




APPENDIX 15.3

RECEIVING ENVIRONMENT

Appendix 15.3: Receiving Environment

General Archaeological and Historical Background

During the Mesolithic period (*c*. 7,000-4,000 BC) people existed as hunters/gatherers, living on the coastline, along rivers and lakesides. They used flint and other stones to manufacture sharp tools, and locating scatters of discarded stone tools and debris from their manufacture can sometimes identify settlements. The native landscape consisted of woodland with hazel, oak, ash and Scot's pine as the primary species and Mesolithic hunting groups made no significant impact on the landscape.

Late Mesolithic and Neolithic fish traps were discovered during archaeological monitoring of development works on reclaimed land on the north bank of the River Liffey in 2004 (at depths of approximately -6 m OD and -4 m OD, respectively) (McQuade and O'Donnell 2007, 569-584). A Mesolithic shoreline was revealed and the remains of up to five wooden fish traps were excavated. The fish traps were constructed almost exclusively of hazel (*Corylus avellana*), and while fragmentary, were in a relatively good state of preservation, with tool marks in evidence. Radiocarbon determinations from five wood samples returned a date range of between 6,100 – 5,720 cal BC, suggesting that these are the earliest fish traps recorded in Ireland or the United Kingdom. As a result it has been suggested that:

"*other finds such as dugout canoes, hurdles and trackways, dating from prehistory onwards and reflecting shore-based fishing activity across mud flats, may also be preserved in situ at similar levels below the present ground level*" (Margaret Cowen & Co. Ltd. 2009, 50).

The population became more settled during the Neolithic period (*c*. 4,000-2,400 BC) with a subsistence economy based on crop growing and stock-raising. This period also saw changes in burial practices, and a tradition of burying the dead collectively and carrying out of cremations emerged. Neolithic monuments from County Dublin include portal, passage and wedge tombs.

The Bronze Age (*c*. 2,400-600 BC) is characterised by the introduction of metalworking technology to Ireland and coincides with many changes in the archaeological record, both in terms of material culture as well as the nature of the sites and monuments themselves. Though this activity has markedly different characteristics to that of the preceding Neolithic period, including new structural forms and new artefacts, it also reflects a degree of continuity. During this period knowledge of metalworking was acquired resulting in changes in material culture such as the introduction of metal tools and artefacts, as well as the introduction of a highly decorated pottery called Beaker pottery. In addition to changes in material culture, there were changes in burial rite from communal megalithic tombs to single burial in cists.

By the 4th millennium BC, a farming economy was developing that involved forest clearance. Archaeological and pollen records show an increasingly settled landscape with some fixed field boundaries for livestock and cereal production. While farming did spread throughout the country, the preference was for light soils and upland margins with free draining soils and light woodland cover. Extensive use of the productive though heavy soils of the poorly drained central lowlands was restricted by virtue of the limitations of available tools and technology.

Bronze Age monuments from County Dublin include standing stones, stone pairs, cairns, barrows and *fulachta fiadh,* which are one of the most numerous monument types in Ireland with over 4,500 examples recorded (Waddell 2005, 174).

During the Iron Age (*c*. 600 BC-400 AD) new influences came into Ireland which gradually introduced the knowledge and use of iron, although for several centuries bronze continued to be widely used. The Iron Age in Ireland however is problematic for archaeologists as few artefacts dating exclusively to this period have been found, and without extensive excavation it cannot be determined whether several monument types, such as ring-barrows or standing stones, date to the Bronze Age or Iron Age. Most knowledge for this period stems from Irish folklore, the epic poems and legends of warrior kings and queens which are traditionally believed to be Celtic in origin. These stories however come from an oral society and were first recorded by Early Medieval monks.

The Early Medieval period (*c*. 400-1169 AD) is depicted in the surviving sources as entirely rural characterised by the basic territorial unit known as *túath.* Walsh (2000, 30) estimates that there were at least 100, and perhaps as many as 150, kings in Ireland at any given time during this period, each ruling over his own *túath.*

The Early Medieval period is also characterised by the foundation of a large number of ecclesiastical sites throughout Ireland in the centuries following the introduction of Christianity in the 5th century AD. The early churches tended to be constructed of wood or post-and-wattle. Between the late 8th and 10th centuries mortared stone churches gradually replaced the earlier structures. Many of the sites, some of which were monastic foundations, were probably originally defined by an enclosing wall or bank similar to that found at coeval secular sites. This enclosing feature was probably built more to define the sacred character of the area of the church than as a defence against aggression. An inner and outer enclosure can be seen at some of the more important sites; the inner enclosure surrounding the sacred area of church and burial ground and the outer enclosure providing a boundary around living quarters and craft areas. Where remains of an enclosure survive it is often the only evidence that the site was an early Christian foundation.

The commencement of Viking raids at the end of the 8th century and their subsequent settlement during the following two centuries marked the first ever foreign invasion of Ireland. Viking settlement evidence is scarce and has been found in Dublin and Waterford, however excavations there have revealed extensive remains of the Viking towns. Outside these towns understanding of Viking settlement is largely drawn from documentary and place-name evidence. In addition to Dublin and Waterford, documentary sources provide evidence for the Viking foundation of the coastal towns of Limerick, Wexford and Cork (Edwards 2006, 179). Other indirect evidence which suggest Viking settlement, or at least a Norse influence in Ireland, is represented by upwards of 120 Viking-age coin hoards, possible votive offerings of Viking style objects and the assimilation of Scandinavian art styles into Irish designs. Whilst the initial Viking raids would have been traumatic, the wealth and urban expansion brought into the country as a result of Viking trading would have eventually benefited the native Irish and the cultural assimilation in some parts would have been significant.

The arrival of the Anglo-Normans in Ireland towards the end of the 12th century caused great changes during the following century. Large numbers of colonists arrived from England and Wales and established towns and villages. They brought with them new methods of agriculture which facilitated an intensification of production. Surplus foods were exported to markets all along Atlantic Europe which created great wealth and economic growth. Results of this wealth can be seen in the landscape in the form of stone castles, churches and monasteries.

The political structure of the Anglo-Normans centred itself around the establishment of shires, manors, castles, villages and churches. In the initial decades after the Anglo-Norman invasion a distinctive type of earth and timber fortification was constructed- the motte and bailey. There are six motte and baileys recorded in County Dublin (www.archaeology.ie).

In certain areas of Ireland however Anglo-Norman settlers constructed square or rectangular enclosures, now termed moated sites. Their main defensive feature was a wide, often water-filled, fosse with an internal bank. As in the case of ringforts, these enclosures protected a house and outbuildings usually built of wood. They appear to have been constructed in the latter part of the 13th century though little precise information is available. Moated sites were also built in Britain and elsewhere in north west Europe. There are six moated sites recorded in County Dublin (www.archaeology.ie).

More substantial stone castles followed the motte and bailey and moated sites in the 13th and 14th centuries. Tower houses are regarded as late types of castle and were erected from the 14th to early 17th centuries. Their primary function was defensive, with narrow windows and a tower often surrounded by a high stone wall (bawn). An Act of Parliament of 1429 gave a subsidy of £10 to "liege" men to build castles of a minimum size of 20ft in length, 16ft in breadth and 40ft in height (6 m x 5 m x 12 m). By 1449 so many of these £10 castles had been built that a limit had to be placed on the grants. The later tower houses were often smaller, with less bulky walls and no vaulting. There are 61 tower houses recorded in County Dublin (www.archaeology.ie).

The 14th century throughout north west Europe is generally regarded as having been a time of crisis, and Ireland was no exception. Although the Irish economy had been growing in the late 13th century, it was not growing quickly enough to support the rapidly expanding population, especially when Edward I was using the trade of Irish goods to finance his campaigns in Scotland and Wales. When the Great European Famine of 1315-17 arrived in Ireland, brought about by lengthy periods of severe weather and climate change, its effects were exacerbated by the Bruce Invasion of 1315-18. Manorial records which date to the early 14th century show that there was a noticeable decline in agricultural production. This economic instability and decline was further worsened with the onset of the Bubonic Plague in 1348.

Before the Tudors came to the throne the kings of England were also the kings of western France and so, during the 14th and 15th centuries, the various lords who ruled in Ireland were largely left to themselves. The Tudor conquest however brought a far greater interest in the affairs of Ireland. They wanted to put a stop to the raids of the native Irish on the areas under English rule. To do this, they ruthlessly put down any rebellions and even quashed inter-tribal feuds. English settlers were then brought in to settle their lands. The first of these plantations occurred in the mid-16th century in what is now Laois and Offaly. After the Desmond rising in Munster in 1585 came another plantation, and parts of south western Tipperary were planted at that time.

From 1593 until 1603 there was a countrywide war between the native Irish, who were supported by the French, and the Elizabethan English. The Irish were finally defeated and with the "Flight of the Earls" from Rathmullan, County Donegal in 1607, Ulster, which had previously been independent of English rule, was planted.

Dublin Port

The rapidly expanding population of Dublin in the latter half of the 17th century and a growing economy necessitated expansion beyond the city's walls. New land was required and this coincided with the necessity of keeping the harbour open to shipping. Land which became reclaimed in the Docklands area was held by the City, as the shoreline was included in the riding of the franchises from as early as 1488. Private development however was also encouraged as a result of the provision of preferential rents and leases (Margaret Cowen & Co. Ltd. 2009, 51).

