

Assessment Report on the Results of Metro North Advance Archaeological Test Trenching,

Testing Area 7, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN101/MN102) Seatown Stop and Fosterstown Park & Ride.

Excavation Licence Number: 09E465 Director: Brendan Fagan and William O. Frazer Report Authors: William O. Frazer, Brendan Fagan, Orlaith Leinihan & James Hession Project Code: RPMN08 Client: Railway Procurement Agency RPA 7120_5 Townland: Swords Demesne and Miltonsfield townlands Ordnance Datum: 71.48 m NGR: 318478/246114



Assessment Report on the Results of Metro North Advance Archaeological Test Trenching,

Testing Area 7, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN101/MN102) Seatown Stop and Fosterstown Park & Ride.

Excavation Licence Number: 09E465 Director: Brendan Fagan and William O. Frazer Report Authors: William O. Frazer, Brendan Fagan, Orlaith Leinihan & James Hession Project Code: RPMN08 Client: Railway Procurement Agency RPA 7120_5 Townland: Swords Demesne and Miltonsfield townlands Ordnance Datum: 71.48 m NGR: 318478/246114

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

DOCUMENT HISTORY LOG

Revision	Report Status	Issue Date	Description	Prepared by	Checked by	Approved by
01	1 st Draft	11/2/2010	Advance archaeological test trenching assessment report, Testing Area 7, Sub- area 18, for Metro North	OĹ, WOF, JH and BF	JH and PL	PĹ

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

CONTENTS		PAGE
	SUMMARY	5
1.0	INTRODUCTION	7
2.0	SITE LOCATION AND DESCRIPTION	9
3.0	PROJECT BACKGROUND	10
3.1	Environmental Impact Statement	10
3.2	Archaeological Strategy Document	10
3.3	Previous Metro North Investigations	10
4.0	ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	11
5.0	OBJECTIVES	14
6.0	METHODOLOGY	14
7.0	RESULTS	17
7.1	General	17
7.2	Post-medieval agricultural features	18
7.3	Miltonsfield 1 (Sub-area 18, Test Trench 4)	19
7.4	Miltonsfield 2 (Sub-area 19)	20
7.5	Interpretative assessment of the geophysical survey	24
	anomalies in Testing Area 7, Sub-area 18	
8.0	IMPACT ASSESSMENT	24
9.0	PROPOSED MITIGATION	25
	REFERENCES	28

APPENDICES

- Appendix 1: Field Register
- Appendix 2: Trench Register
- Appendix 3: Context Register
- Appendix 4: Sample Register
- Appendix 5: Drawing Register
- Appendix 6: Photograph register
- **Appendix 7:** Archive Quantities

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

LIST OF TABLES

- Table 1:
 Testing areas and their assigned excavation licence numbers
- Table 2:
 RMPs located in the vicinity of Testing Area 7
- Table 3:
 Summary of identified archaeological sites and estimate of resources required

LIST OF FIGURES

Figure 1:	Testing Area 7 location including RMP extract			
Figure 2:	Testing Area 7, Sub-areas 16 and 17 Test Trench Layout			
Figure 3:	Testing Area 7, Sub-areas 18 and 19, Overview of Test Trench layout and archaeological features			
Figure 4:	Location of archaeological features in Test Trench 4			
Figure 5:	Sub-area 19, Test Trench 4 Plan of archaeological features (Miltonsfield 2)			
Figure 6:	Sub-area 19, Test Trench 4. Southwest-facing section of large pit (021)			
Figure 7:	Sub-area 19, Test Trench 4. South-facing section of possible posthole (019) and adjacent metalled surface (024) and overlying spread (020)			

LIST OF PLATES

- Plate 1: Mid-excavation view of pit (101) within Sub-area 18, Test Trench 4, facing east
- Plate 2: General view of Sub-area 19, Test Trench 3, looking northeast
- Plate 3: View of extent of metalled surface (024, demarcated by ranging rods), and adjacent large pit (021, right) in Sub-area 19, Test Trench 4, facing south-southwest
- Plate 4:Detail of rough-metalled surface (024) with channel drain (042), centre
right) in Sub-area 19, Test Trench 4-offset-B, facing east-northeast

File Name: Metro North Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

- Plate 5: View of building remains in Sub-area 19, Test Trench 4 possible postholes (019, front right; 026, centre left), metalled surface (024, right side of main trench) and overlying spread (020, left in baulks within main trench), large pit (021, left rear of main trench), facing north northeast
- Plate 6: Detail of metalled surface (024) and adjacent large pit (021, left), facing north northeast
- Plate 7:Mid-excavation view of possible posthole (019), within Sub-area 19,Test Trench 4, facing north
- Plate 8: Detail of modern road surface identified within Test Trench 1, Subarea 16.
- Plate 9: Detail of modern water/storm drainage services in vicinity of Test Trench 2, Sub-area 17.

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

SUMMARY

Metro North is a light rail project, the route of which will run along a proposed 18 km corridor, from Belinstown in North County Dublin, through Dublin Airport, to the City Centre at St. Stephen's Green.

Headland Archaeology (Ireland) Ltd was commissioned by the Railway Procurement Agency (RPA) to carry out advance archaeological testing of the proposed Metro North scheme. For the purposes of archaeological assessment the Metro North route has been sub-divided into fourteen testing areas, TA 1–14. This report outlines the results of Advance Archaeological Test Trenching undertaken in Testing Area 7 Swords Demesne and Miltonsfield townlands (MN101/102), Co. Dublin on the footprint of the Seatown Stop and Fosterstown Park & Ride area (09E465; Figures 1–3).

The programme of advance archaeological testing for Metro North was carried out following a series of non-invasive archaeological investigations including an Environmental Impact Assessment (EIA; CRDS Ltd 2008), the preparation of an Archaeological Strategy Document (MGL Ltd 2007) and a programme of geophysical survey (08R0117; Thebaudeau and Harrison 2009).

There are no Heritage constraints identified by the EIS for Testing Area 7, although there are four recorded archaeological sites listed in the RMP within approximately 550 m of the testing area (Table 1). These included three ritual sites (DU011-045), (DU012-022) and (DU011-037) and a Font (DU011-070). None of these recorded monuments will be impacted directly upon by the proposed scheme.

The geophysical survey carried out in Testing Area 7 (Sub-areas 16-19) was only able to survey Sub-area 18. The survey noted a few features of archaeological potential in this Sub-area, including several parallel short east northeast–west southwest orientated trends interpreted as plough marks or field furrows, occasional amorphous positive responses and areas of magnetic disturbance (G51; Thebaudeau and Harrison 2009, 26).

The advance archaeological testing of Sub-area 18, Testing Area 7 (09E465) within Miltonsfield townland was carried out on the 23rd September 2009. Sub-area 19 (Miltonsfield td), was tested on 14th-15th October 2009 with Sub-areas 16 and 17 (Swords Demesne) tested on the 19th January 2010. Seventeen test trenches were

excavated within Testing Area 7, amounting to a total of 1109 linear metres, of 2.0 mwide test trenches (2218 m²). This comprised 9.28% of the entire testing area.

Two archaeological sites were identified within Testing Area 7. These included (from south to north): Miltonsfield 1, Sub-area 18; a pit (101) (Plate 1)containing heat-affected stones and charcoal-stained silt, of possible prehistoric/Bronze Age date (*c*.2200–500BC), and Miltonsfield 2, Sub-area 19; the remains of a sub-rectangular building and associated field system, of possible early-medieval/late medieval date (*c*.AD500–1600), (Figures 3-12; Plates 3-7). Other features of archaeological potential noted in the geophysical survey were identified as the remains of late post-medieval and modern agricultural activity, namely plough furrows, field boundaries, land drains and stone sockets, and were not considered to be of archaeological significance.

This report outlines the results of the archaeological testing and assesses the impact of the proposed Metro North scheme on Testing Area 7. As this testing area is within the proposed location of the Seatown stop and the Fosterstown Park & Ride, any sub-surface archaeology is likely to be subject to a direct negative impact from ground works associated with site preparation works (including removal of topsoil) and any other sub-structure construction associated with the stop and Park & Ride facility. It is therefore recommended that archaeological excavation of the two sites (Miltonsfield 1 and 2) be carried out prior to construction works.

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

1.0 INTRODUCTION

This document is submitted as an assessment report on the Advance Archaeological Testing of Metro North, Testing Area 7, Swords Demesne and Miltonsfields townlands (MN101/MN102), Co. Dublin (09E465; Seatown Stop and Fosterstown Park & Ride; Figs 1–3).

Metro North will be a combined underground and surface light rail service development, segregated from traffic using tunnel, road median and Greenfield construction environments. The Metro North route will run along a proposed 18 km corridor, from Belinstown in North County Dublin, through Dublin Airport, to the City Centre at St. Stephen's Green.

The route of the Metro North is generally a north–south alignment. It will have stops at Belinstown (where its depot will be located), Lissenhall (provisional), Estuary, (provisional), Seatown, Swords, Fosterstown, Dublin Airport, Dardistown, Northwood, Ballymun, Dublin City University, Griffith Avenue, Drumcondra, Mater Hospital, Parnell Square, O' Connell Bridge and St. Stephen's Green.

Testing Area 7 incorporates the Seatown stop located to the east of Swords adjacent to the R132 and the Fosterstown Park and Ride facility located in the vicinity of the Airside Retail Park, and as such it will be intensively developed.

The purpose of the advance testing was to determine the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts along the route so as to inform the subsequent archaeological strategy in advance of construction. All areas of archaeological potential, sites and significant features recorded for the footprint of the proposed scheme in the Metro North EIS or subsequently identified by the Metro North geophysical survey were investigated as part of the testing programme.

For the purposes of design and construction the Metro North route has been broken into seven zones or section areas (MN101-MN107):

Area 1 MN101 - Lissenhall to Fosterstown;

- Area 2 MN102 South of Fosterstown to Dublin Airport Boundary (North);
- Area 3 MN103 Dublin Airport;

Area 4	MN104 - Dublin Airport Boundary (South) to M50 motorway;
--------	--

- Area 5 MN105 M50 (South) to Dublin City University (DCU);
- Area 6 MN106 DCU to Mater Hospital; and

Area 7 MN107 - Mater Hospital to St Stephen's Green

For management purposes, the Metro North route has been sub-divided into fourteen archaeological testing areas (TA1–14) by the RPA Project Archaeologist and each of these areas has been assigned an individual excavation licence number (see Table 1).

Testing Area	Excavation License No.
TA1	09E450
TA2	09E448
TA3	09E449
TA4	09E462
TA5	09E463
TA6	09E464
TA7	09E465
TA8	09E466
TA9	09E467
TA10	09E478
TA11	09E479
TA12	09E480

File Name: Metro North Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

Testing Area Excavation License No.		
	Testing Area	
TA13 09E481	TA13	09E481
TA14 09E482	TA14	09E482

Table 1: Testing areas and their assigned excavation licence numbers.

2.0 SITE LOCATION AND DESCRIPTION

Testing Area 7, incorporating the footprint of the Seatown Stop and Fosterstown park and ride facility, is located in the townlands of Swords Demesne and Miltonsfield, Barony of Nethercross, parish of Swords, Co. Dublin (Figure 1).

