/Cellar
AZ4	N/A		Madigan's	19	O'Connell Street Upper	Dublin 1	DCC	N/A	50010548	Basement/Cellar
AZ4	N/A		Gresham Hotel	20-23	O'Connell Street Upper	Dublin 1	DCC	DCC 6017	50010549 50010550	Basement/Cellar



EIAR Zone	TII Ref. Condition Survey	EIAR Ref	Name	Street No.	Street	Area Code	Local Authority	RPS	NIAH	Area Surveyed
AZ4	N/A			24	O'Connell Street Upper	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A			25	O'Connell Street Upper	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A			26	O'Connell Street Upper	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A			27	O'Connell Street Upper	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A			28	O'Connell Street Upper	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A			29	O'Connell Street Upper	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A			30	O'Connell Street Upper	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A			31	O'Connell Street Upper	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A			32	O'Connell Street Upper	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A			33	O'Connell Street Upper	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A			34	O'Connell Street Upper	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A			35	O'Connell Street Upper	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A			35	O'Connell Street Upper	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A		Centra	36	O'Connell Street Upper	Dublin 1	DCC	N/A	50010614	Basement/Cellar
AZ4	B-077		AIB	37-38	O'Connell Street Upper	Dublin 1	DCC	DCC 6021	50010558	Basement/Cellar
AZ4	N/A		Royal Dublin Hotel (now demolished)	40	O'Connell Street Upper	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A		Royal Dublin Hotel (now demolished)	41	O'Connell Street Upper	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	B-076		Catholic Community Club	42	O'Connell Street Upper	Dublin 1	DCC	DCC 6022	50010554	Basement/Cellar
AZ4	B-070		Carlton Cinema	52-54	O'Connell Street Upper	Dublin 1	DCC	DCC 6025	50010543	Basement/Cellar
AZ4	N/A		De Quirkey's Good Time Emporium	55	O'Connell Street Upper	Dublin 1	DCC	N/A	50010542	Basement/Cellar
AZ4	N/A		De Quirkey's Good Time Emporium	56	O'Connell Street Upper	Dublin 1	DCC	N/A	50010543	Basement/Cellar



EIAR Zone	TII Ref. Condition Survey	EIAR Ref	Name	Street No.	Street	Area Code	Local Authority	RPS	NIAH	Area Surveyed
AZ4	N/A		Carrolls Irish Gifts	57	O'Connell Street Upper	Dublin 1	DCC	DCC 6026	50010541	Basement/Cellar
AZ4	N/A		Carrolls Irish Gifts	58	O'Connell Street Upper	Dublin 1	DCC	DCC 6027	50010540	Basement/Cellar
AZ4	N/A		Dublin Bus	59	O'Connell Street Upper	Dublin 1	DCC	N/A	50060601	Basement/Cellar
AZ4	N/A		Dublin Bus	60	O'Connell Street Upper	Dublin 1	DCC	DCC 6028	50010535	Basement/Cellar
AZ4	N/A		Flanagan's Restaurant	61	O'Connell Street Upper	Dublin 1	DCC	DCC 6029	50010534	Basement/Cellar
AZ4	B-200		McDonald's	62	O'Connell Street Upper	Dublin 1	DCC	DCC 6030	50010531	Basement/Cellar
AZ4	B-199		Spar, Anna Livia Hotel	63	O'Connell Street Upper	Dublin 1	DCC	DCC 6031	50010532	Basement/Cellar
AZ4	B-198		Standard Life Assurance	65	O'Connell Street Upper	Dublin 1	DCC	DCC 6032	50010531	Basement/Cellar
AZ4	B-198		Standard Life Assurance	66	O'Connell Street Upper	Dublin 1	DCC	DCC 6032	50010531	Basement/Cellar
AZ4	N/A		Funland Amusements	67	O'Connell Street Upper	Dublin 1	DCC	DCC 6033	50010530	Basement/Cellar
AZ4	N/A		Londis	68	O'Connell Street Upper	Dublin 1	DCC	DCC 6034	50010529	Basement/Cellar
AZ4	N/A		Tourism Office	69	O'Connell Street Upper	Dublin 1	DCC	N/A	50010493	Basement/Cellar
AZ4	B-067		General Post Office		O'Connell Street Upper	Dublin 1	DCC	DCC 6010	50010528	Basement/Cellar
AZ4	N/A		ESB Substation		O'Connell Street Upper	Dublin 1	DCC	N/A	N/A	ESB Sub-station
AZ4	B-079		Rotunda Hospital		Parnell Square	Dublin 1	DCC	DCC 6419 - 6420	50010619	Basement/Cellar
AZ4	B-081		Ambassador Theatre		Parnell Square	Dublin 1	DCC	DCC 6437	50010618	Basement/Cellar
AZ4	N/A			1	Parnell Square East	Dublin 1	DCC	DCC 6366	50011020	Basement/Cellar
AZ4	N/A			2	Parnell Square East	Dublin 1	DCC	DCC 6367	N/A	Basement/Cellar
AZ4	N/A			3	Parnell Square East	Dublin 1	DCC	DCC 6368	N/A	Basement/Cellar
AZ4	B-087		Gaelscoil Cholaiste Mhuire & The Charles Stewart	4	Parnell Square East	Dublin 1	DCC	DCC 6369	50011018	Basement/Cellar