A survey of 1682 resulted in the division of "*the strand between Mabbot's Mill (the area of Connolly Station) and the Furlong of Clontarf*" into 152 lots. The area of the North Lotts was susceptible to flooding at high tide and it was a requirement of allocation that each owner would defend his lot against inundation. It appears that this was unsuccessful however as four years later the granting of land was annulled. It is probable that the reclamation effort required to secure the area from the sea was beyond individual effort and was more likely a job to be undertaken with municipal support.

"*Consequently, at the close of the 17th century, it is unlikely that any development had taken place in the area east of the North Strand, although it would be unusual if the area had not been continually used for riverine activities*" (*ibid*., 52).

An Act was passed in 1707 which established the Ballast Office, and in 1710 it began river containment works at the site of the present North Wall. Wooden piles were inserted into the mud to strengthen the ground before the construction of the first earthen and gabion river wall, using woven timber kishes filled with stone and backed with sand, gravel and mud dug out of the riverbed. During the construction of the Custom House in 1791, the architect James Gandon uncovered part of this wall in front of the Custom House. He described it as:

"*60 feet wide at top and badly constructed; the walls of black stone; it's foundation laid on the surface of the strand; on the side next to the river it was twelve feet high, but on the inner only eight; the filling between the walls was a sand used for ballast; the base of the foundation stood about six feet above the bed of the river*".

By 1717, the north bank of the river had been formed in this way. By this time, the number of lots to be established by the Assembly had been reduced to 132 after being re-surveyed. This new survey was carried out by J. Macklin who produced a schematic map, (known as Bolton's map after the sitting Lord Mayor), which shows the plots and the leaseholders names. The Assembly was also charged to ensure "*that a wall be built to keep out the sea and that the canal be made and walled in*".

Work on this new masonry wall went ahead quite quickly but the formation of the land behind it progressed more slowly. In 1727 the Ballast Office reported that it was to build a back wall and form a quay. It is possible that the quay was built in two stages, the river wall and supporting material first, and a back wall and filling material at a later stage (de Courcy 1996, 272).
The wall was badly built and in constant need of repair. As early as 1730 the Ballast Office was repairing the wall and in 1786 Francis Tunstall, the first Inspector of the Ballast Board, recommended the wall be demolished and rebuilt.

By 1756 the area of the North Lotts had been reclaimed and the wall completed, with the pattern of the plots recorded on Rocque's 1756 *Map of Dublin*. In the early stages these new tracts of land were unattractive to the people of the city and the area remained largely under-developed. However, the moving of the Custom House from the centre of the city at Wood Quay to its new location at Custom House Quay in the latter half of the 18th century was part of a general movement eastwards from the old city. Despite fierce opposition from the city centre merchants, the Custom House opened in 1791. Streets, factories and workshops were demolished by the Wide Street Commission to make room for the development. Works also included a new dock and a terrace of large warehouses for merchant's wares on the newly laid Store Street (McCullough 1989, 79, 147).

Rocque's map clearly shows the area of the North Lotts, with "North Wall", "Mayor Street", "Sherriff Street", "East Quay" and "The Strand" all being recorded. East Wall Road is recorded but not named on Rocque's map. Individual plots are recorded in between these roads.

The major difference in the area between Rocque's map and the First Edition (1843) map is the presence of the Royal Canal, construction of which began in 1790 and lasted 27 years. The development of the railway system however had a devastating effect on the canals, as can be seen in the Second Edition (1876) map where extensive railway marshalling yards and lines are recorded. Most of the tracks ran alongside the Royal Canal, with a connection along West Road to the Belfast Line and a spur extending back to the area now occupied by the Point Depot.

The construction of the Customs House, the Royal Canal and the railway system attracted industrial development to the area, but also prevented the possibility of affluent settlement on the Lotts. Isolated industrial works are depicted in the area to the east of the Royal Canal (which is otherwise under pasture or waste ground) on the 1st Edition OS map of 1843 (figure 17.6). The only indication that any of the 1717 plotholders had developed their land for residential use is evident in the names of several houses such as "Forbes Castle" and "Fort William".

In the 18th and 19th centuries, Dublin port saw a steady increase in its volume of trade, and this brought increased political pressure to improve port facilities. In 1834 George Halpin, Inspector of Works, and two English engineers, Mr. Cubitt and Mr. Teford, recommended rebuilding of the partially collapsed north wall with foundations at a lower level. This suggestion turned out to be too expensive, and in 1840 Cubitt and Halpin found a temporary solution of fronting the quay with timber supported by piling.

In the 1860s, Dublin Port Engineer Bindon Blood Stoney began to evaluate the costs of both masonry and concrete for the purpose of constructing new quay walls when it became clear that the berthage facilities along the North Wall needed improvement. By 1869 the wall had been rebuilt "*carrying its foundation level to such depth that berth's varying from 16 feet to 18 feet at low water became available alongside*" (de Courcy 1996, 273). Although it does not appear that concrete was used for the construction of the new quay walls, it was used for the construction of the North Wall extension that began in 1867, using Stoney's enormous concrete monoliths. The deep-water berths at East Wall and the south side of Alexander Basin were also constructed, and the river was dredged to a depth of twenty feet from Dublin Bay to the city.

Until 1800, most trade took place on the south side of the Liffey, but with the opening of the New Custom House in1791, port development shifted to the north bank of the river. The original Custom House Dock opened in 1796, and it was supplemented by George's Dock in 1821 which included large warehouses and storage vaults. In 1851 William Dargan was commissioned by the Ballast Board to construct a dry dock at the North Wall, which was leased to a shipbuilding firm which went bankrupt in 1870. Several large flourmills opened in the Docklands with the rise in the import of wheat from the 1840s. Until Butt Bridge opened in 1879, Sackville Bridge- now O'Connell Bridge- was the nearest crossing point in the Docks area, and so people relied on the Liffey ferries to cross down-stream.

The development of the Alexandra Basin allowed much larger ships to discharge their cargo at all stages of the tide, and this naturally led to a reduction in the amount of traffic docking at the railway terminus. The outbreak of the First World War saw renewed passenger activity in the area with the railway yards being used for troop movement. Political instability in the early years of the 1920s led to the military zoning of the area. The Transport Act of 1944 nationalised the railway system in Ireland, and the two railway companies were taken over by Córas Iompair Éireann (CIE), along with the canal.

Fairview Park and *River Tolka*

The area of modern day Fairview began to develop with the construction of Annesley Bridge in 1797. Rocque's map of 1756 clearly shows that Ballybough Bridge was the only means of crossing the River Tolka in this area. Fairview Park was originally tidal mud flats and was used for land fill in the early 1900s. The park was developed in the late 1920s.

Eighteenth and 19th century pottery was recently revealed in Fairview Park as a result of monitoring groundworks in the area (Dr. Ruth Johnson, Dublin City Archaeologist, *pers. comm*.).

The River Tolka (in Irish *An Tulcha*, the flood) is one of Dublin's three main rivers (along with the Liffey and the Dodder). Annesley Bridge, west of the proposed pipeline corridor, was originally the mouth of the river, but reclamation has resulted in the Tolka flowing immediately south of Fairview Park before entering in to the sea north of East Wall Road.

The development will proceed along Alfie Byrne Road at the southern end of the proposed pipeline corridor. Alfie Byrne (17th March 1882 – 13th March 1956) was a politician who served as both an MP in the House of Commons and as a TD in Dáil Éireann. He was elected Lord Mayor of Dublin nine times without a break from 1930 to 1939. He also served as Lord Mayor in 1954 and 1955.

Marino Crescent

Built in 1792, it is recorded as having been constructed by Charles Ffolliott, a painter from Aungier Street, Dublin, to block the view of the sea from Marino House after he had had a disagreement with Lord Charlemount, the owner of Marino House.

Bram Stoker, author of *Dracula*, was born at no. 15 Marino Crescent in 1847. The author William Carleton resided at no. 3 and Martin Haverty, author of *History of Ireland*, lived for many years at no. 21.

Marino

A building scheme at Marino was first suggested in 1910, and a preliminary layout plan involved 96 acres, including the grounds of Marino House and additional land from the Christian Brothers Seminary (McManus 2002, 182). Eleven hundred houses were planned, with 12.5 acres of allotments. Existing trees and woodland were to be incorporated in to the layout wherever possible. The Corporation took control of the land in 1915, which had been used as allotments by the Land Cultivation Committee for a number of years. In October 1919 the Municipal Council approved a plan of 600 houses on a 50 acre site, at a cost of approximately £695 per house (*ibid*., 184). The City Architect later amended the plan to 530 houses.

In 1922 a Housing Committee report noted that due to the political situation the Marino Scheme had not been proceeded with. It was considered at that time to include additional land, so that the original 50 acre site was added to by a further 76 acres. Negotiations were underway by the following year to purchase the additional land which extended westward from the 50 acre site to Philipsburgh Avenue. Building on the proposed new thoroughfare on the northern boundary (Griffith Avenue) was deferred until a future date when money would be available to construct "*a superior class of dwelling within the prescribed limit*" (*ibid*., 186). After leaving the main frontages at Malahide Road, Griffith Avenue, Philipsburgh Avenue and Marino Mart, 428 houses would be erected in two phases.