Testing Area 7 is divided into two areas situated approximately 1.2 km apart. The northern part of the testing area (Testing Area 7, Sub-areas 16 and 17), at the site of the proposed Seatown stop is located at NGR 318823/246852 in the townland of Swords Demesne. The southern part of the testing area (Testing Area 7, Sub-areas 18 and 19), at the site of the proposed Fosterstown Park & Ride, is located at NGR 317838/245641 in the townland of Miltonsfield (MN102).

Testing Area 7 Sub-areas 16 and 17 were situated primarily in Rohans industrial estate, with Test Trenches 2 and 3 of Sub-area 17 located within the grounds of the Siemens factory compound. Sub-areas 16 and 17 are bounded to the west by the R132, approximately 100 m south of the Seatown roundabout. Testing Area 7 Sub-areas 18 and 19 are bounded on the west by the R127, with the roundabout at the end of the dual carriageway approximately 100 m to the northeast. The Airside Retail Park is located approximately 125 m to the south. Sub-area 18 was situated on a steep slope under pasture land and was located in one irregular-shaped field. Sub-area 19 was situated in a flat irregularly-shaped field of rough ground adjacent to the R127; it was heavily overgrown with brambles and buddleia.

Soils specific to the region of North county Dublin are predominated by a highly consolidated, very stiff clay and silt matrix containing sand, gravel, cobbles and boulders. This clay is generally grey to black in colour. In Testing Area 7 of the proposed scheme, however, its colour range included brown hues. Pockets of glacial sands and gravels occur within this boulder clay. These sands and gravels are likely

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

to have been deposited in glacial ponds or streams and are generally water bearing. The underlying bedrock comprises a nodular and muddy argillaceous limestone with a relatively uniform bed thickness. It is interbedded with thin shale beds and contains major units of very distinctive, laminated fine limestone (ERM and Jacobs Engineering Ireland Ltd 2008).

3.0 PROJECT BACKGROUND

Several stages of non-invasive archaeological investigation were carried out on the route of Metro North prior to the archaeological testing, and the results of these investigations have had a direct influence on the strategy adopted for the testing programme.

3.1 Environmental Impact Statement

An Environmental Impact Assessment was carried out as part of the Railway Order Application for Metro North. Cultural Resource Development Services Limited (CRDS) on behalf of ERM Environmental Resources Management Ireland Limited (ERM) completed the assessment for archaeology, architectural heritage and cultural heritage. The assessment consisted of a review of the published and unpublished documentary, aerial and cartographic sources, supported by a field inspection of the proposed alignment.

3.2 Archaeological Strategy Document

In addition to the EIS chapter, an Archaeological Strategy document was prepared for Metro North by Margaret Gowen & co. Ltd. (MGL) in 2007. The strategy supplements the provisions outlined in the EIS for the mitigation of impacts on archaeological heritage arising from the project. The strategy is a live document and is managed by the RPA Project Archaeologist and will continue to evolve on a phased basis to ensure that it remains appropriate and effective in managing archaeological risk throughout the project up to construction commencement.

The EIS and the Metro North Archaeological Strategy recommended that a programme of geophysical survey followed by a programme of testing should be carried out in the Greenfield areas of the route in advance of construction.

3.3 Geophysical Survey

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

A programme of geophysical survey was carried out by MGL between May and September 2008 with further investigations in 2009 (Thebaudeau and Harrison 2009, 18 and 26). The methodology included a scanning gradiometry survey and a detailed magnetometry survey of approximately twenty-eight areas along the route of Metro North.

4.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

This historical and archaeological background for Testing Area 7 has been compiled using the Archaeology, Architectural Heritage and Cultural Heritage chapter of the EIS (CRDS Ltd 2008), the aforementioned Archaeology Strategy (Gowen 2008) and Geophysical Survey (Thebaudeau and Harrison 2009) in addition to available literary and cartographic sources.

"Evidence for prehistoric activity in north county Dublin comes from the Record of Monuments and Places, which includes prehistoric sites, previous development-led investigations and surveys and from stray finds. In the early historical period the area through which the route is aligned formed part of the geographical region of Brega with a range of sites of this period including ringforts, dispersed settlement sites and Early Christian ecclesiastical sites. There are relatively few surviving ringforts in north County Dublin due to the intensive cultivation and agricultural activity in this part of the county, which levelled many earthwork sites. These tend to survive as cropmarks, as illustrated in the archaeological desk study undertaken for the EIS.

After the conquest by Anglo-Normans in the twelfth century, new social structures, agrarian development and settlement centres of religious and secular origin followed. Throughout the medieval period monastic foundations and individual lordships held large tracts of lands in north Dublin. A period of great flux occasioned by warfare, confiscation and transfer of ownership occurred during the Tudor era and Confederate and Williamite conflicts and the development of demesne properties in subsequent years all influenced the character and layout of the rural north Dublin... landscape which was also influenced by peacetime economic and agricultural development' (Gowen 2008, 4–5).

Recorded Archaeological Sites

Due to activities associated with modern development such as agriculture, industry and infrastructural improvements in the second half of the 20th century many archaeological sites have been levelled. The present day archaeological landscape is not therefore fully representative of the human occupation of Ireland which has spanned some nine thousand years. Nonetheless, archaeological sites survive today as upstanding structures, earthwork monuments or sub-surface remains.

In all, there are four recorded archaeological sites listed in the RMP for County Dublin within approximately 550 m of the testing area (Table 2). They provide evidence for human settlement and activity within the area. The presence of three ritual sites and a font suggest a religious centre of some importance in the area. Although the Recorded Monuments (RMPs) are all in the vicinity of the proposed testing area, none are impacted directly by it.

HC #	RMP #	Site Type	NGR	Distance
-	DU011-070	Font	318459/246778	250 m to the west of TA 7 (Sub-areas 16 and 17)
-	DU011-037	Ritual Site	317923/246347	550 m to the southeast of TA 7 (Sub- areas 16 and 17)
-	DU012-022	Ritual Site	318986/246013	500 m to the north of TA 7 (Sub-area 18)
-	DU011-045	Ritual Site	318496/245796	500 m to the northeast of TA 7 (Sub- area 18)

Table 2 - RMPs located within the vicinity of Testing Area 7

File Name: Metro North Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

The geophysical survey carried out in Testing Area 7 was only able to survey Subarea 18. The survey noted few features of archaeological potential in Sub-area 18 aside from: several parallel short east-northeast/west-southwest orientated trends interpreted as plough marks or field furrows; occasional amorphous positive responses; and areas of magnetic disturbance (G51; Thebaudeau and Harrison 2009, 26).

Townlands and Townland Boundaries

The Irish landscape is divided into approximately 60,000 townlands and the system of landholding is unique in Western Europe for its scale and antiquity. Many townlands are pre Anglo-Norman in origin and Irish historical documents consistently use townland names throughout the historic period to describe areas and locate events accurately in their geographical context. The townland names and boundaries were standardised in the nineteenth century when the Ordnance Survey began to produce large-scale maps of the country. The original Irish names were eventually anglicised to varying degrees, depending in part upon the linguistic skills of the surveyors and recorders. A study of the townland names can provide information on aspects of cultural heritage including descriptions of the use of the landscape by man.

According to the EIS (CRDS 2008, 407), 'Miltonsfield' derives from an English place name incorporating the family name of 'Milton' which probably refers to a former landowner. The name 'Swords Demesne' indicates that this townland once formed part of the demesne grounds that fell within the purview of the archiepiscopal manor of Swords. That condition is likely to have pertained from the later medieval era at least, although there is a possibility that the particular land parcel in question did not become part of the demesne until a later, post-medieval date

Previous Archaeological Excavations

The archaeological "Excavations Bulletin" (1970–2005) was checked for a record of any licensed archaeological investigations carried out within the townlands of Swords Demesne and Miltonsfields since 1970; however, no such investigations were listed.

Geophysical Survey

The geophysical survey carried out in Testing Area 7 was only able to survey Subarea 18. The survey noted a few features of archaeological potential in this Sub-area:

- several parallel short east-northeast/west-southwest orientated trends interpreted as plough marks or field furrows;
- occasional amorphous positive responses;
- and areas of magnetic disturbance (G51; Thebaudeau and Harrison 2009, 26).

Cartographic sources

Testing Area 7, Sub-areas 16 and 17 were contained within two, unused, rough grassland areas within industrial estates (Rohans and Seimens) adjacent to the R132. Examination of the historical Ordnance Survey maps indicates that these areas were at one point contained within one large or expansive trapezoidal shaped field within Swords Demesne townland. This land has undergone considerable change and development since the survey and publication of the 1st edition OS map (1837-1843).

Testing Area 7, Sub-area 18 was contained within a medium-sized field with Subarea 19 located directly to the south within a single small field adjacent to the R127. Scrutiny of historical Ordnance Survey maps indicates that both fields are similar in layout to that in existence at that time of the survey, although the western, roadside boundary is likely to have lain further west.

5.0 OBJECTIVES

The objective of the testing was to determine the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts along the route so as to inform the subsequent archaeological strategy in advance of construction. All areas of archaeological potential, sites and significant features identified in the EIS and by the geophysical survey were investigated during the testing programme

As part of the advance archaeological testing of Metro North all townland boundaries directly impacted by the proposed scheme were investigated and surveyed; however no such townland boundaries will be impacted within Testing Area 7.

6.0 METHODOLOGY

File Name: Metro North Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

The archaeological excavation licence number 09E479 was initially granted to Brendan Fagan and transferred to William O. Frazer of Headland Archaeology (Ireland) Ltd. by the Department of the Environment, Heritage and Local Government (DoEHLG) in consultation with the National Museum of Ireland (NMI). This licence pertained to the excavation of test trenches as per the test trench layout plan for Testing Area 7, which was submitted together with the licence application method statement (Figures 2 and 3).

Initial works in Sub-area 18 were carried out by Headland Archaeology (Ireland) Ltd on behalf of the RPA on 23 September 2009. Later works in Sub-area 18 were undertaken between 14 and 15 October 2009. Works pertaining to Sub-areas 16 and 17 were carried out on the 19 January 2010.

The methodology of the investigation complied with the Policy and Guidelines on Archaeological Excavation (Dúchas 1999) and the specification, terms and conditions of the Contract between the RPA and Headland Archaeology (Ireland) Ltd. The work was undertaken in accordance with the Code of Practice agreed between the DoEHLG and the Railway Procurement Agency.

Testing Area 7 encompassed approximately 2.39 hectares. A total of 2218 linear metres of 2 m wide test trenches was excavated in Sub-areas 16, 17, 18 and 19, comprising 9.28% of the entire testing area (Appendices 1 and 2). Testing was in the form of mechanically excavated test trenches. These were excavated using mechanical tracked excavators (13.5-18-tonne) with a toothless ditching/grading bucket under the direct and continuous supervision of the director or their supervisors. This work was overseen by the Headland Archaeology Senior Archaeologists Patricia Long and Angus Stephenson. Two archaeological assistants were employed to assist the licensed director, director colleagues and supervisors with the recording of the test trenches and the features identified within them.

The layout of the test trenches was designed to test the features of archaeological potential identified in the geophysical survey. Seventeen test trenches were excavated throughout the entire testing area. This trenching layout was designed to 'ground-truth' the geophysical survey where applicable, and to obtain a representative random sample of those areas in which geophysics had not been possible.