EIAR Zone	TII Ref. Condition Survey	EIAR Ref	Name	Street No.	Street	Area Code	Local Authority	RPS	NIAH	Area Surveyed
			Dublin - Guest Accommodation							
AZ4	B-088		Gaelscoil Cholaiste Mhuire & The Charles Stewart Dublin - Guest Accommodation	5	Parnell Square East	Dublin 1	DCC	DCC 6370	50011018	Basement/Cellar
AZ4	B-089		Gaelscoil Cholaiste Mhuire & The Charles Stewart Dublin - Guest Accommodation	6	Parnell Square East	Dublin 1	DCC	DCC 6371	50011018	Basement/Cellar
AZ4	N/A		Hotel Saint George	7	Parnell Square East	Dublin 1	DCC	DCC 6372	50011015	Basement/Cellar
AZ4	N/A			8	Parnell Square East	Dublin 1	DCC	DCC 6373	50011014	Basement/Cellar
AZ4	N/A			9	Parnell Square East	Dublin 1	DCC	DCC 6374	50011013	Basement/Cellar
AZ4	B-088		Youthreach Transition Centre	10-10A	Parnell Square East	Dublin 1	DCC	DCC 6375	50011012	Basement/Cellar
AZ4	N/A			11	Parnell Square East	Dublin 1	DCC	DCC 6376	50011011	Basement/Cellar
AZ4	N/A		Top of the Town	12	Parnell Square East	Dublin 1	DCC	DCC 6377	50011010	Basement/Cellar
AZ4	B-089		The Competition Authority, Parnell House	15	Parnell Square East	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	B-082		Gate Theatre		Parnell Square East	Dublin 1	DCC	DCC 1338	50011031	
AZ4	B-090		Abbey Presbyterian Church		Parnell Square North	Dublin 1	DCC	DCC 6379	50010910	Basement/Cellar
AZ4	N/A		Patrick Conway's Pub	70	Parnell Street	Dublin 1	DCC	DCC 6423	50010561	Basement/Cellar
AZ4	N/A			71	Parnell Street	Dublin 1	DCC	N/A	50010562	Basement/Cellar
AZ4	N/A		TJs Coffee Bar	79	Parnell Street	Dublin 1	DCC	N/A	50060401	Basement/Cellar
AZ4	N/A		The Gate Hotel	80	Parnell Street	Dublin 1	DCC	N/A	50060400	Basement/Cellar



EIAR Zone	TII Ref. Condition Survey	EIAR Ref	Name	Street No.	Street	Area Code	Local Authority	RPS	NIAH	Area Surveyed
AZ4	N/A		The Gate Hotel	81	Parnell Street	Dublin 1	DCC	N/A	50060399	Basement/Cellar
AZ4	N/A			158	Parnell Street	Dublin 1	DCC	DCC 6436	50011029	Basement/Cellar
AZ4	N/A			159	Parnell Street	Dublin 1	DCC	N/A	50081114	Basement/Cellar
AZ4	N/A		Hop House	160	Parnell Street	Dublin 1	DCC	N/A	50011028	Basement/Cellar
AZ4	N/A			161	Parnell Street	Dublin 1	DCC	N/A	N/A	Basement/Cellar
AZ4	N/A			163	Parnell Street	Dublin 1	DCC	N/A	N/A	Basement/Cellar



Appendix 4: Locations Requiring Archaeological Resolution during M130 contract

Note: To be completed

Appendix 5: Cultural Heritage Mitigation Requirements per Contract Package

Note: To be completed

LOCATION: Impacted Sites			MITIGATION REQUIREMENTS (Advance Works:M100 Series)					Mitigation Requirements (Enabling Works M300 Series)		MITIGATION REQUIREMENTS (Main Works: M400 and M500 Series)				
Station:	RMP/ RPS/ NIAH No.	EIAR No.	Environment, Structures and Land Access M110	Heritage Works (M120)	Archaeological Works M130	Utilities M140 and M150	Vibration /Settlement Monitoring	O'Connell Station	Charlemont Station	Archaeological Monitoring	Heritage Works (Storage/Reinstatement)	Vibration/Settlement Monitoring	Protection <i>in situ</i>	Preservation by Excavation



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