Soon after work began on the first phase, the Corporation compulsorily acquired 90 acres of land running westward to Philipsburgh Avenue and 852 houses were eventually completed.

The north eastern boundary of the Marino scheme was formed by the so-called "*100 foot road*", and leases for houses on this road, which became known as Griffith Avenue, were first granted in 1927 when two sites were leased. Two additional sites were leased in 1928 on the condition that the houses would be semi-detached and "*of a nature suitable to the roadway*" (*ibid*., 252). The Griffith Avenue frontage therefore was built up gradually by a number of different interests, although in a manner in which the Corporation was able to control the size and quality of houses being built.

The Casino, Marino (National Monument No. 302, RMP DU018:144) is located approximately 180 m west of the proposed pipeline corridor. Located in the grounds of Marino Demesne, it was designed by Scottish architect Sir William Chambers for James Caulfeild, the 1st Earl of Charlemont, starting in the 1750s and finishing around 1775.

The name is derived from Italian which translates literally as "*the small house by the small sea*". Widely regarded as the most important Neo-Classical building in Ireland, it is actually quite small measuring only 15 m square to the outer columns. In plan, it takes the form of a Greek cross with a pair of columns framing each projecting elevation. Seen from the outside, the building has the appearance of a single roomed structure, with a large panelled door on the north elevation and a single large window on each of the other elevations. This is all an illusion however as it actually contains 16 rooms on three floors. Only two of the panels in the doors open to allow an entrance, and the panes in the windows are subtly curved, disguising the partitioning which allows what looks like a single window to serve several rooms. The interior includes a basement level with a kitchen and associated rooms, a main floor with reception rooms and a top storey with servant rooms and a State Bedroom.

It contains some very fine plasterwork ceilings and some elaborate hardwood parquet floors. Originally the Casino was linked to Marino House by a tunnel, although this has more recently been blocked off due to building works in the area.

Donnycarney

A report dated 28th August 1928 recommended that lands at Donnycarney be compulsorily purchased for the purpose of house building, and by December of the same year notices to quit had been served on tenants of the City Estate premises on Malahide Road (*ibid*., 207). Originally over 540 houses were to have been built but this was reduced to 421, giving a density of 12 houses per acre or approximately 30 per hectare. Houses at the intersections of roads received special design, with those at the junction of Malahide Road and Collins Avenue for example having a timber-frame effect in the upper storey and red roof tiles as opposed to black slate used elsewhere in the scheme.

Lewis (1837) records Artane, or Artaine, as containing 583 inhabitants. Oscar Traynor Road is named after Oscar Traynor (1886 - 1963), who took part in the Easter Rising of 1916. He was elected as a Sinn Féin TD in a 1925 by-election, was re-elected in the 1927 general election and was elected as a Fianna Fáil TD for Dublin North in the 1932 general election.

The settlement of Coolock grew up around an Early Medieval church (RMP DU015-076001), although prehistoric activity in the area is testified to by the presence of a ring-ditch (RMP DU015-077) to the east of the proposed pipeline corridor. A housing estate currently occupies the location of this cropmark site. At one stage the village was located on the Malahide Road, but that was subsequently diverted and now passes slightly to the east of the village. Coolock remained a small village until the 1950s, since when developments such as Edenmore, Darndale, Kilmore and Priorswood have taken place.

Belcamp Park is located immediately south of the N32 along the northern boundary of the city. It measures 25 hectares or 62 acres in size. It dates to the late 17th century when Sir Humphrey Jervis, Lord Mayor of Dublin, built a house there (RMP DU015-061). Both Henry Grattan and Dean Swift are recorded as having been visitors. Countess Markievicz rented the house in 1909 and it was then used as a centre for the Fianna Éireann movement.

Dublin Airport

Aer Lingus was established by Government in 1936 and began operations from the military airport of Baldonnel, to the south west of Dublin City. A decision however was made to replace Baldonnel with a civil airport, and Collinstown was chosen due to its association with aviation as a British military airbase. Construction of the new airport began in 1937, and by the end of 1939 a grass airfield surface and associated infrastructure were in place. The inaugural flight from Dublin took place on 19th January 1940 to Liverpool. The new airport terminal building was completed in the same year (Protected Structure no. 612). Three new concrete runways were completed by 1947.

A zoomorphic penannular brooch was found 0.6 m below the surface while a cutting was being made at Dublin Airport in 1938 (National Museum of Ireland: 1938:8566).

Toponyms

Table 15.9: Translation or Explanation of Townland Names from within the Proposed Pipeline Corridor

Townland	Derivation / Meaning
Artane	*Ard Aidhin*. Various translations such as the height of the flocks and Aidhean's height.
Balgriffin	*Baile Ghrífín* meaning Griffin's town.
Belcamp	Belcamp.
Brookville	Name of a demesne.
Clonshaugh	*Chluain Seach*. No definite translation.
Clontarf	*Cluain Tarbh* meaning pasture of the bulls.
Coolock	*An Chúlóg meaning* little corner.
Corballis	*An Corrbhaile* meaning odd townland.
Donnycarney	*Domhnach Cearna* meaning Cearnach's church.
Killester	*Cill Easra*. Possibly meaning St. Lassera's Church.
Marino	From the Italian meaning small sea.
Middletown	*An Baile Meánach*.
Newtown	*An Baile Nua*.
Oldtown	*An Seanbhaile*.
Stockhole	*Steach Comhaill* meaning Comhgalls' house.
St. Thomas'	*San Tomás*.
Tonlegee	*Tóin le Gaoith.* Possibly meaning hill to the wind.
Toberbunny	*Tobar Búinne* meaning the milk well.

Summary of Previous Fieldwork in the Study Area

Reference to Summary Accounts of Archaeological Excavations in Ireland (www.excavations.ie) revealed the following fieldwork programmes have been carried out in townlands located within or in close proximity to the proposed pipeline corridor.

1980-84:0092. Artaine South.
The site survey revealed ditches south east and north west of the church (RMP DU014-073001). These may be associated with the Medieval manor of Artaine. The site of the castle (RMP DU014-073003) is shown north west of the church on the OS 6" map.

1990:033. *Church of St. John the Evangelist, Coolock*.
The recovery from this site of the lower stone of a horizontal water mill, together with several sherds of 13th/14th century pottery, indicated the presence of a site of archaeological significance. As such, it was decided that preliminary archaeological excavations should be undertaken when further works within the area of the church precincts were proposed.
Excavations were confined to two areas; the first was along the south wall of the church and the second area was located close to the boundary wall, where traces of a disused entrance could be identified.

In all areas there was evidence for considerable disturbance extending to a depth of over 2 m in places. Most of this disturbance had been caused by repeated burial, with the recovery of broken slate and mortar fragments at all levels. Only one articulated burial was encountered in the cutting outside the wall of this structure, which proved to be a post-18th century vault. There was some evidence that the present church, built in the mid-18th century, had been constructed on the foundations of an earlier structure.

In the area to the south east, where an earlier gateway had existed, there was evidence for an outer ditch and an inner bank, along with a burial within the line of the bank.

Small numbers of finds were recorded, generally without stratigraphical context. However, among these was a bronze penannular brooch, as well as the remarkably well preserved pin of a second brooch, both occurring high in the fill of the deposits close to the wall of the church. As well as these, a small lead ingot and a piece of worked antler gave further evidence for Early Medieval activity on the site. Some sherds of 13th or 14th century pottery, as well as portions of glazed roof tiles, indicated occupation during this later period.

1991:031. Clonshaugh.
The site was identified from the 1910 Edition of the relevant OS map, where it was marked as a hachured area. Archaeological investigation to establish the potential of the site was conducted over a one-week period. Prior to excavation, the site appeared as a triangular-shaped grassy platform, bounded on three sides by roads and supporting a single large tree on its south side. Maximum height of the feature was 1.5 m and the maximum width was 15 m. Two main trenches were opened to obtain a profile through the feature. A stone lined and lintelled culvert was uncovered at the site. Further investigation yielded a ceramic pipe which ran through the feature and could be observed as a slightly raised area on the road surface as it extended under the road and eventually ended in a stream. No features or material of archaeological significance were uncovered at the site.

1994:049. *Cadbury Ireland, Malahide Road, Coolock*.
The archaeological site which gave rise to the assessment was a mound situated within the grounds on the site, close to the entrance gateway. It was a well-defined, grass-covered mound, 20 m in diameter and over 3 m high. It had not been dated, nor had its function been established. However, given its small size, its regular shape and its height, it was suggested that it may date to either the Neolithic period or to the Bronze Age and is likely to contain burials. It was considered too small to be a defensive Norman motte.

No archaeological soils, features, or artefacts were revealed in the excavated trenches, and on the basis of these results it was decided that no further trenching was required as the construction of the proposed extension would not expose, damage or destroy any archaeological material relating to the mound.

2000:230. Cadbury's Factory. Old Malahide Road/Oscar Traynor Road.
An assessment was required in advance of construction of a Bord Gáis Above-Ground Installation in the grounds of Cadbury's factory. The site area measured 7.5 m x 10.5 m. The area was stripped of topsoil and no archaeological finds or features were noted.