File Name: Metro North Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

Four of the test trenches (northernmost test trenches) proposed in the method statement that accompanied the testing licence application for Sub-area 16 were omitted from the testing programme. The location of Test Trench 1 was also altered slightly in order to avoid a 4" pipe outlet. In Sub-area 17 one test trench (southernmost trench), which extended under a landscaped area within the Siemens Industrial park, was omitted from the testing programme. The location of Test Trench 1 within this area was also slightly altered. In Sub-area 18, it was necessary - with the approval of the RPA Project Archaeologists - to shorten the length of Test Trenches 1-8 in order to avoid underground electrical services; although the layout of the trenches themselves was largely unchanged from that proposed in the method statement that accompanied the testing licence application. Within Sub-area 19 an additional 19 m of approved offsets were excavated in order to define the limits of the archaeology identified (Miltonsfield 2 site).

Where features of archaeological potential were identified, mechanical excavation ceased and the features were cleaned back and tested by hand. The purpose of the testing was to establish the nature and extent of the archaeological deposits and features present. With this in mind, partial excavation and half-sectioning of features was undertaken where appropriate but every effort was made to preserve the stratigraphical integrity of archaeological sites/features. All features of archaeological potential were sectioned to ascertain their significance. If a feature was deemed to be non-archaeological due to its character or the presence of modern datable material no detailed recording was undertaken, but notes were made on the test trench sheets contained within the site archive.

Recording

Unique numbers were given to all contexts of archaeological potential and small finds identified during archaeological test trenching. Prefixes were not used by Headland Archaeology (Ireland) Ltd but context numbers are illustrated throughout the report in brackets e.g. (001). Digital photographs were taken of each field, test trench and feature. All test trenches were surveyed using Trimble GPS surveying equipment with accuracy levels within 3 mm for the duration of the project. All recording was undertaken on Headland Archaeology (Ireland) Ltd *pro forma* record cards. All archaeologically significant features have been related to Ordnance Datum and the Irish National Grid as per RPA Project Control.

Environmental Samples

In the method statement it was agreed that environmental samples would be taken where necessary in consultation with Headland Archaeology (Ireland) Ltd archaeobotanist Karen Stewart (Appendix 4). Generally samples are taken from primary contexts where the composition of the sediments was likely to provide information on the date and/or use of a particular structure/feature. Three soil samples were taken in Sub-area 19.

Finds Retrieval

No artefacts were recovered during the course of archaeological test trenching at Testing Area 7.

7.0 RESULTS

7.1 General

A total of seventeen test trenches were mechanically excavated in Testing Area 7, Sub-areas 16, 17, 18 and 19, totalling 2218 m². This comprised 9.28% of the entire testing area space of 23,903 m². Within Sub-areas 18 and 19 the test trenches were set approximately 10-15 m apart.

Archaeological remains were identified in two locations, Test Trench 4 in Sub-area 18 (Miltonsfield 1; Figure 3; Plate. 1); and Test Trench 4 and Offset B in Sub-area 19 (Miltonsfield 2; Figures 3, 4 and 5; Plates 3-7). Details of this archaeology are outlined below; a full description of all test trenches is included in Appendix 2.

Sub-areas 16 and 17 were located east of the R127 within working industrial estates. The surrounding land was heavily disturbed and modern services including water and storm drainage were identified (Plate 9). The test trenches were excavated to an average depth of 0.50 m (0.60 m max), exposing the underlying subsoil (003). This consisted of a mid-orange brown silty clay that varied to a grey brown compact silty clay containing frequent angular stone. In Test Trench 1, Sub-area 16 a modern tar macadam surface (0.10 m) and foundation material (0.10 m) was present intermittently beneath the overburden/topsoil horizon (Plate 8). This was interpreted as the precursor of the R132.

In Sub-area 18 the test trenches were excavated to an average depth of 0.38 m (maximum 0.46 m), exposing the underlying subsoil (003). In Sub-area 18, the subsoil varied over the excavated area from dark yellowish brown moderately compact, silty clay to a mid- to light brown coloured silty boulder clay containing many sub-rounded stones, some of which were decayed and measured up to 5 cm in length. The varying test trench depth in Sub-area 18 was due to the intermittent presence of ploughsoil across the site (002). This was identified beneath the topsoil layer (001) and consisted of dark brown moderately compact silty clay with occasional sub angular stone inclusions 3 cm to 4 cm in length.

In Sub-area 19, the subsoil was light to mid-brown yellow silt clay with occasional tiny to small irregularly shaped stones (003). The sub-soil was mottled in places with a mid brown grey sandy silt clay with frequent stones of a similar size and shape. The depth of topsoil (001) in this Sub-area was relatively deep, achieving an average of 0.60–0.80 m. This is the result of the presence of a thick interfacial layer (002) between recently ploughed topsoil and the underlying natural subsoil. This interfacial layer is likely to represent several different processes that have since been rendered indistinguishable through 'site transformation processes' such as worm-action, soil migration, erosion and leaching. These processes probably include: the agglomeration of buried ploughsoils of different eras, resulting from ploughing to different depths over centuries of agricultural use (and perhaps particularly hand-dug gardens or lazy beds, for which there is circumstantial evidence in the Sub-area); the collapse and erosion of mass material walls (in the vicinity of archaeological site Miltonsfield 2), such as the 'mud' or 'clay' walling that is characteristic of late medieval and post-medieval buildings in Fingal.

Non-archaeological features identified within Testing Area 7, Sub-area 18 generally consisted of linear furrows orientated east/west, cultivation ridges, possibly associated with the cultivation of potatoes, and shallow stone field drains. A large number of these linear features were investigated by hand across the site but their character and in some cases the presence of modern material in the fills led to them being discounted as archaeological features. Where it became apparent that a feature was non-archaeological notes were made on the test trench sheets for inclusion in the archive but the features were not archaeologically recorded.

7.2 Post-medieval/modern agricultural remains

File Name: Metro North Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

In Sub-area 18, agricultural remains could generally be dated to the late postmedieval/modern era on the basis of their characteristics and the finds included in their fills. Details are provided below. Unusually, in Sub-area 19 it was not possible to confirm all of the linear features as either agricultural (although this is likely) or as late post-medieval/modern in date. Many exhibited evidence of having been dug by hand but they could not be clearly correlated with the orientation of the existing modern boundaries in the waste-ground field. The lack of artefacts within their fills also hindered their interpretation, although some of these features appear to relate to the aceramic building remains in Sub-area 19 Test Trench 4. They have therefore been tentatively identified as related field systems and are of archaeological significance. They are described below as part of the description of the identified Miltonsfield 2 archaeological site.

Field drains

Three sections of field drain were uncovered in Testing Area 7, Sub-area 18. The field drains were constructed of stone and were visible in Test Trenches 1, 2, 3, 4 and 5. A stone field drain identified as a possible plough mark in the geophysical survey was also observed in Test Trench 5. The drains were orientated in a northwest/southeast orientation and measured approximately 0.30 m in width. They contained inclusions of red brick and modern ceramic sherds within their soil matrices and were therefore noted but not recorded as they are of little archaeological significance.

Agricultural furrows.

Two furrows were uncovered in Testing Area 7, Sub-area 18. One was located in Test Trench 2 and another was uncovered in Test Trench 8. The furrows were orientated in a roughly east/west orientation and measured on average 0.40 m in width and 0.10 m in depth. Both furrows were investigated but upon inspection it was immediately apparent that they were the result of very recent agricultural activity and they were not archaeologically recorded in any further detail.

Shallow cultivation ditches

There were five remaining linear features within Testing Area 7, Sub-area 18. These features had a maximum depth of 0.35 m and an average width of 1.20 m. They were orientated in a variety of directions and were interpreted as having an agricultural function. They may represent the remnants of a network of potato drills.

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

7.3 Miltonsfield 1 (Sub-area 18 Test Trench 4)

In Sub-area 18, Test Trench 4 two features were identified. The north/south orientated linear feature, located 4 m from the northwestern extent of the test trench, was interpreted as a field furrow. It was shallow with a depth of 0.18 m and contained fragments of broken red ceramic pipe. It appeared likely that it was of post-medieval or modern date and so its presence was noted but not recorded in any great archaeological detail.

Of greater interest was the sub-circular shaped pit (101) (Figure 3; Plate 1). This feature was located approximately 0.71 m from the south-southeast extent of Test Trench 4 (GPS Lat: 53026 m, 52.315 m. Long: 6013 m, 35.175 m. Alt: 31 m.). It measured 1.20 m north/south by 1.05 m east/west and was 0.22 m in depth (Plate. 1). The feature was quarter sectioned by hand and from this the following details were ascertained. The pit was cut into the natural subsoil and had a bowl shaped profile. It had gradual breaks of slope to top, concave sides and a slightly concave base. It contained two fills. The basal fill (103) consisted of dark grey silt clay that contained inclusions of charcoal and heat-affected stones. The upper fill (102) was of grey silt clay.

It is difficult to interpret this feature as it appeared to occur in isolation. The presence of heat-affected stone would be typical of a prehistoric burnt mound, making a provisional Bronze Age date possible (c.2200–500BC). Though no other features were identified in the immediate vicinity this feature was very well defined and could be indicative of further sub-surface archaeological remains. No burnt human bone was uncovered from either of the pit fills. It is therefore unlikely that this feature represented a cremation burial pit designed as a repository for burnt human remains. It is also difficult to discern if it may have been used as a refuse pit as no animal bone, fish bone or plant remains emerged from the excavated fills. While the evidence that could be gleaned from the test trenching is not sufficient for a definite interpretation for this feature (101), it would appear to be of archaeological significance.

7.4 Miltonsfield 2 (Sub-area 19 Test Trench 4 and Offset B)

A metalled surface (024), which possibly represents the remains of a sub-rectangular building, was identified in Test Trench 4 and Offset B of Sub-area 19 approximately 34 m from the south-southwestern end of the test trench (Figures 4-7; Plates 3-7).

Linear features that appear to represent a field system associated with the putative building remains were also identified in Test Trenches 2-4 ((004)-(006), (008)-(011), (014)-(018), and (022)).

No dating evidence was recovered from either the metalled surface or the associated linear ditches and stone drains. In a location so proximal to the important medieval and post-medieval centres of Swords and Dublin City itself, the lack of medieval or post-medieval ceramic is unusual (see Frazer forthcoming). The lack of pottery may therefore suggest that the archaeology dates from a predominantly 'aceramic' era (i.e. prior to *c*.AD1200) or that the building is not domestic in nature and is thus less likely to have domestic pottery remains nearby. The apparent sub-rectangular shape in plan of the metalled surface - as opposed to a circular or oval shape - may suggest a construction date post *c*.AD800. Due to the lack of associated finds, it is suggested that the remains may provisionally date from the early medieval/late medieval eras (*c*.AD500–1600), but with an increased chance of dating from *c*.AD800–1200 as the likelihood of even stray pottery finds increases significantly after *c*.AD1600.