2000:342. Stockhole Lane 1.
This small site was identified in the course of archaeological monitoring prior to construction of Phase 1 of the Dublin Airport–Balbriggan bypass. The site was identified as a small, linear area that contained charcoal-enriched soil, fragments of cremated bone and a cow tooth. The site was 0.55 m long, 0.36 m wide and 0.12 m deep. The charcoal-enriched soil and the cremated bone were in a layer at the base of the linear feature. It is probable that this site had been a small pit that had subsequently been ploughed through.

2000:343. Stockhole Lane 2.
This small site was identified in the course of monitoring prior to construction of Phase 1 of the Dublin Airport–Balbriggan bypass. The site was identified as a small, circular area that contained charcoal-enriched soil. It was 0.9 m long, 0.81 m wide and 0.13 m deep. The charcoal-enriched soil lay directly on top of the subsoil. The site was probably a small pit that had been ploughed through. This site is considered to be of no archaeological significance.

2000:344. Stockhole Lane 3.
This small site was identified in the course of monitoring prior to construction of Phase 1 of the Dublin Airport–Balbriggan bypass. The site was identified as a small, oval area that contained charcoal-enriched soil and a small area of burnt topsoil to the east. It was 0.7 m long, 0.62 m wide and 0.05 m deep. The charcoal-enriched soil lay directly on top of the subsoil. The site was probably a small pit that had been ploughed through. It is considered to be of no archaeological significance.

2001:377. Berth 51a, Dublin Port.
Ten test trenches were excavated in the location of an extension to Berth 51a in Dublin Port. Three layers were identified in the deposit profile established in Trenches 1–9. The depths of the layers varied in the individual trenches and indicated a gently sloping surface in both glacial and post-glacial times; however, the sequence and constituent make-up of the deposits remained constant.

The upper deposits excavated consisted of backfilled material dumped on the old estuary surface in 1970. These deposits were 1–2 m deep and were made up of heavy demolished building debris (rubble stone, brick and concrete and fragmentary iron reinforcing). This backfilled material was dumped in the estuary in the 1970s as a solid retaining wall to surround the reclamation scheme for the new ferryport terminal. The building debris lay above the fine estuarine silt that accumulated in the mouth of the Liffey on either side of the old channel leading into the port. The deposits of silt accumulated to a depth of 1–3.8 m and overlay glacial gravel at the base of the deposit profile.

Trench 10 was the most southerly trench excavated and recorded the deposits of rubble debris utilised as bund material in the 1970s. The identification of deep deposits of bund material at this location identified the old dredging line associated with the deepening of the port in the late 1960s.

No archaeological deposits or indicators were located in any of the test trenches. The results of the test excavation corroborated the results of earlier geophysical survey.

2001:476. Dublin Port Tunnel, Whitehall.
Monitoring was conducted in a large ploughed field (High Park) at Whitehall during preparatory works for the compound and access shaft of the Dublin Port Tunnel. The monitoring identified a series of field boundaries dating from the 18th to the early 20th century. Sherds of Post-Medieval pottery were also recovered. The results of the monitoring reflect the depiction of the site on historical maps such as those of Rocque (1760) and Duncan (1821).

A small quantity of 17th and 18th century pottery (Staffordshire slipware and North Devon gravel-tempered ware) was identified from the ploughzone, but the majority of the pottery was 20th century in date. A single sherd of local Medieval pottery was retrieved from the topsoil. No flint (worked or otherwise) was recovered from the topsoil. The pottery sherds contained in the matrix of topsoil were not associated with any archaeological features. The occurrence of pottery in these quantities reflects the manuring of farmland over the centuries and indicates that the field at High Park has been cultivated for many centuries.

2002:537. Dublin Port Tunnel.
Monitoring revealed that the area was mudflats until the late 19th century when it was used as landfill. Fairview Park was developed in the 1920s and the monitoring results were consistent with this, with no earlier features being recorded.

2003:576. Spencer Dock, Sheriff Street.
The excavation of environmental test pits on the site of the Spencer Dock residential development was monitored between July and October 2003. Monitoring of groundworks on the site commenced in January 2004.

The ground uncovered in the environmental test pits comprised Post-Medieval rubble and fill, overlying silts and river gravels. A series of subsurface structural remains of red brick and limestone construction were uncovered. These are the remains of industrial structures, dating from the 19th and 20th centuries. A number of artefacts dating from the Post-Medieval period were recovered from the test pits. During initial site clearance and shoring, cellars were uncovered in the south of the site, where they extend under the North Wall road. These are from the demolished structures Nos. 46 and 47 North Wall, and may date from as early as the mid-18th century.

2004:487. Clonshaugh.
A large tracked excavator was retained to open six trenches (50-100 m long) in the area to the west of the delisted monument RMP DU014:024. The stratigraphy was uniform across the tested area, with grey/brown clayey silt topsoil averaging 0.3 m in thickness overlying light-yellow/brown and grey/brown clayey sand subsoil. No archaeological features, finds or deposits were discovered during testing.

2004:537. Berth 50a, Dublin Port.
Monitoring of dredging for a new berth was undertaken in April-May 2004. The berth is at the south end of Breakwater Road South, adjacent to land reclaimed by the Dublin Port Authority/Company, just east of the North Wall and the North Wall (Breakwater) lighthouse and just west of the car ferry terminal. While most of the site lay within the main modern Dublin Harbour channel, and has thus been dredged regularly in recent times, it was near the historical location of Brown's Patch sandbank and Clontarf Pool, an area infamous for its tortuous, shifting sands, at the confluence of the Liffey and Tolka estuaries. No wrecks are recorded specifically for this area, but the eastern extremity of Brown's Patch was sufficiently dangerous to have been successively marked by buoys to prevent beaching by vessels entering either Dublin Port or Clontarf Pool. No archaeology was revealed anywhere on the site, and no further mitigation was recommended.

2004:565. Spencer Dock, North Wall Quay.
Monitoring and excavation were carried out on the site of Building C, Spencer Dock, North Wall Quay, between January and September of 2004. Three principal phases of activity were uncovered.

The earliest phase relates to fishing and other activity carried out when the Liffey estuary occupied the south of the site. The transition of silt and gravels uncovered between 13-16 m north of the southern limit of excavation marked the old shoreline of the Liffey channel. The remains of wooden fish traps, stake rows and miscellaneous pieces of worked wood were preserved in the waterlogged silts. A semi-circular wicker structure or fish trap comprised stakes and a series of smaller upright rods, around which rushes had been woven. A radiocarbon date of 6,090-5,840 cal. BC was returned for this feature. Along the shoreline to the south west of the fish trap was a deposit of horizontally set roundwoods. These were truncated to the east by machine excavation, but the remains covered an area measuring 3.4 m x 1.28 m and have been radiocarbon dated to 6,070-5,890 cal. BC. In the south of the site was a row of 36 stakes aligned north east/south west; a date of 5,920-5,720 cal. BC was obtained for one of these stakes. Along the western shoreline, to the north of the western stakes, were the remains of a wicker-basket-type structure and a group of stakes. The structure, which survived up to 0.6 m long and 0.3 m wide, has been dated to 5,990-5,750 cal. BC. On the west of the site were two rows of rods and stakes, a horizontal panel of wicker (dated to 6,100-5,970 cal. BC) and a fragmentary wicker fence, which were probably part of a truncated fish trap.

The fish traps were constructed mainly but not exclusively of hazel and were in a good state of preservation. In addition, there were several other stakes and pieces of worked wood, which did not form any coherent structures.

Phase 2 was the reclamation of land from the estuary and its floodwaters. This was achieved by depositing a series of fills in order to build up the ground. Artefacts recovered from these reclamation deposits have been dated to the 18th and 19th centuries and corroborate with the documentary sources in indicating the date when this work was carried out.

The third phase was the development of the reclaimed land. From the later 18th up to the 20th century a series of structural remains were founded on the reclamation deposits and the site was drained by a series of brick culverts cut into these deposits. In the south of the site, *c*. 112 m to the east of the canal and 45m north of where the canal opens into the Liffey, were the remains of a circular masonry structure. This had an internal diameter of 11.2 m and its encircling wall was constructed of limestone blocks (0.35 m x 0.22 m x 0.16 m), bonded with mortar. The wall was 1 m wide and survived to a maximum of 1 m in height. In the west was an entrance. Leading from the western entrance was a walkway, which comprised two rows of granite slabs on either side of which was a red brick floor (6.1 m x 5.1 m) and to the west were four sandstone slabs. To the east of the floor and abutting the external wall was a north/south masonry wall with an eastern return at its north. This was probably an internal division within the circular structure. This was the earliest masonry structure uncovered on site. Its location roughly corresponds with the windmill at North Wall Quay, which was recorded as being 100m east of the mouth of the Royal Canal. The windmill had burned down in a spectacular fire late in 1810 but is shown on Taylor's map of 1816. The inclusion of the windmill on Taylor's map suggests that it was reconstructed after the fire of 1810. However, it is not shown on the First Edition OS map (1843), which shows a warehouse on the same location. The western wall of this warehouse was uncovered during site works, partly overlying, and therefore post-dating, the windmill wall. The archaeological evidence corroborates the cartographic evidence in indicating an early 19th century date for the windmill. It was larger in diameter (11.2 m) than typical tower mills (4 - 6 m). Its location on low-lying ground, which was prone to flooding, suggests that it may have served for pumping and draining water rather than milling corn.

To the north, west and south of the windmill structure were a series of 19th and 20th century walls and basement floors, which largely corresponded with the structures shown on the OS maps. A series of five arched vaults was uncovered along the street front and extended under the road, south of Nos. 46 and 47 North Wall Quay. The vaults extended for *c*. 16 m east/west and were accessed from the north through an arched corridor. The individual vaults measured *c*. 3 m long x 3.2 m wide and the corridor was *c*. 1.5 m wide. The vaults were constructed of limestone blocks bonded with mortar.

Red and yellow brick used in the upper structure of the walls may represent modifications to the original structure. These vaults were filled in and remain *in situ*.

2004:642. *Balgriffin*.
Monitoring was carried out as part of the Dublin North Fringe Water Supply Scheme, Contract 7 between June and September 2004. No archaeological features or artefacts were revealed as a result of monitoring.

2006:582. Clonshaugh and Turnapin.
An assessment was carried out in advance of the planned M50 Upgrade. Testing Areas 1–3 were located in the townlands of Clonshaugh (1–2) and Turnapin (3). The combined area of test trenches excavated in Testing Area 1 was 957 m², in Testing Area 2 it was 1362.7 m² and in Testing Area 3 it was 203.4 m².

No features of archaeological significance were identified and no finds were recovered. Natural subsoil was exposed in Testing Area 1, built-up rubble and other construction related material was identified in Testing Area 2 and redeposited natural material that contained inclusions of modern rubbish was identified in Testing Area 3.

2006:584. Collinstown townland.
Intermittent monitoring of groundworks, measuring 7,838 m², associated with the extension of Dublin Airport terminal building were carried out between May 2006 and August 2007. No archaeological features or artefacts were revealed.

2006:586, 2007:452 and 2009:AD4. Corballis House. Corballis.
Test trenching and monitoring were carried out on the proposed site of a new terminal building at Dublin Airport. The works on site included the monitoring of geotechnical site investigations, monitoring the removal of plaster render from Corballis House and the excavation of test trenches around the site of Corballis House and within the constraint area of a “castle site” (RMP DU014:011).

Nothing of archaeological interest was uncovered during the monitoring of the geotechnical site investigations. The test trenching indicated that a layer overlying subsoil consisted of made ground containing a mix of clays and Post-Medieval artefacts, including red brick, modern glass, wood and post-18th century pottery. Testing adjacent to the castle, recorded as a "*castle in ruins*" on the OS maps, focused on establishing if any remains of the structure survived below ground. This area however was shown to contain an extensive network of modern services and as a result no archaeological features or artefacts were revealed. Two test trenches were excavated around the foundations of Corballis House. Test trench 1 revealed that the foundation of the rear wall of Corballis House extended 0.76 m below the present ground surface. A cobbled surface, dating from at least the late 18th/early 19th century, was also revealed. Test trench 2 revealed a rectangular sectioned roughly coursed foundation wall.

Plaster render was removed from key surfaces at Corballis House, and this confirmed that an earlier structure was contained within the later extended late 18th/early 19th century house. This early building appears to have been a simple rectangular stone structure and is likely to have functioned as a dwelling. Architectural fragments, when considered in combination with the wall thickness, suggest a building that dates from shortly after *c*. 1641/2. The building is illustrated on Rocque's map of 1760.

Monitoring associated with the construction of Terminal 2 failed to reveal any features associated with RMP DU014:011, the site of a tower house located approximately 220 m south east of Corballis House.

2006:602. Bond Street, Dublin.
Monitoring was carried out at this site, which lies on the eastern side of Bond Road to the south of the Tolka River. Prior to development, the site was occupied by two warehouses. The depth of excavation was 1m and a series of engineering trial pits were excavated to depths of between 4.5 m and 5 m. Monitoring revealed that the development site was located on made ground comprising fill dating from the 20th century. Natural ground was identified in the trial pits *c*. 5 m below the present ground level. Nothing of archaeological significance was identified.

2006:639. Docklands, Sheriff Street.
Monitoring was carried out at Sheriff Street Lower, Docklands, Dublin 1. A long area, *c*. 10 m wide, north of Spenser Bridge was stripped and monitored. A depth of approximately 0.3 m – 0.5 m of grey clay material with stones was removed to put in a platform for the new station. Beneath this was a mixture of yellow/orange sandy clay with stones. Both layers contained modern ceramics, Post-Medieval building material, metal, glass bottles and shell and were disturbed by the construction of the old railway and the reclamation of land for the canal. The remains of a small Post-Medieval red brick building were uncovered, as well as a part of the foundation wall for the bridge. Nothing of archaeological significance was uncovered during monitoring.

2006:655. Crescent Place, Fairview.
Monitoring of construction groundworks took place at 22 Crescent Place, at the rear of 22 Marino Crescent, during September 2006. No. 22 Marino Crescent is part of an 18th century terrace and is a Protected Structure in the Dublin City Development Plan. The development site was previously occupied by a single-storey concrete workshop and is located north of RMP DU018:067 (classified as "burial").

Four foundation trenches in a rectangular grid were excavated within the site with a mini-digger equipped with a toothless bucket. A dark-brown/grey garden soil was noted beneath the concrete floor surface. The subsoil consisted of a malleable mid-brown silty clay. Along the eastern and western boundaries of the site were found calp-limestone garden wall foundations. Examples of 19th and early 20th century household waste was recovered from the garden soils.

No archaeological features, deposits or artefacts were discovered during the course of the excavation of the four foundation trenches.

2006:676 and 2007:528. Marino.
Monitoring of the Dublin North Fringe Water Supply Scheme in Marino failed to reveal either archaeological features or artefacts.

2006:690. *Tonlegee House, Raheny*.

The proposed development site was located within the Zone of Archaeological Potential of RMP DU015–078, a dwelling site illustrated on the Down Survey map and perceived to be located on the site of Tonlegee House. A large complex of farm buildings at the site of Tonlegee House was illustrated on all three Editions of the Ordnance Survey maps, but the structures were demolished prior to the assessment. Five trenches were inspected and structural remains were identified. These were not of Medieval fabric and are believed to relate to various structures illustrated on the Second and Third Edition OS maps, providing a construction time frame of 1872–1937. The remains of a small well, presumably used to supply water to Tonlegee House, was also identified.
No features or stratigraphy dating to the Medieval period were identified on this site.

2006:AD8. 2-8 Richmond Avenue and 65 Fairview Strand, Ballybough.

Pre-development testing was carried out on the site of a proposed mixed-use scheme in September 2006. The south east part of the development site borders an 18th century Jewish burial-ground (RMP DU018:040). Testing comprised the excavation of a single, staggered trench on the footprint of the south east corner of the proposed building in close proximity to the cemetery's boundary wall. The results of testing indicated that the existing ground level in this area is raised some 0.25 m above the old ground level, which is represented by a disturbed topsoil layer. The topsoil overlay light-grey/brown silty sand, which was 0.15 m thick and yielded a couple of Post-Medieval clay-pipe fragments. This overlay yellow/brown silty/clayey sand subsoil. No archaeological material was uncovered.

2007:450. *Coolock*.

Test trenching and monitoring took place in relation to the development of retail units adjacent to a "possible chapel site" (RMP DU015–084) located to the west of the proposed development area. Testing was undertaken mechanically across the site, while the remaining undisturbed ground contained no archaeological features. Monitoring of piling works failed to reveal any archaeological features or artefacts.

2007:494. Spencer Dock, North Wall Quay.

Excavation uncovered the remains of two stationary fishing structures or fish traps constructed of wood and several pieces of worked wood which had been washed in by the tide.

The traps may be described as ebb weirs. These structures were generally V-shaped and were constructed of large wooden fences or stone walls. They were erected in tidal zones and caught fish that drifted with the falling tide. There was often a basket at the junction of the fences. The fences served to direct the fish into the basket or trap. Fish could then be removed when the traps were exposed for two to three hours at low tide.

All of the wooden remains had been covered in layers of estuarine silt, which had built up from tidal deposition. These waterlogged silt deposits facilitated the preservation of the wood.

Two distinct phases of prehistoric activity were identified on the southern end of the site, within the area previously occupied by the Liffey estuary.

Phase 1 was represented by the *in situ* remains of a fish trap, most probably an ebb weir, which was partially exposed within an area of deeper excavation (to -4.66 m OD) on the southern end of the site. At this location the trap would have stood in the intertidal mudflats along the northern edge of the River Liffey or on the shore of an island within the estuary area. The remains of this trap were dated to the Late Mesolithic period (6,000–5,760 cal bc).

Phase 2 was characterised by the remains of a wattle panel which was probably part of the fence of a much larger ebb weir. The wattle panel was not *in situ* but was found washed up against what was then the shoreline of the Liffey estuary. The weir would probably have originally stood in the intertidal mud flats somewhere to the south of the shore. It was dated to the Middle Neolithic period (3,630–3,370 cal bc).