As the route of the present R127 Dublin to Drogheda road is of some antiquity, there is a suspicion that the archaeology identified may be the rear portion of a narrow west-northwest/east-southeast oriented croft-and-toft-type landholding that extended off the predecessor to the R127. If such is the case, the former street frontage of such a property may have been lost beneath later road widening. This may mean that the putative building identified in Test Trench 4 and Offset B lay at the rear of a croft/garden enclosure; probably representing an outbuilding of some description (perhaps helping to explain the lack of ceramic finds there).

The activity identified at Miltonsfield 2 was contained within an area of approximately 20 m north-northeast/south-southwest by 15 m. Linear features that may be a surviving remnant field system related to the building remains extended across Test Trenches 2-4 and included hand-dug linear ditches (016), (011), (004), (017), (010) and (005), hand-dug stone drains (015), (008), (018) and (006) and wide shallow ditches that are the possible remains of hedge boundaries (009), (014) and (022). On the recommendations of the RPA Project Archaeologists, a 20 m-wide buffer zone has been established around the archaeology, yielding a triangular 100 m by 50 m site that effectively includes all of Sub-area 19. It should be noted, however, that the density of archaeology within this site is likely to be very low outside of the central 20 m by 15 m area of the building remains.

File Name: Metro North Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

Detail

The main activity at Miltonsfield 2 consisted of a metalled surface (024), measuring 7.25 m north-northeast by 5.9 m west-northwest(Figures 4-6; Plates 3-6). The compact surface consisted of round, sub-round and irregular small to medium-sized stones pressed down into the natural subsoil; although the density of the metalling varied throughout.

Three u-shaped channels with gradual breaks of slope seemed to have been built into surface (024). The central of these channels, (028), was oriented north-northwest/south-southeast and measured 0.75+ m long by 0.20 m wide by 0.08 m deep. It was lined along its western side and southern end by a row of slightly larger medium-sized stones. The westernmost drain (027) was oriented in a north/south direction and was 4.2+ m long. At its southern end it measured 0.30 m wide by 0.10 m deep. At its northern end it was slightly larger, with maximum dimensions of 0.40 m wide by 0.20 m deep. The larger measurements at the northern end of this feature are possibly the result of it intersecting with the central drain (028). The eastern drain (042) was oriented northeast/southwest and measured 0.70+ m long by 0.25 m wide. It was filled by large sub-round stones.

At the southwestern corner of metalled surface (024) a small oval pit/possible posthole (019) was identified (Figures 4, 5 and 7; Plates 5 and7). This measured 0.67 m in length, 0.64 m in width and 0.28 m in depth. It was filled with a compact light grey silt clay (044). This contained large packing stones around its upper perimeter, occasional charcoal flecks concentrated at its base and frequent animal bone throughout. A second pit/possible posthole (026), measuring 0.60 m by 0.15+ m by 0.15 m deep, was identified along the western edge of the metalling. It contained a mid grey silt clay fill (045) with occasional charcoal flecks and tiny irregularly shaped stones. Both of these features possessed sharp breaks of slope on top, near vertical sides, gradual basal breaks of slope and concave bases.

A large pit (021) was identified at the northwestern extent of the metalled surface (024) (Figures 4-6; Plates 3, 5 and 6). It was oval in plan, measuring 4.6+ m northnortheast/south-southwest by 1.0+ m, with a sharp break of slope on top and a gentle sloping, slightly stepped eastern side; the pit was not bottomed, but achieved a depth of 0.80+ m. Four fills were contained within this feature. The basal fill consisted of moderately compacted yellowish grey silty clay with inclusions of small sub angular

stones (032). This was situated beneath moderately compacted mottled greyish orange silty clay (031), which contained inclusions of stone. The third fill consisted of moderately compacted mid-greyish yellow silty clay with inclusions of small to medium sub-rounded stones (030). This was overlain by the upper fill, moderately compacted mid-greyish yellow silty clay (029), containing inclusions of small to medium sub-rounded stones. Another sub-rectangular pit (025) was identified some 4.5 m to the north-northeast of the metalled surface (024), approximately 50.0 m from the south-southwest end of Test Trench 4. It measured 1.25 m east/west by 1.14 m by 0.24 m deep and had a sharp break of slope on top, steeply sloping sides, a gradual basal break of slope and a flat base.

Overlying metalled surface (024) was a light yellow grey silt clay spread (020). This deposit may represent both erosion following the disuse of the metalled surface and the collapse of mass material walls (clay/mud) around it. The spread also overlay fill (045) of feature (026), however, its stratigraphic relationship with the other posthole (019) and with the large pit (021) to the northwest is unclear.

Numerous linear features were also identified throughout Test Trench 4, with some extending into Test Trenches 2 and 3. None of these features contained postmedieval or modern finds and some of them were clearly hand-dug rather than excavated by machine. As they could not be related with any conviction to an extant field system, they may be a surviving field system contemporary to the aforementioned metalled surface (024).

For a detailed description of these features and their fills please see Appendix 2: Ditch/hedge line (014) was orientated north-northwest/south-southeast and was located at the southern extent of Test Trench 4. It measured 2.31 m wide by 0.16 m deep. East/west stone drain (015/008) was located *c*.9.5 m from the southern end of Test Trench 4 and 8.5 m from the southern end of Test Trench 3. It measured 0.70 m wide by 0.20 m deep and was orientated in an east-northeast/west-southwest direction. A northeast/southwest orientated u-shaped ditch (016/011/004), measuring 0.48 m wide by 0.27 m deep was located *c*.11 m from the southern extent of Test Trench 4, 22 m from the southern extent of Test Trench 3 and 23 m from the southern extent of Test Trench 1, 22 m from the southern extent of Test Trench 4, 19.5 m wide by 0.33 m deep and was orientated in an east-southeast/west-northwest direction. It was located *c*.21.3 m from the southern end of Test Trench 4, 19.5 m from the southern end of Test Trench 3 and around 17.5 m from the southern end of

Test Trench 2. Stone drain (018/006), orientated west-northwest/east-southeast, measured 0.50 m wide by 0.34 m deep and was located c.34 m from the southern extent of Test Trench 4 and 28 m from the southern extent of Test Trench 2; it was not detected in Test Trench 3. Wide, shallow ditch/hedge line (022/013) was orientated in a north-northwest/south-southeast direction. It measured 1.70 m wide by 0.24 m deep and was located c.59.5 m from the southern end of Test Trench 4 and possibly at approximately 45 m from the southern end of Test Trench 3. A final northwest/southeast stone drain (023/012), measuring 0.48 m wide by 0.28 m deep, was located c.65 m from the southern extent of Test Trench 4 and possibly at 43.5 m from the southern extent of Test Trench 3.

7.5 Interpretative assessment of the geophysical survey anomalies in Testing Area 7 (Sub-area 18)

Geophysical survey was only possible within Sub-area 18 of Testing Area 7 (Thebaudeau and Harrison 2009). The survey noted few features of archaeological potential in Testing Area 7, Sub-area 18, aside from several parallel short east-northeast/west-southwest features. These were interpreted as plough marks or field furrows with occasional amorphous positive responses and areas of magnetic disturbance also noted (G51; Thebaudeau and Harrison 2009, 26). Only one of the parallel short east-northeast/west-southwest features identified during the survey could be linked to a feature uncovered during the testing. This was the modern stone drain uncovered in Test Trench 5. The parallel features interpreted as plough furrows present in the geophysics report at the northern end of the field did not appear as features in the subsoil and may instead have been present as trend in the overlying topsoil.

8.0 IMPACT ASSESSMENT

The significant archaeology that was identified in Testing Area 7, Sub-areas 18 and 19 may be grouped into two sites, Miltonsfield 1 (Sub-area 18; Figure 3) and Miltonsfield 2 (Sub-area 19; Figures 3, 4 and 5). These sites lie within the part of Testing Area 7 that is the proposed location of the Fosterstown Park & Ride. Sub-surface archaeology at this location is typically located within 350–800 mm of the present ground level. It will therefore be subject to direct negative impact from ground disturbance works associated with site preparation (including the removal of topsoil) and any other construction works.

File Name: Metro North Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

No significant archaeological features were identified during the course of archaeological test trenching at Testing Area 7, Sub-areas 16 and 17, therefore no impact on archaeological remains is predicted.

9.0 **PROPOSED MITIGATION**

In order to mitigate the predicted impact of the proposed scheme on Testing Area 7, Sub-areas 18 and 19 a mitigation strategy is presented here. Test trenching within Sub-areas 16 and 17 of Testing Area 7 did not reveal any finds or features of archaeological significance, therefore the scheme will not have an impact on cultural heritage in these areas and no further mitigation is recommended.

As noted, the archaeology identified in Sub-areas 18 and 19 were grouped into two sites, Miltonsfield 1 and 2. For both sites, it is likely that heritage authorities will recommend a programme of 'preservation by record' of the archaeological remains. This will be required in order to preserve the cultural heritage of the 'non-renewable archaeological resource' concerned and to ameliorate the impact of the proposed scheme. The proposed areas for archaeological excavation, as illustrated on Figure 3, include the extent of archaeology stratigraphy as identified by the advance archaeological testing in addition to a recommended 20m buffer zone. This buffer zone was established in accordance with relevant heritage and planning legislation, the RPA Code of Practice (2007) and the recommendations of the RPA Project Archaeologist.

A proposal for the archaeological excavation of Miltonsfield 1 and 2, with regard to the area of excavation, and proposed staff, timescale and resources is outlined in Table 3.

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

Archaeological Sire number	Trench number	Summary of Archaeological features identified	Proposed area of excavation	Resources required	Timescale for completion
Miltonsfield 1	Test Trench 4, Sub-area18	Isolated pit with burnt mound-type material	25 by 25 m	1 tracked excavator, 1 dumper 1 Director 1 Supervisor 3 Assistants	.5 weeks
Miltonsfield 2	Test Trench 4, Sub-area 19 (main); Test Trenches 2-4 (including field system)	Sub-rectangular building (metalled surface, postholes, pits) and associated field system (ditches, drains)	100 by 50 m (triangle-shaped;	2 tracked excavator, 2 dumpers 1 Director 1 Supervisor 10 Assistants	3 weeks

Table 3: Summary of identified archaeology sites and estimate of resources required

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

These recommendations are provisional and subject to review/approval by the RPA Archaeologists and the National Monuments Service, Department of the Environment, Heritage and Local Government.

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

REFERENCES

Cartographic sources

1st Edition Ordnance Survey Map Dublin, 1843.

Record of Monuments and Places Map Dublin.

Literary sources

Department of the Environment, Heritage and Local Government and the Railway Procurement Agency (2007) *Code of Practice between the Department of the Environment, Heritage and Local Government and the Railway Procurement Agency.* Dublin: Government Publications Office.

CRDS Ltd. (2008) Material Assets: Archaeology, architectural heritage and cultural heritage, In Environmental Resources Management Ireland Limited (ed.) *Environmental Impact Statement – Metro North: Belinstown to St. Stephen's Green*, volume 1, book 1, chapter 23

Dúchas (1999) *Policy and Guidelines on Archaeological Excavation.* Department of Arts, Heritage, Gaeltacht and the Islands, Dublin, The Stationary Office.

ERM (2008) Environmental Impact Statement – Metro North: Belinstown to St. Stephen's Green, Volume 1, Book 1, Capter 6, 71-96.