The Late Mesolithic remains were defined by two linear stake rows which probably represent the remains of a single fish trap. The western stake row was oriented north east/south west and the eastern stake row ran north west/south east. The excavated portions of these fences were set 8.47 m apart. The two stake rows would probably have joined at a point further north, where there was likely to have been a basket trap. The area to the north of the stake rows did not require excavation to the same depth and consequently no further remains of this fish trap were uncovered. The stakes were set an average of 0.25 m apart and were an average of 0.03 m wide. They varied considerably in length, ranging from 0.03 m to 1.15 m, indicating that they had been

driven into the silt at various depths. There were 15 stakes within the western row which extended for 4.45 m, and the eastern fence comprised a longer (12.75 m) staggered row of 62 stakes. The majority of stakes were identified as hazel, but there were a few pomaceous fruitwoods. The hazel pieces ranged between three and 17 years and the pomaceous fruitwood types ranged from seven to 24 years. Several stakes had worked ends. These took the form of wedge-shaped points (cut on two sides) and chisel points (cut on just one face). All of the worked pieces were cut at angles of 10°. The majority had flat facets but there were also several concave examples. The facets ranged from 15 mm to 52 mm in length, and from 7 mm to 23 mm in width.
A second phase of activity was identified at a higher level (between - 2.4 m OD and -3.01 m OD), where the remains of another fish trap were uncovered on the east end of the site. This trap comprised the remains of a wattle fence, which was beautifully preserved. The surviving remains of Fish Trap 1 measured 4.41 m long x 4.16 m wide. They were found lying almost horizontally, having been washed up on the shore, but would almost certainly have been part of a vertical fence. That fence would have formed part of a much larger fish trap structure, most probably an ebb weir.

The wattle panel was woven from a series of rods and sails that were originally supported by four upright stakes. The panel was secured to the stakes by a series of hazel withies, some of which were incorporated into the weave. As already mentioned, the panel was found lying horizontally but would almost certainly have stood vertically and the stakes would have held it in position. The sails and stakes were the upright components of the trap and the rods and withies formed the horizontal weave. The stakes ranged between 1.42 m x 2.03 m in length and were 0.05 m wide on average. They were all made of hazel pieces that ranged from between nine and 28 years. The sails ranged from 1.63 m to 3.16 m long and were an average of 0.02 m wide. A sample of these was identified to species and all were found to be hazel that was between two and seven years old when cut. Seven horizontal rods were woven into the structure of the fish fence. The rods were an average of 0.03 m wide and were secured to the stakes and to some of the sails by a series of knots. A total of 16 knots had been tied at a number of key points within the structure, where they were bound around stakes and sails. No finds or fish bones were recovered during the excavation.

2007:529. The Casino, Marino.
Five test trenches were excavated, two in the north west corner of the site at the point closest to the Gothic Room, and three in the south west corner, formerly occupied by the northern reaches of the Serpentine Lake. No evidence was revealed for the presence or foundations of the Gothic Room. The remains of two possibly contemporary structures however were uncovered, a small brick culvert and a large masonry wall, the latter possibly the foundations of the original boundary wall, and the former may have fed the Serpentine Lake. The three trenches in the area of the lake were cut through 1.5 m of backfill. Possible remnants of lakeside deposits were revealed, consisting of sedimentary silt underlying a thin layer of wood and decayed vegetation, suggesting marshy ground with a thick cover of trees and shrubs. Deeper deposits of black silt marked the lake in the south west corner of the development. Metal detection of all the soil revealed brass, copper pipes and modern debris such as bicycle parts and nails, together with modern china.

2007:554. Toberbunny/Stockhole.
Test trenching and monitoring were carried out in association with the construction of the Eastlands Consolidation Compound, a *c*. 9.45 hectare site located north of the Cuckoo Stream and east of Dublin Airport. No archaeological features or artefacts were revealed.

Liffey Services Tunnel, North and South Wall Quay.
A programme of archaeological monitoring took place during the construction of the Liffey Services Tunnel, North and South Wall Quay, in 2007-8. Shaft excavations (Shafts 1 and 2) on North Wall Quay exposed surviving elements of an east/west oriented masonry wall-like structure 2 m below the level of the campshire and extending to a depth of 5 m below the level of the campshire. The wall was 1 m thick, and was located 2.80 m to the north of and running parallel to the existing wall of the north quay. Construction was of randomly coursed limestone blocks (10 cm to 0.40 m wide) bonded by lime-based mortar and faced only on its northern side. The structure was constructed on a layer of riverine sand and gravel. There was no indication of foundation stones. It is clear that the structure was truncated from above as the surface of wall encountered during the monitoring programme was rough and disturbed. A think layer of sand with inclusions of shell lay to the north of the structure.

It is likely that this layer of sand was re-deposited as infill having been dredged from the base of the river basin. A timber revetment constructed of upright timber planks was identified 1 m south of the masonry wall between it and the outer quay wall. It is likely that this represents the back wall of the current quay wall that was built between 1864-69 by the Dublin Port and Docks Board (which replaced the Ballast Office) in order to improve the berthing facilities and lower the foundation levels of the wall. The wall was constructed by building two masonry retaining walls running parallel to each other at a distance of 2.80 m with a sand-filled core. A timber revetment placed between the walls acted as additional support. The exterior faces of both walls were faced, and the outer face of the river-side wall was then dressed with a cut stone granite ashlar façade.

Site Investigation Boreholes, DART Undergound: North Quay's to Portal East.
There was no evidence of archaeological deposits in cores retrieved from the area close to the East Portal and proposed new Docklands station. The area was shown as having been heavily truncated, levelled and filled with Post-Medieval and modern landfill deposits. The natural ground in the area lies to the north of the primary estuary and its sand and mudbanks which, close to the current quayfronts, yielded evidence of Mesolithic and Late Neolithic fish traps of -6 m OD and -4 m OD respectively. Drilling in the area immediately behind North Quay Wall showed slightly over 7 m of fill but no evidence of archaeological activity.

2008:364. Brookville House, Artane.
Monitoring was carried out over four days adjacent to the Protected Structure Brookville House. No remains of archaeological significance were uncovered in the course of the works.

2008:373. Belcamp.
Test excavations were undertaken at three locations along the proposed route of the Malahide distributor road. A series of 2 m wide trenches were excavated within each of the areas in order to test the results of a geophysical survey (08R0023).

At Belcamp, trenches were excavated in a large tilled field where topsoil was an average of 0.35m deep. A trench measuring 80 m and two offsets, 15 m and 30 m long respectively, were excavated across a series of linear ditches identified by the geophysical survey. Most of these were Post-Medieval land drains. They were orientated north west/south east and were an average of 0.8 m wide. A pit (0.85 m x 0.9 m) filled with cockleshell was also uncovered. The geophysical survey had identified a potential prehistoric site 108 m to the north west. An 80 m trench and a 20 m offset were excavated with additional areas opened in order to define the extent of archaeological features within the road take. A large pit 2.5 m x 2.05 m and 0.3 m deep, two smaller pits and a linear feature were uncovered within an area measuring 10 m x 7 m. All of these features were filled with charcoal-rich silty clay and burnt stones.

2008:381. *Stockhole Lane*.
An assessment, including trenching, was carried out in advance of the construction of a house. Four test trenches were excavated, in the south west corner of a level field, with no visible anomalies. The RMP indicates a mound/site, DU015–001, in the adjacent field to the west of the site. No material of an archaeological nature was disclosed by the test trenching.

2008:385. *Greencastle Avenue, Coolock*
An assessment took place in the form of monitoring of groundworks associated with a residential development at Castle Avenue, Coolock, Co. Dublin. The site of the proposed development was located within close proximity to RMP DU015–072, the site of a dwelling dated to the 16th/early 17th century, which is recorded as being a tower house or a fortified house. During the course of monitoring no features or deposits of an archaeological nature were identified.

2008:476. Former Charlemont Demesne, Marino.
A programme of monitoring and limited excavation was carried out within a small area of the former Charlemont Demesne at Marino. The new centre is located to the north west of the Casino, a National Monument. The development footprint lies close to the remains of two historically noted landscape features of the demesne: the Gothic Room and what was referred to as the Serpentine Lake. These features were not thought to be visible in today's landscape. A series of test trenches was initially opened in 2007 (2007:529 above).

Ground reduction was undertaken by a tracked excavator with a 2 m bucket. The area was reduced to the required level in a series of east/west strips up to 6 m in width, with the area impacted upon by a new reinforced concrete road being initially examined. It was found that the sod level sealed two general deposits: to the east was a large area of introduced soil containing modern material, presumably dating to the construction of the nearby football pitch. To the west was a darker soil, more organic in content, containing tree roots, vegetative matter and other modern material. The interface of both deposits extended along a north/south line and it seems the darker material came from the Serpentine Lake and had been spread out over an area to the east, rather than being removed wholesale from the site.

The slight foundation courses of two masonry walls were sealed by the more organic material and appeared to have more or less demarcated its eastern edge. Its degree of truncation rendered it impossible to phase the wall in any meaningful way. The reduction of the area of landscaping to the rear of the centre was undertaken in two stages and resulted in a limited excavation of masonry and brick footings immediately to the east of what would appear to be the eastern elevation of the Gothic Room along with an investigation of a parallel wall some 9 m to the north east and a later wall, linking both earlier structures diagonally.

The major finding of the investigations at Marino has been the recovery of the eastern foundation of the Gothic Room. On the basis that something of a fair face remains over the upstanding twin arches, it would appear likely that the eastern wall at any rate was up to 1.5 m in thickness, with the arches that are hidden behind the hoarding today being either recessed back from the foundation or representing the rear face of a double wall. This may have been undertaken as a device for hanging plants in an attempt to create a romantic ruin.

The shell of the Gothic Room appropriately became a small graveyard and it is likely that the northern and southern walls at least were demolished and subsequently rebuilt in concrete blocks in the relatively recent past.

2009: AD3. *Old Stockhole Lane, Cloghran*.
Limited testing, carried out in advance of proposed development, was undertaken across 7.0 ha of low-lying greenfields in the townland of Cloghran, near to Dublin Airport. Some 0.07 ha of test-trenches were opened on the basis of geophysical survey, landscape analysis and accessibility.

Archaeological features were identified in one general location within the site, and consisted of above and below-ground settlement remains from Cloghran House, its attached farm buildings and an adjacent small formal garden. This assessment tentatively dated the earliest Post-Medieval material to the second quarter of the 18th century (*c*. 1725–40), possibly indicating an early 18th century origin for Cloghran House. Above-ground remains were in the form of former walls of Cloghran House reused in modern farm buildings. The below-ground remains of the house, its farmyard and garden had been truncated by later use of the area as part of the lands of the former Glebe House – and later Cloghran Stud Farm – across the road and outside of the development site, and by the continuing use of the area as a farmyard up until the time of testing.

2010:247. *Cadbury's Factory, Old Malahide Road, Coolock*.
The excavation of a lift shaft to the south of the existing factory building was monitored. The ground was found to have been disturbed previously during the insertion of services. No archaeological features or finds were uncovered.

2010:248. *Parnell's GAA Club, Coolock*.
Testing was undertaken in advance of a mixed-use phased development. A geophysical survey recorded no obvious trace of archaeological features within the perimeter of the proposed development; however the data indicated considerable interference from modern ferrous activity.

One area of archaeological importance was identified in the north east of the site, across an area measuring *c*. 90 m east/west x 75 m north/south. The identified features comprised a series of ditches, many of which contained Medieval pottery, seashells and animal bone and were likely to represent a Medieval field system. A number of spreads and pits with similar fills were also identified within the excavated trenches and these features may be an indication of settlement associated with the field system.

There were no previously known archaeological sites dating to the Medieval period located in proximity to the proposed development area, however it was possible that the 17th century church (RMP DU015–084) located to the immediate east of the site may have replaced an even earlier church dating to the Medieval period.

Topographical Files of the National Museum of Ireland

Information on artefact finds and excavations from County Dublin is recorded by the National Museum of Ireland. Location information relating to such finds is important in establishing prehistoric and historic activity in the study area. The Topographical Files were assessed for townlands within or in close proximity to the proposed pipeline corridor.

Artaine (Domville) townland

Skeletal remains were uncovered in 1939 and these were considered to be of no archaeological significance. No precise location or further information is recorded.

Clontarf

NMI reference:SA1898:117. A 16th century iron rowel spur.

NMI reference:1907:116. A bronze ring pin with a round stem.

NMI reference:L1931:2. A bronze axehead.

NMI reference:1941:972. A flint axe was found in 1941 0.30 m – 0.45 m in to the ground.

NMI reference:E191:370. Copper alloy spur.

NMI reference:R462. Bronze axehead.

NMI reference:R465. Bronze axehead.

Collinstown townland

NMI reference:1938:8566. Zoomorphic penannular brooch found 0.6 m below the surface while a cutting was being made at Collinstown (now Dublin) Airport in 1938.

Coolock
NMI reference:L1931:2. A bronze axehead (also recorded above in Clontarf townland).

Dublin Harbour

NMI reference:1970:190. Clay pipe bowl.

NMI reference:1970:191. Pottery rimsherd. Dredged up from a sunken boat at a depth of 0.15 m in mud and silt.

NMI reference:1970:192. Portion of copper vessel.

NMI reference:1970:193-197. Five cylindrical lengths of clay pipe stem.

East Wall Road
NMI reference:1954:168. An iron knife-shaped object was found in a trench 1.8 m deep during construction works for a church in 1954.

Killester
NMI reference:1993:19. A stone sculpture, with a carved head, was found in a garden. No additional information is recorded.

Cartographic Analysis

John Rocque, *Plan of the city of Dublin,* 1756 (figure 15.3) and ***An Actual Survey of the County of Dublin*, 1760** (figure 15.4)
East Wall Road is recorded but unnamed on Rocque's map of 1756. There are no structures recorded east or immediately north of East Wall Road at this time. A pool of water is recorded on Rocque's map at the bend of present day East Wall Road where it turns south. "Clontarf Island" and "Island Houfe" are recorded and these were later removed by dredging works. Fairview Park did not exist and Ballybough River is shown as extending east/west across what would become Fairview Park.

The approximate line of Fairview is recorded. The southern end of Malahide Road appears to be recorded on Rocque and either side is shown as open land, with "Royal Charter School" recorded east of Malahide Road. This area represents the northern extent of the map and no further topographical information relating to the proposed development is recorded.

It is known that Rocque did not always accurately represent features which he considered to be unimportant, and therefore individual indications of land use as recorded on his map of 1756 should perhaps be regarded as representative of the wider environment. He calculated that the city consisted of 12,060 houses, with an average of eight people to a house, giving a total population of 96,480 people, a figure which is now regarded as being a little on the low side (National Library of Ireland 1988, 7). The map shows that Dublin had continued to expand towards the east, both north and south of the Liffey, and much of this new development was devoted to housing for the upper classes while the poor remained in slum conditions in the old city (*ibid*.).

Rocque's map of the County of Dublin, 1760, records the eastern end of the area of land take as unreclaimed and as "Browns Patch", and this is south of "Ballybough River" and "Clontarf Pool". The line of East Wall Road is recorded, as is "The North Lots". Malahide Road is recorded but not named, although its southern end in the vicinity of the proposed land take appears to be on a slightly different alignment than it is in the present day. Unnamed structures are recorded immediately west of Malahide Road, and these may relate to Marino House. A "Church in Ruins" is recorded to the west of Malahide Road at the location of RMP DU014:073001, while a second "Church in Ruins" is noted east of Malahide Road at the location of RMP DU019:015001. "Coolock" and "New Town" are recorded, as is a "Church in Ruins" in the location of RMP DU015:076001.

William Duncan, *Map of the county of Dublin*, 1821 (figure 15.5)
East Wall Road and "The North Lots" are recorded on the 1821 map. Annesley Bridge, present day Annesley Bridge Road, is also recorded. Malahide Road is shown as tree-lined on its western side and the Crescent is recorded to the east of it. "Marino Demesne" is also recorded. "Mt Temple" is recorded east of Malahide Road. "Doneycarney", "Scurloges Br" and "Artane" are recorded in the vicinity of the proposed development area. "Ch. In Ruin" is recorded at the location of RMP DU014:073001. "Mt. Dillon" and "Annaville" are recorded east of Malahide Road, and this marks the northern extent of Duncan's map in the vicinity of the proposed area of land take.

Ordnance Survey Map First Edition 1837 and 1843 (figures 15.6, 15.7 and 15.8)
The First Edition OS map records "East Wall" but the area to the north and east of this is unreclaimed. Clontarf Island is recorded. Very little development is noted in the area of North Lotts. The line of the "Dublin and Drogheda Railway" is recorded as "in Progress". Fairview Park is not recorded and this area is shown as river and mudflats. Malahide Road, Howth Road and Clontarf Road are all clearly recorded, as is Marino Crescent. The proposed pipeline corridor will extend along Copeland Avenue which is not shown on the First Edition map, but "Marino Avenue" is recorded to the south. "Marino Ho." and "Temple" are clearly shown to the west of Malahide Road. "Marino Villa", "Elm Mount" and "Grace Ville" are recorded either side of Malahide Road in the location of Donnycarney and Clontarf Golf Club, and a gate lodge is shown to the south. "Collins Avenue" is recorded but unnamed on the First Edition map leading west from Malahide Road but not to the east. "Scurloges Br.", "Long Cottage" and "Artaine Ho." are recorded north of Collins Avenue, as are two gate lodges. The southern end of Kilmore Road is recorded as being on a different alignment than it is today.