ERM and Jacobs Engineering Ireland Ltd (2008) Soil and Geology In Environmental Resources Management Ireland Limited (ed.) *Environmental Impact Statement – Metro North: Belinstown To St. Stephen's Green*, Volume 1, Book 1, Chapter 17, 311-317.

Frazer, W.O. (2009) Assessment Report on the Results of Metro North Advance Archaeological Test Trenching, Testing Area 1, Belinstown and Lissenhall Little townlands, Co. Dublin, RPA ref: (MN101) Belinstown Depot. Unpublished report for the RPA.

Frazer, W.O. (forthcoming 2009). A medieval farmstead at Killegland, Ashbourne, Co. Meath. In *Medieval Rural Settlement in Ireland* (C. Corlett and M. Potterton, eds).

Margaret Gowen & Co Ltd (2008) *Metro North Dublin City Centre to Lissenhall; Archaeological Strategy (Preliminary)* Margaret Gowen & Co Ltd (Unpublished Report for RPA)

Thebaudeau, B. and Harrison, D. (2009) *Metro North Dublin City Centre to Lissenhall, County Dublin: Geophysical Survey Report: Licence No. 08R0117.* Margaret Gowen & Co Ltd (Unpublished Report for RPA)

File Name: Metro North Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Swords Demesne and Miltonfield townlands, Co. Dublin, RPA ref: (MN102) Seatown Stop and Fosterstown Park & Ride

www.excavations.ie (ed. Bennett 2006) [Accessed 30-07-09]

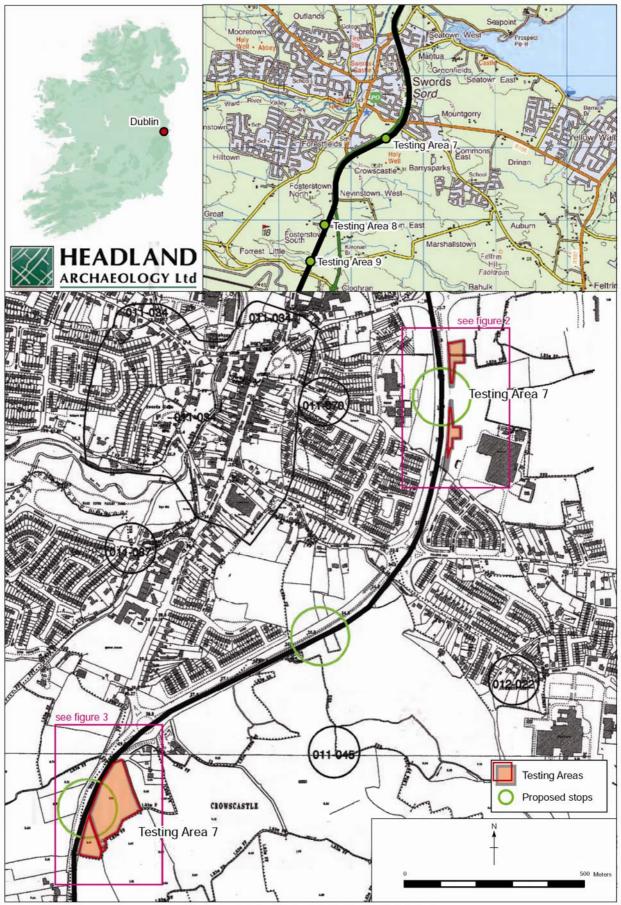


Figure 1 - Advance Archaeological Test Trenching of Metro North: Testing Area 7, Swords Demesne and Miltonsfields townlands, Co. Dublin, RPA ref: (MN101/MN102) Seatown Stop and Fosterstown Park & Ride. Testing Area 7 location including RMP extract.

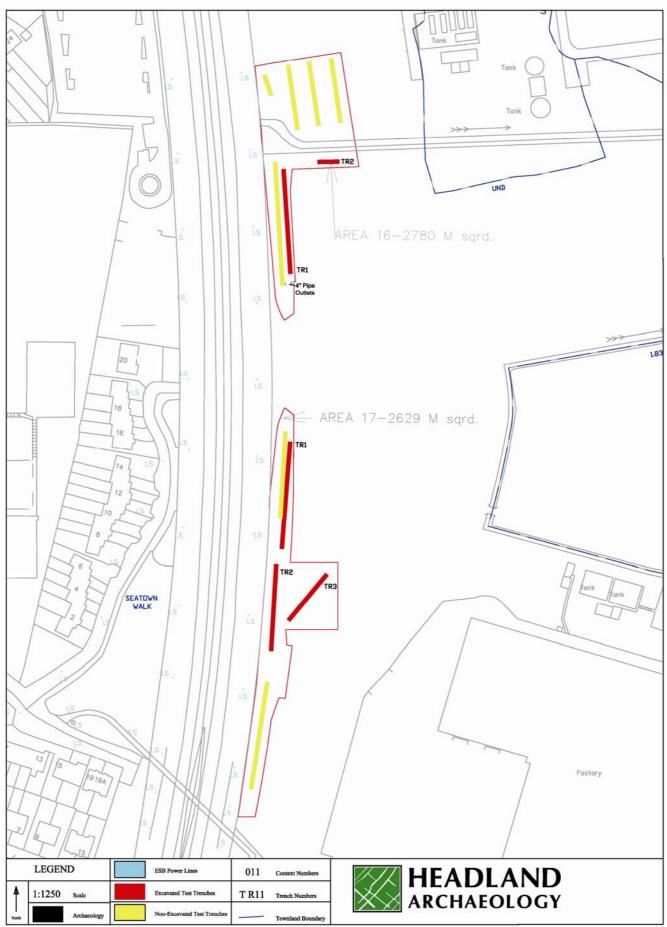


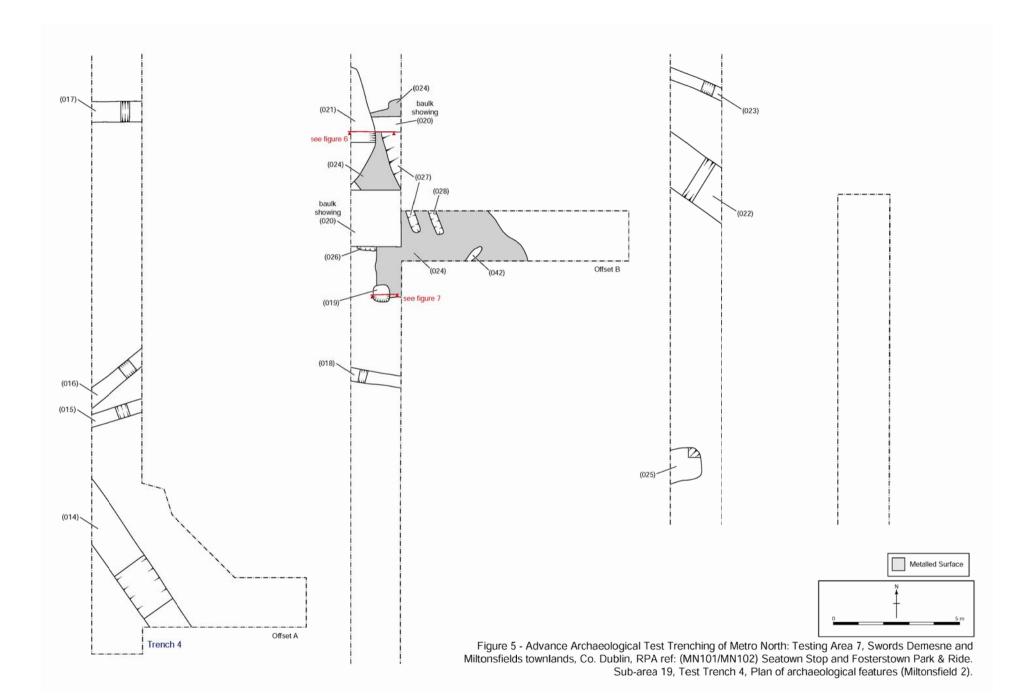
Figure 2 - Advance Archaeological Test Trenching of Metro North: Testing Area 7, Swords Demesne and Miltonsfields townlands, Co. Dublin, RPA ref: (MN101/MN102) Seatown Stop and Fosterstown Park & Ride. Testing Area 7, Sub-areas 16 and 17, Test Trench Layout.



Figure 3 - Advance Archaeological Test Trenching of Metro North: Testing Area 7, Swords Demesne and Miltonsfields townlands, Co. Dublin, RPA ref: (MN101/MN102) Seatown Stop and Fosterstown Park & Ride. Testing Area 7, Sub-areas 18 and 19, Overview of Test Trench layout and archaeological features.



Figure 4 - Advance Archaeological Test Trenching of Metro North: Testing Area 7, Swords Demesne and Miltonsfields townlands, Co. Dublin, RPA ref: (MN101/MN102) Seatown Stop and Fosterstown Park & Ride. Testing Area 7, Sub-area 19, Location of archaeological features in Test Trench 4.



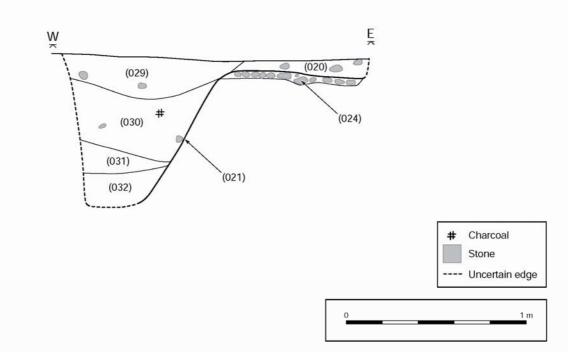
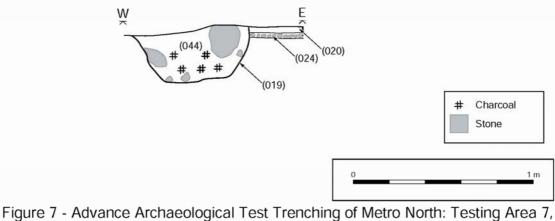


Figure 6 - Advance Archaeological Test Trenching of Metro North: Testing Area 7, Swords Demesne and Miltonsfields townlands, Co. Dublin, RPA ref: (MN101/MN102) Seatown Stop and Fosterstown Park & Ride.

Sub-area 19, Test Trench 4, Southwest-facing section of large pit (021).



Swords Demesne and Miltonsfields townlands, Co. Dublin, RPA ref: (MN101/MN102) Seatown Stop and Fosterstown Park & Ride.

Sub-area 19, Test Trench 4, South-facing section of possible posthole (019) and adjacent metalled surface (024) and overlying spread (020).



Plate 1 - Mid-excavation view of pit (101) within Sub-area 18, Test Trench 4, facing east.



Plate 3 - View of extent of metalled surface (024, demarcated by ranging rods), and adjacent large pit (021, right) in Sub-area 19, Test Trench 4, facing south-southwest.



Plate 2 - General view of Sub-area 19 Test Trench 3, looking northeast.



Plate 4 - Detail of rough-metalled surface (024) with channel drain (042), centre right) in Sub-area 19, Test Trench 4-offset-B, facing east-northeast.



Plate 5 - View of building remains in Sub-area 19, Test Trench 4 - possible postholes (019, front right; 026, centre left), metalled surface (024, right side of main trench) and overlying spread (020, left in baulks within main trench), large pit (021, left rear of main trench), facing north-northeast.



Plate 6 - Detail of metalled surface (024) and adjacent large pit (021, left), facing north-northeast.



Plate 7 - Mid-excavation view of possible posthole (019) within Sub-area 19, Test Trench 4, facing north.



Plate 8 - Detail of modern road surface identified within Test Trench 1, Sub-area 16.



Plate 9 - Detail of modern water/storm drainage services in vicinity of Test Trench 2, Sub-area 17.

Headland Archaeology (Ireland) Ltd Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Sub-areas 18& 19, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Fosterstown Park & Ride

Appendix 1: Field Register

Testing Area	Sub-area	Townland(s)	Description	Total Linear Metres	Services Present
7	16	Swords Demesne	This area is an undeveloped section of Rohans industrial estate (2.780ha).	60 m	Water and storm drainage in vicinity of Test Trenches 1 and 2
7	17	Swords Demesne	This area is an undeveloped section of Rohans/Siemens industrial estate (2.629ha)	120 m	N/A
7	18	Miltonsfield	In use as pasture land for horses at time of testing.	740 m	Underground ESB, mandating the shortening of Test Trenches 1–8.
7	19	Miltonsfield	Waste ground alongside R127, overgrown with bramble, buddleia. Relatively flat.	219 m	None
	1		Total	1139 m	

File Name: Metro North Advance Archaeological Test Trenching, Testing Area 7, Sub-areas 18 & 19, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Fosterstown Park & Ride

Headland Archaeology (Ireland) Ltd Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Sub-areas 18& 19, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Fosterstown Park & Ride

Appendix 2: Trench Register

Testing Area	Sub-area	Test Trench No.	Length (m)	Width (m)	Depth (m)	Orientation	Description	Summary of Features
7	16	1	50.00 m	2.00 m	0.40 m	N/S	Topsoil (001): (Man made ground) Heavily disturbed compact brown silty clay, with frequent inclusions of construction rubble; red brick fragments, angular stone and plastic. Modern surface: a modern tarmacadam surface (old Belfast road) and foundation layer were identified throughout the trench. Natural Subsoil (003): Mid-orange brown silty clay with bands of grey yellow coarse grained silty clay also noted. No features of archaeological significance identified.	 Previous construction activity in this area has completely truncated any surviving features. No features were identified

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Sub-areas 18& 19, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Fosterstown Park & Ride

Testing Area	Sub-area	Test Trench No.	Length (m)	Width (m)	Depth (m)	Orientation	Description	Summary of Features
7	16	2	10.00 m	2.00 m	0.4 m	E/W	 Topsoil (001): Moderately compact mid brown silty clay with moderate occurrence of medium and small sub- angular stone. Natural Subsoil (003): Mid-orange brown silty clay with bands of yellow brown coarse grained silty clay also noted. No features of archaeological significance identified. 	 A water mains inspection area was identified to the east of the trench. No features were identified
7	17	1	50.00 m	2.00 m	0.5 m	N/S	 Topsoil (001): Moderately compact mid brown silty clay with moderate occurrence of medium and small sub- angular stone. Natural Subsoil (003): Mid-orange brown silty clay with bands of grey brown coarse grained silt clay also 	 No features were identified.

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Sub-areas 18& 19, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Fosterstown Park & Ride

Testing Area	Sub-area	Test Trench No.	Length (m)	Width (m)	Depth (m)	Orientation	Description	Summary of Features
							noted. No features of archaeological significance identified.	
7	17	2	40.00 m	2.00 m	0.4 m	NW/SE	 Topsoil (001): Moderately compact mid brown silty clay with moderate occurrence of medium and small sub- angular stone. Natural Subsoil (003): Mid-orange brown silty clay with bands of grey brown coarse grained silt clay also noted. No features of archaeological significance identified. 	No features were identified
7	17	3	30.00 m	2.00 m	0.50 m	NE/SW	Topsoil (001) : Moderately compact dark brown silty clay with moderate	No features were identified within the

Testing Area	Sub-area	Test Trench No.	Length (m)	Width (m)	Depth (m)	Orientation	Description	Summary of Features
							occurrence of medium and small sub- angular stone. Natural Subsoil (003): Mid-brown silty clay with bands of orange brown coarse grained silt clay also noted. No features of archaeological significance identified.	trench.
7	18	5	100.00	2.00	0.42	NNW/SSE	Topsoil (001): Dark brown silty clay with occasional sub-angular stone inclusions. The sod level was heavily root penetrated. Ploughsoil (002): Moderately compact mid-yellowish brown silty clay with occasional sub-angular stone inclusions. Subsoil (003): Mid brown boulder	Stone filled field drain orientated NW/SE located 69.70 m from the NNW end of the test trench. Measured 0.30 m in width and was filled by large stones which measured up to 0.15 m in diameter.

Testing Area	Sub-area	Test Trench No.	Length (m)	Width (m)	Depth (m)	Orientation	Description	Summary of Features
							clay with moderate occurrence of stone inclusions. No features of archaeological significance.	
7	18	6	80.00	2.00	0.42	NW/SE	 Topsoil (001): Mid to dark brown clayey silt with moderate occurrence of small angular and sub-angular stone inclusions. Ploughsoil (002): Moderately compact mid-yellowish brown silty clay with occasional sub-angular stone inclusions. Subsoil (003): Pale orangey brown silty clay with moderate occurrence of small and medium sized stone sub- angular stone inclusions. No features of archaeological 	Linear feature orientated NE/SW located 44.2 m from the NW end of the test trench and measured 1.40 m in width by 0.35 m in depth. Filled by mid orangey brown silty clay with moderate occurrence of sub- rounded small and medium sized stones and occasional charcoal inclusions.

Testing Area	Sub-area	Test Trench No.	Length (m)	Width (m)	Depth (m)	Orientation	Description	Summary of Features
							significance.	 Linear was half sectioned. Linear feature orientated NW/SE and present from 44.2 m from the NW end of the test trench to the NW terminus of the trench. Measured 0.65 m in width by 0.22 m in depth. Linear was half sectioned.
7	18	7	70.00	2.00	0.38	NNW/SSE	Topsoil (001): Dark brown clay with heavy root penetration and moderate occurrence of small angular and sub- angular stone inclusions. Ploughsoil (002): Dark greyish	 Agricultural furrow orientated N/S and located 1 m from the NNW end of the test trench. Measured 0.70 m in width by

Testing Area	Sub-area	Test Trench No.	Length (m)	Width (m)	Depth (m)	Orientation	Description	Summary of Features
							brown clay with occasional sub- angular stone inclusions. Subsoil (003): Pale orangey brown boulder clay with moderate occurrence of decayed stone and sub-angular stone inclusions. No features of archaeological significance.	 0.10 m in depth. It had a bowl shaped profile and was filled by a loose and friable brownish yellow silty clay with occasional sub-angular stone inclusions. A small area of root burning was overlying the linear. Feature was half sectioned. Agricultural furrow was orientated ENE/WSW and located 50.10 m from the NNW end of the test trench. Measured 1.20 m in width and

Testing Area	Sub-area	Test Trench No.	Length (m)	Width (m)	Depth (m)	Orientation	Description	Summary of Features
								0.33 m depth. Filled by a loose and friable light brownish yellow silty clay with occasional sub- angular stone inclusions. Feature was half sectioned.
7	18	8	50.00	2.00	0.30	NW/SE	Topsoil (001): Mid to dark brown clayey silt with moderate occurrence of small angular and sub-angular stone inclusions. Ploughsoil (002): Moderately compact mid-yellowish brown silty clay with occasional sub-angular stone inclusions. Subsoil (003): Medium brown boulder clay.	 Furrow orientated E/W and located in the NW portion of the test trench. Measured 0.47 m in width and 0.08 m in depth. Furrow had a bowl shaped profile and was filled by a homogenous grey silty clay with

Testing Area	Sub-area	Test Trench No.	Length (m)	Width (m)	Depth (m)	Orientation	Description	Summary of Features
							No features of archaeological significance.	occasional post- medieval pottery inclusions.
7	19	1	20	2	0.65	NNE/SSW	Sod and Topsoil (001): Mid greyish brown silty clay with frequent humus elements, and moderate inclusions of rubbish and stones Interfacial Layer (002): Mid brownish yellow silty clay with occasional inclusions of small stones. Natural Subsoil (003): Mid brownish yellow silty clay mottled with mid brownish grey sandy silty clay containing occasional inclusions of stone. No features of archaeological significance identified.	No features identified in this trench
7	19	2	40	2	0.8	NNE/SSW	Sod and Topsoil (001): Mid greyish	Linear land drain

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Sub-areas 18& 19, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Fosterstown Park & Ride

Testing Area	Sub-area	Test Trench No.	Length (m)	Width (m)	Depth (m)	Orientation	Description	Summary of Features
							brown silty clay with frequent humus elements, and moderate inclusions of rubbish and stones Interfacial Layer (002): Mid brownish yellow silty clay with occasional inclusions of small stones. Natural Subsoil (003): Mid brownish yellow silty clay mottled with mid brownish grey sandy silty clay containing occasional inclusions of stone. No features of archaeological significance identified.	 (004), orientated NE/SW, 22 m from southern end of trench. Linear drainage channel (005), orientated E/W, 28 m from southern end of trench
7	19	3	60	2	0.8	NNE/SSW	Sod and Topsoil (001): Mid greyish brown silty clay with frequent humus elements, and moderate inclusions of rubbish and stones Interfacial Layer (002): Mid brownish yellow silty clay with occasional	 Linear land drains (007) with varying orientations across the trench Linear ditch (009), orientated N/S, 14 m

Testing Area	Sub-area	Test Trench No.	Length (m)	Width (m)	Depth (m)	Orientation	Description	Summary of Features
							inclusions of small stones. Natural Subsoil (003): Mid brownish yellow silty clay mottled with mid brownish grey sandy silty clay containing occasional inclusions of stone. No features of archaeological significance identified.	 from southern end of trench Linear ditch (013), orientated NW/SE, 44 m from southern end of trench
7	19	4	99	2	0.8	NNE/SSW	Sod and Topsoil (001): Mid greyish brown silty clay with frequent humus elements, and moderate inclusions of rubbish and stones Interfacial Layer (002): Mid brownish yellow silty clay with occasional inclusions of small stones. Natural Subsoil (003): Mid brownish yellow silty clay mottled with mid brownish grey sandy silty clay containing occasional inclusions of	 Metalled surface (024) Linear ditches (014) and (023) Land drains (015) with various orientations across the trench Pits (019), (021) in the vicinity of the

Testing Area	Sub-area	Test Trench No.	Length (m)	Width (m)	Depth (m)	Orientation	Description	Summary of Features
							stone. Features	: metalled surface
							Two linear ditches (014) and (023) at	
							either end of the trench. In the centre	
							was a rectangular metalled surface	
							measuring 7.35 m (NNE/SSW) by 5.9)
							m and a number of adjacent pits	

File Name: Metro North Advance Archaeological Test Trenching, Testing Area 7, Sub-areas 18 & 19, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Fosterstown Park & Ride

Headland Archaeology (Ireland) Ltd Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Sub-areas 18& 19, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Fosterstown Park & Ride

Appendix 3: Context Register

Preparation of the context register included the compilation of numbers originally assigned according to the date on which fieldwork was undertaken: with numbers beginning from 101 for initial fieldwork (September); and number beginning from 001 for later fieldwork (October).

Context No.	Testing Area	Sub-area	Trench No.	Type (cut/fill/ deposit)	Length (m)	Width (m)	Depth (m)	Description	Interpretation
101	7	18	4	Cut	1.20	1.05	0.22	Cut of a sub-circular shaped pit, which is filled by 102 and 103. The pit had a sharp break of slope concave sides and a flat and even base.	Cut of a sub-circular shaped pit containing charcoal and heat affected stone.
102	7	18	4	Fill	1.20	1.05	0.12	Upper fill of the pit 101. It was grey silty clay with charcoal inclusions.	Fill of a sub-circular shaped pit containing charcoal and heat affected stone.
103	7	18	4	Fill	1.20	1.05	0.10	Basal fill of the pit 101. It was a dark grey silty clay which contained charcoal and heat affected stone	Fill of a sub-circular shaped pit containing charcoal and heat affected stone.

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Sub-areas 18& 19, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Fosterstown Park & Ride

Context No.	Testing Area	Sub-area	Trench No.	Type (cut/fill/ deposit)	Length (m)	Width (m)	Depth (m)	Description	Interpretation
								inclusions.	
001	7	19	All	Deposit	Site-wide	Site-wide	0.55	Mid greyish brown silty clay with frequent humus elements, and moderate inclusions of rubbish and stones	Topsoil
002	7	19	All	Deposit	Site-wide	Site-wide	0.15	Mid brownish yellow silty clay with occasional inclusions of small stones.	Interfacial layer
003	7	19	All	Deposit	Site-wide	Site-wide	-	Mid brownish yellow silty clay mottled with mid brownish grey sandy silty clay containing occasional inclusions of stone.	Natural subsoil
004	7	19	2	Cut	-	0.4	-	Linear orientated NE/SW	Linear land drain
005	7	19	2	Deposit	-	6	-	Light creamish brown clay	Band of geological variation

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Sub-areas 18& 19, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Fosterstown Park & Ride

Context No.	Testing Area	Sub-area	Trench No.	Type (cut/fill/ deposit)	Length (m)	Width (m)	Depth (m)	Description	Interpretation
								with humus and mineral elements	
006	7	19	2	Cut	-	0.9	-	Linear orientated E/W	Linear drainage channel
007	7	19	3	Cut and fill	-	0.3	0.24	Linear orientated NE/SW with sharp breaks of slope, near vertical sides, and a flat base. Contained a fill of firmly compacted light grey silty clay	Cut and single fill of linear land drain
008	7	19	3	Cut and fill	-	0.35	0.13	Linear orientated ENE/WSW with sharp breaks of slope, gradually sloping sides, and a concave base. Contained a fill of firmly compacted light grey silty clay	Cut and single fill of linear land drain
009	7	19	3	Cut and	-	1	0.2	Linear orientated N/S with	Cut and fill of linear ditch

Context No.	Testing Area	Sub-area	Trench No.	Type (cut/fill/ deposit)	Length (m)	Width (m)	Depth (m)	Description	Interpretation
				fill				gradual breaks of slope, steep sides, and a flat base. Contained a light grey silty clay at its eastern side, and a main fill of dark grey sandy clay with a high proportion of small-medium sub rounded stones	
010	7	19	3	Cut and fill	-	0.5	0.25	Linear orientated E/W with sharp breaks of slope, steep sides, and a rounded base. Contained a fill of dark grey sandy clay with a high proportion of small- medium sub rounded stones	Cut and single fill of linear land drain
011	7	19	3	Cut and fill	-	0.5	0.24	Linear orientated ENE/WSW with sharp	Cut and fills of linear land drain

Context No.	Testing Area	Sub-area	Trench No.	Type (cut/fill/ deposit)	Length (m)	Width (m)	Depth (m)	Description	Interpretation
								breaks of slope, near vertical sides, and a concave base. Contained an inner fill of dark grey sandy clay, and an outer fill of light grey silty clay	
012	7	19	3	Cut and fill	-	0.3	-	Linear orientated NW/SE with a fill of light brownish yellow clayey silt	Cut and single fill of linear land drain
013	7	19	3	Cut and fill	-	0.7	0.2	Linear orientated NW/SE with sharp breaks of slope on top, gently sloping sides, and a flat base with imperceptible breaks of slope. Contained a fill of light brownish yellow clayey silt	Cut and single fill of linear land drain

Context No.	Testing Area	Sub-area	Trench No.	Type (cut/fill/ deposit)	Length (m)	Width (m)	Depth (m)	Description	Interpretation
014	7	19	4	Cut	-	2.31	0.16	Linear orientated NNW/SSE with sharp breaks of slope on top, gently sloping sides, and an uneven base with imperceptible breaks of slope	Cut of linear ditch
015	7	19	4	Cut	-	0.7	0.2	Linear orientated E/W with sharp breaks of slope on top, steep sides, and a concave base with gradual breaks of slope	Cut of rubble stone drain
016	7	19	4	Cut	-	0.48	0.27	Linear orientated ENE/WSW with sharp breaks of slope on top, near vertical sides, and a flat base with gradual breaks of slope	Cut of linear drain/ditch

Context No.	Testing Area	Sub-area	Trench No.	Type (cut/fill/ deposit)	Length (m)	Width (m)	Depth (m)	Description	Interpretation
017	7	19	4	Cut	-	0.81	0.33	Linear orientated NNE/SSW with gradual breaks of slope, steep sides, and a rounded base	Cut of linear ditch
018	7	19	4	Cut	-	0.5	0.34	Linear orientated NNE/SSW with sharp breaks of slope on top, near vertical sides, and a flat base with gradual breaks of slope	Cut of rubble stone drain
019	7	19	4	Cut	0.67	0.64	0.28	Sub circular shape in plan with sharp breaks of slope on top, steep sides, and a flat/concave base with gradual breaks of slope	Cut of pit
020	7	19	4	Spread	8.3	5.9	0.09	Moderately compacted light yellowish grey silty clay	Deposit overlying metalled surface (024)

Context No.	Testing Area	Sub-area	Trench No.	Type (cut/fill/ deposit)	Length (m)	Width (m)	Depth (m)	Description	Interpretation
021	7	19	4	Cut	5.1	-	-	Sub oval shape in plan with sharp breaks of slope on top and gradually sloping sides. The base was not reached after 0.80 m	Cut of large pit
022	7	19	4	Cut	-	1.7	0.24	Linear orientated NW/SE with gradual sides and breaks of slope and a concave base	Cut of linear ditch
023	7	19	4	Cut	-	0.48	0.28	Linear orientated NW/SE with gradual breaks of slope, near vertical sides, and a flat base	Cut of rubble stone drain
024	7	19	4	Spread	7.35	5.9	-	Sub rectangular spread of compacted small-medium rounded, and sub rounded, stones pressed into the	Metalled surface

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Sub-areas 18& 19, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Fosterstown Park & Ride

Context No.	Testing Area	Sub-area	Trench No.	Type (cut/fill/ deposit)	Length (m)	Width (m)	Depth (m)	Description	Interpretation
								underlying natural subsoil.	
025	7	19	4	Cut	-	1.14	0.24	Sub rectangular shape in plan with rounded corners, sharp breaks of slope on top, steep sides, and a flat base with imperceptible breaks of slope	Cut of large pit
026	7	19	4	Cut	0.6	0.15	0.6	Oval shape in plan with sharp breaks of slope on top, near vertical sides, and a concave base with gradual breaks of slope	Cut of pit
027	7	19	4	Cut	-	0.4	0.2	Linear drain with metalled surface orientated N/S within metalled surface (024)	Linear drain
028	7	19	4		0.75	0.2	0.08	Linear drain with metalled	Linear drain

Context No.	Testing Area	Sub-area	Trench No.	Type (cut/fill/ deposit)	Length (m)	Width (m)	Depth (m)	Description	Interpretation
								surface orientated N/S within metalled surface (024)	
029	7	19	4	Fill	5.1	-	0.22	Moderately compacted mid- greyish yellow silty clay with inclusions of small-medium sub rounded stones	Upper fill of large pit (021)
030	7	19	4	Fill	5.1	-	0.24	Moderately compacted mid- grey silty clay with inclusions of decayed stone, charcoal flecking, and animal bone	Tertiary fill of large pit (021)
031	7	19	4	Fill	5.1	-	0.18	Moderately compacted mottled greyish orange silty clay with inclusions of decayed stone and small- medium sub rounded	Secondary fill of large pit (021)

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Sub-areas 18& 19, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Fosterstown Park & Ride

Context No.	Testing Area	Sub-area	Trench No.	Type (cut/fill/ deposit)	Length (m)	Width (m)	Depth (m)	Description	Interpretation
								stones	
032	7	19	4	Fill	5.1	-	>0.20	Moderately compacted yellowish grey silty clay with inclusions of small sub angular stones	Basal fill of large pit (021)
033	7	19	4	Fill	-	2.31	0.16	Moderately compacted light orangish brown sandy clay with occasional small stones and pebbles	Single fill of linear ditch (014)
034	7	19	4	Fill	-	0.34	0.2	Loosely compacted light brown clayey silt with a high proportion of medium-large sub rounded stones	Upper fill of rubble stone drain (015)
035	7	19	4	Fill	-	0.7	0.15	Loosely compacted dark yellowish brown clayey sand with moderate inclusions of pebbles	Basal fill of rubble stone drain (015)

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Sub-areas 18& 19, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Fosterstown Park & Ride

Context No.	Testing Area	Sub-area	Trench No.	Type (cut/fill/ deposit)	Length (m)	Width (m)	Depth (m)	Description	Interpretation
036	7	19	4	Fill	-	0.35	0.23	Moderately compacted light greyish brown silty clay with occasional inclusions of pebbles	Upper fill of drain/ditch (016)
037	7	19	4	Fill	-	0.16	0.23	Moderately compacted light yellowish brown silty clay	Basal fill of drain/ditch (016)
038	7	19	4	Fill	-	0.81	0.33	Moderately compacted light greyish brown clayey sand with occasional inclusions of pebbles	Single fill of linear ditch (017)
039	7	19	4	Fill	-	0.5	0.34	Loosely compacted mid- brown silty clay with a high proportion of medium-large sub rounded stones	Single fill of rubble stone drain (018)
040	7	19	4	Fill	-	1.14	0.24	Firmly compacted light brownish grey sand with frequent inclusions of small-	Single fill of pit (025)

Context No.	Testing Area	Sub-area	Trench No.	Type (cut/fill/ deposit)	Length (m)	Width (m)	Depth (m)	Description	Interpretation
								medium stones	
041	7	19	4	Fill	-	0.48	0.28	Loosely compacted light greyish brown silty sand with a high proportion of medium-large sub rounded and sub angular stones	Single fill of land drain (023)
042	7	19	4		-	0.7	0.25	Linear drain with metalled surface orientated N/S within metalled surface (024)	Linear drain
043	7	19	4	Fill	-	1.7	0.24	Moderately compacted light yellowish grey silty clay with occasional inclusions of small stones	Single fill of linear ditch (022)
044	7	19	4	Fill	0.67	0.64	0.28	Firmly compacted light grey silty clay frequent inclusions of animal bone, moderate	Single fill of pit (019)

Context No.	Testing Area	Sub-area	Trench No.	Type (cut/fill/ deposit)	Length (m)	Width (m)	Depth (m)	Description	Interpretation
								medium-large stones, and occasional charcoal	
045	7	19	4	Fill	0.6	0.15	0.15	Moderately compacted mid- grey silty clay with occasional inclusions of charcoal flecking and small stones	Single fill of pit (026)

File Name: Metro North Advance Archaeological Test Trenching, Testing Area 7, Sub-areas 18 & 19, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Fosterstown Park & Ride

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 1, Belinstown and Lissenhall Little townlands, Co. Dublin, RPA ref: (MN101) Belinstown Depot

Sample No.	Context No.	Sub-area	Trench No.	Townland	Description
1	44	19	4	Miltonsfield	Animal bone from fill (044) of pit (019) in Test Trench 4
2	44	19	4	Miltonsfield	Fill (044) containing occasional charcoal from pit (019) in Test Trench 4
3	30	19	4	Miltonsfield	Tertiary fill (030) of pit (021) containing charcoal flecking in Test Trench 4

Appendix 4: Sample Register

Appendix 5: Drawing Register

Drawing No.	Туре	Scale	Sub- area	Trench No.	Townland	Description
001	Section	1:20	19	4	Miltonsfield	NW facing section of (014) in Test Trench 4
002	Section	1:20	19	4	Miltonsfield	WSW facing section of (015) in Test Trench 4
003	Section	1:20	19	4	Miltonsfield	SW facing section of (016) in Test Trench 4
004	Section	1:20	19	4	Miltonsfield	W facing section of (017) in Test Trench 4
005	Section	1:20	19	4	Miltonsfield	ENE facing section of (018) in Test Trench 4
006	Plan	1:100	19	4	Miltonsfield	Plan of Test Trench 4
007	Section	1:20	19	4	Miltonsfield	SW facing section of (020), (021) and (024) in Test Trench 4
008	Section	1:20	19	4	Miltonsfield	S facing section of (019) in Test Trench 4
009	Section	1:20	19	4	Miltonsfield	ESE facing section of (023) in Test Trench 4

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Subareas 18& 19, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Fosterstown Park & Ride

Photo No.	Camera No.	Sub- area	Trench No.	Townland	Direction Facing	Description
0108	Casio 11c	16	N/A	Swords Demesne	N	Spoil heap protecting Sub- area 16
0109	Casio 11c	16	N/A	Swords Demesne	NW	Track machine north of protective spoil heap
0110	Casio 11c	16	N/A	Swords Demesne	N	Modern services in vicinity of Test Trench 1
0111	Casio 11c	16	N/A	Swords Demesne	N	Modern services in vicinity of Test Trench 1
0112	Casio 11c	16	N/A	Swords Demesne	E	Waste/rough ground to east of Test Trench 1
0113	Casio 11c	16	N/A	Swords Demesne	W	Modern services in vicinity of Test Trench 1
0114	Casio 11c	16	1	Swords Demesne	S	Modern road surface within Test Trench 1
0115	Casio 11c	16	1	Swords Demesne	SW	Modern road surface and foundation layer under overburden within Test Trench 1
0116	Casio 11c	16	1	Swords Demesne	S	Modern tarmac road surface within Test Trench 1
0117	Casio 11c	16	2	Swords Demesne	E	Modern water services within vicinity of Test Trench 2
0118	Casio 11c	16	2	Swords Demesne	E	Recording of Test Trench 2 in progress
0119	Casio 11c	16	2	Swords Demesne	E	Recording of Test Trench 2 in progress
0120	Casio 11c	16	1	Swords Demesne	N	Test Trench 1 backfilled
0121	Casio 11c	16	2	Swords Demesne	E	Test Trench 2 backfilled
0122	Casio 11c	17	1	Swords Demesne	N	General shot of Test Trench 1

Appendix 6: Photo Register

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Subareas 18& 19, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Fosterstown Park & Ride

Photo No.	Camera No.	Sub- area	Trench No.	Townland	Direction Facing	Description
0123	Casio 11c	17	N/A	Swords Demesne	NW	Entry into Siemens compound from Rohans industrial estate
0124	Casio 11c	17	N/A	Swords Demesne	NW	Entry into Siemens compound from Rohans industrial estate
0125	Casio 11c	17	2	Swords Demesne	N	General shot of Test Trench 2
0126	Casio 11c	17	2	Swords Demesne	N	General shot of Test Trench 2
0127	Casio 11c	17	3	Swords Demesne	NE	General shot of Test Trench 3
0128	Casio 11c	17	3	Swords Demesne	NE	General shot of Test Trench 3
0129	Casio 11c	17	3	Swords Demesne	SW	Shot of Test Trench 3 backfilled
0130	Casio 11c	17	2	Swords Demesne	S	Shot of Test Trench 2 backfilled
0131	Casio 11c	17	2	Swords Demesne	S	Shot of Test Trench 2 backfilled
0132	Casio 11c	17	2 and 3	Swords Demesne	N	General shot of backfilled Siemens area.
0133	Casio 11c					N/A
0134	Casio 11c	17	N/A	Swords Demesne	S	Shot of reinstated fence network
0135	Casio 11c	17	N/A	Swords Demesne	S	Shot of reinstated fence network
1048	Casio 15c	18	4	Miltonsfield	S	Variation in natural subsoil. Not archaeologically significant.
1049	Casio 15c	18	4	Miltonsfield	NW	Stone filled field drain.
1050	Casio 15c	18	4	Miltonsfield	S	General shot of Test Trench.

Photo No.	Camera No.	Sub- area	Trench No.	Townland	Direction Facing	Description
1051	Casio 15c	18	4	Miltonsfield	N	Pre-ex of pit 101.
1052	Casio 15c	18	6	Miltonsfield	N	S-facing section of linear feature.
1053	Casio 15c	18	6	Miltonsfield	N	S-facing section of linear feature.
1054	Casio 15c	18	6	Miltonsfield	SE	Linear feature orientated NW/SE.
1055	Casio 15c	18	6	Miltonsfield	N	Linear feature orientated NW/SE.
1056	Casio 15c	18	4	Miltonsfield	SSE	Pit 101.
1057	Casio 15c	18	4	Miltonsfield	SSE	Pit 101.
1058	Casio 15c	18	4	Miltonsfield	E	Pit 101.
1059	Casio 15c	18	4	Miltonsfield	E	Pit 101.
1060	Casio 15c	18	4	Miltonsfield	N	General shot of Test Trench.
1061	Casio 15c	18	4	Miltonsfield	S	General shot of Test Trench.
1062	Casio 15c	18	4	Miltonsfield	W	Not archaeologically significant.
1063	Casio 15c	18	1	Miltonsfield	NW	General shot of Test Trench.
184	Casio 10	19	1	Miltonsfield	SW	General view of Test Trench 1
185	Casio 10	19	2	Miltonsfield	NE	General view of Test Trench 2
186	Casio 10	19	3	Miltonsfield	NE	General view of Test Trench 3

Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Subareas 18& 19, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Fosterstown Park & Ride

Photo No.	Camera No.	Sub- area	Trench No.	Townland	Direction Facing	Description
187	Casio 10	19	4	Miltonsfield	E	Mid-ex shot of animal bone in (019) in Test Trench 4
188	Casio 10	19	4	Miltonsfield	SE	General view of (014)in Test Trench 4
189	Casio 10	19	4	Miltonsfield	NE	General view of (015) in Test Trench 4
190	Casio 10	19	4	Miltonsfield	NE	General view of section through (016) in Test Trench 4
191	Casio 10	19	4	Miltonsfield	E	General view of (017) in Test Trench 4
192	Casio 10	19	4	Miltonsfield	W	General view of (018) in Test Trench 4
193	Casio 10	19	4	Miltonsfield	N	General view of (022) in Test Trench 4
194	Casio 10	19	4	Miltonsfield	N	General view of (021) in Test Trench 4
195	Casio 10	19	4	Miltonsfield	S	General view of (024) and (020) in Test Trench 4
196	Casio 10	19	4	Miltonsfield	S	General view of (024) in Test Trench 4
197	Casio 10	19	4	Miltonsfield	E	General view of (024) in eastern extension in the centre of Test Trench 4
198	Casio 10	19	4	Miltonsfield	N	General view of south facing section of (019) in Test Trench 4
199	Casio 10	19	4	Miltonsfield	WSW	General view of section through (014) in Test Trench 4
200	Casio 10	19	4	Miltonsfield	NE	General view of Test Trench 4
201	Casio 10	19	4	Miltonsfield	N	General view of (015) in Test Trench 4
202	Casio 10	19	4	Miltonsfield	NE	General view of (016) in Test

Photo No.	Camera No.	Sub- area	Trench No.	Townland	Direction Facing	Description
						Trench 4
203	Casio 10	19	4	Miltonsfield	NNE	General view showing the relationship between (015) and (016) in Test Trench 4
204	Casio 10	19	4	Miltonsfield	NNE	General view of (017) in Test Trench 4
205	Casio 10	19	4	Miltonsfield	E	General view of section through (017) in Test Trench 4
206	Casio 10	19	4	Miltonsfield	NNE	General view of section through (018) in Test Trench 4
207	Casio 10	19	4	Miltonsfield	NNE	General view of features (019), (026), (020), (021) and (024) in centre of Test Trench 4
208	Casio 10	19	4	Miltonsfield	NNE	General view of (020), (021) and (024) in Test Trench 4
209	Casio 10	19	4	Miltonsfield	NNE	General view of section through (021) in Test Trench 4
210	Casio 10	19	4	Miltonsfield	WSW	General view of section through (021) in Test Trench 4
211	Casio 10	19	4	Miltonsfield	ENE	General view of (024) in eastern extension in the centre of Test Trench 4
212	Casio 10	19	4	Miltonsfield	NW	General view of (024) in eastern extension in the centre of Test Trench 4
213	Casio 10	19	4	Miltonsfield	NNW	General view of (024) in eastern extension in the centre of Test Trench 4
214	Casio 10	19	4	Miltonsfield	NW	General view of (024) in eastern extension in the centre of Test Trench 4

Headland Archaeology (Ireland) Ltd Title: Metro North, Assessment Report on the Results of Advance Archaeological Test Trenching, Testing Area 7, Subareas 18& 19, Swords Demesne and Miltonsfield townlands, Co. Dublin, RPA ref: (MN102) Fosterstown Park & Ride

Photo No.	Camera No.	Sub- area	Trench No.	Townland	Direction Facing	Description
215	Casio 10	19	4	Miltonsfield	W	General view of (024) in eastern extension in the centre of Test Trench 4
216	Casio 10	19	4	Miltonsfield	SSW	General view of north eastern extent and south western extent in Test Trench 4

Item	Quantity
Context Sheets	48
Trench Record Sheets	17
Field record sheets	4
Drawings	9
Photographs	193
Registers	9
Notebooks	0

Appendix 7 -	Archive	Quantities
--------------	---------	------------