A “National School” is recorded immediately north of the southern end of Kilmore Road, with three small structures to the south of the road. Structures are recorded east of Malahide Road between the gate lodges and the National School. “Wellington Ho.”, “Sella Lodge” and a “Gate Lodge” are noted west of Malahide Road and south of Ardlea Road. Three gate lodges and “Lark Hill”, along with a “R.C. Chapel”, a “Police Station”, a “Pound”, a “School Ho.” and a “Dispensary” are all located in Coolock. Malahide Road is on a different alignment to the pre-existing road as recorded on the First Edition map in this general location, as it was redesigned to bypass Coolock village. Malahide Road has also been realigned slightly to the north of this point for a length of approximately 750 m north east/south west. It passes to the east of four small structures, “Newtown Br.”, a “Gate Lodge” and “Newtown Ho.” in this area. The northern end of the realignment took it to the west of “Claregrove Ho.”. A small structure and a gate lodge is recorded north of Belcamp Lane and a possible small quarry is recorded to the west of Airfield Lodge. The line of the proposed pipeline corridor extends between “Belcamp” and “Belcamp Park”, the latter with its associated landscaped grounds and range of formal and informal buildings. “Woodlands” is shown south of the proposed pipeline corridor to the south of the N32 roundabout. “Clonshagh Br.” and “Clonshagh Cottage”, along with several small structures, are recorded either side of Clonshaugh Road, north of the N32. Several small structures are shown either side of Clonshaugh Road as it extends north. Two gate lodges are recorded either side of Clonshaugh Road and east of “Edendale”, which is south of the Athletic Union Sports Ground. Four small associated structures and an east/west oriented lane are recorded at the northern end of the Athletic Union Sports Ground, immediately west of Clonshaugh Road. “Shane’s Ford” is marked immediately north of the Athletic Union Sports Ground. RMP DU014:011, located approximately 400m west of the proposed pipeline corridor, is recorded as “Castle in ruins”. A lane is recorded south of the receiving station at Dublin Airport, leading from Swords Road to “Corballis Ho.”. The line of this lane, which no longer survives above ground, will be traversed by the proposed pipeline corridor.

The proposed pipeline will traverse, or is located immediately beside, 25 townland boundaries and six parish boundaries. Detailed research suggests that:

“*hoards and single finds of Bronze Age weapons, shields, horns, cauldrons and gold personal objects can all be shown to occur on boundaries*” (Kelly 2006, 28).

Ordnance Survey Map Second Edition 1872 and 1876 (figures 15.9, 15.10 and 15.11)
A “Manure Chemical Works” is recorded immediately south of the line of present day Tolka Quay Road, although Tolka Quay Road is not recorded on the Second Edition map. A “Bathing Pool” and “Bathing Slip” are recorded immediately north of East Wall Road, while a “Ship Building Yard” is recorded east of East Wall Road. Clontarf Island is recorded. Fairview Park is not recorded on the Second Edition map. A “Pillar Letter Box” is recorded at the southern end of Malahide Road, west of the proposed pipeline corridor. The area in the vicinity of Marino Crescent is more developed that in the First Edition (1843) map. “Marino Ho.”, “Temple” and a gate lodge are recorded on the Second Edition map west of the proposed pipeline corridor. “Elmview Lodge”, “Mount Temple”, four gate lodges, “Marino Villa”, “Peamount”, “Laurel Hill”, “Janeville” and “Donnycarney Cottage” are all recorded immediately either side of Malahide Road between Marino Avenue and present-day Collins Avenue, which is recorded but unnamed to the west of Malahide Road. “Scurloges Br.”, “Artaine Cottage”, “Rosemount”, “Artaine Ho.” and four gate lodges are recorded north of Collins Avenue. “Stella Lodge” is shown west of Malahide Road, while “Mount Dillon”, “Gracefield”, “Coolock Ho.” and three gate lodges are shown to the east in landscaped gardens. “Greenfield” and “Lark Hill”, along with two associated gate lodges are recorded south of Coolock. A “Dispensary”, a “Constabulary Bk.”, a “Presbytery”, a “R.C. Chapel”, a second “Constabulary Barrack” and a second “Dispensary” along with a “School Ho.” are all recorded at Coolock, either side of Malahide Road. “Moatfield Ho.” and associated structures are recorded to the west of Malahide Road, while a benchmark and several small structures are shown on approximately the line of Malahide Road. “Newtown Br.”, a gate lodge leading to “Darndale Ho.”, “Newtown Ho.” and a benchmark are all recorded west of Malahide Road, in the general location of the roundabout leading to Clonshaugh Avenue. A “Gate Lodge” is recorded at the southern end of a drive leading to Belcamp House on the line of the N32. “Belcamp Park” and “Woodlands” are recorded in a formal setting with associated structures.

"Woodlands" is shown in a formal setting south of the proposed pipeline corridor to the south of the N32 roundabout. "Clonshagh Br." and three structures are recorded at the southern end of Clonshaugh Road, north of the N32. "Edendale" and "Gate Lodge" are recorded south of the Athletic Union Sports Ground. Thirteen small structures are also recorded either side of Clonshaugh Road in this general location. "Shane's Ford" is again recorded north of the Athletic Union Sports Ground. The lane recorded on the First Edition map leading from Swords Road to Corballis House is not recorded on the Second Edition map within the area of the proposed pipeline corridor, although it is recorded to the west where it terminates at the site of the castle.

Ordnance Survey Map Third Edition 1910 and 1912 (figures 15.12, 15.13 and 15.14)
Tolka Quay is recorded on the 1912 map, as is Alexandra Road to the south. "Oil Tanks" and "Chemical Manure Works" are recorded immediately south of Tolka Quay, while "Mooring Posts" are recorded to the north. Development, including a school and a timber yard, are recorded along East Wall. Fairview Park is not recorded. "O'Brien's Institute" is recorded west of the proposed pipeline corridor for the first time, south west of the Casino. There are no major differences recorded on the Second and Third Edition OS maps between north of Marino and N32 Malahide Road, although the extent of the various demesnes have been noticeably reduced by the time of the Third Edition map. A "smithy" is noted west of Clonshaugh Road north of the N32, and there are slightly fewer structures recorded in this general area on the Third Edition map than there were on the Second Edition map.

Ordnance Survey Map Later Edition 1936 (with 1949 Dublin Airport Additions) (figures 15.15, 15.16 and 15.17)
The 1936 map records considerable development at Dublin Port from the time of the 1912 map. Development has extended eastward along Tolka Quay and Alexandra Road. The "Chemical Manure Works" south of Tolka Quay have increased in size and "Oil Tanks" extend eastward along Tolka Quay. The area immediately south of East Wall Road is recorded as being much more developed than previously, with a large number of houses and associated roads filling the area. "Fairview Park" is recorded on the 1936 map, and it is bounded by the railway line to the east, Annesley Bridge Road to the west, Tolka River and East Wall Road to the south and Fairview to the north. Copeland Avenue, along which the proposed pipeline corridor will pass, is recorded for the first time on the 1936 map, as is Griffith Avenue. Marino to the south is shown as having severely impinged on the landscaped grounds of Marino House, which is no longer recorded. Donnycarney is recorded for the first time on the Later Edition map. The area from Donnycarney either side of Malahide Road to Artane is shown as being more developed than on the Third Edition map. The general landscape of the proposed pipeline corridor in the vicinity of Coolock is broadly similar to that recorded on the 1910 map. "Newtown Cottages" are recorded for the first time on the 1936 Edition, while a "poultry farm" is shown immediately west of Malahide Road and immediately south of the grounds of Darndale House. "Edendale", south of the Athletic Union Sports Ground, is recorded as "in Ruins".

Aerial Photography

Aerial photographs held by Ordnance Survey Ireland (www.maps.osi.ie) were consulted to look for the presence of previously unrecorded archaeological or architectural remains within the proposed pipeline corridor.

Dublin Port is clearly recorded as developed in the area of the proposed pipeline corridor on both the 2000 and 2005 photographs. Tolka Quay Road is shown as leading directly on to East Wall Road, but this is no longer the case due to road changes associated with Dublin Port Tunnel. Construction works associated with the South Tunnel entrance of Dublin Port Tunnel are recorded north of East Wall Road on the 2005 aerial photograph. Construction works are also clearly recorded traversing Fairview Park in a north west/south east direction on the 2005 aerial photograph. There appears to be some topsoil stripping recorded in the 2005 aerial photograph along the western and northern boundaries of Belcamp Park. The hotel at the southern end of Clonshaugh Road immediately north of the N32 is not recorded on the 2000 aerial photograph, and is shown as under construction in the 2005 photograph.

More recent aerial photography (www.bing.com/maps) records a similar landscape to that which was noted during the walkover surveys.

There was no evidence of any archaeological, architectural or cultural heritage features recorded on aerial photographs within any areas of the proposed pipeline corridor.

County Development Plans

Dublin City Development Plan 2011 – 2017

It is a policy (FC64) of Dublin City Council to:

"*promote the in-situ preservation of archaeology as the preferred option where development would have an impact on buried artefacts, except where other alternatives are acceptable or exceptional circumstances are determined by the relevant statutory agencies. Where preservation in situ is not feasible, sites of archaeological interest shall be subject to archaeological investigations and recording according to best practice, in advance of redevelopment*" (Dublin City Council 2010, 123).

Fingal Development Plan 2011 - 2017

It is an Objective (AH05) of Fingal County Council to:

"*Endeavour to preserve in situ all archaeological monuments, whether on land or underwater, listed in the Record of Monuments and Places (RMP), and any newly discovered archaeological sites, features, or objects by requiring that archaeological remains are identified and fully considered at the very earliest stages of the development process, that schemes are designed to avoid impacting on the archaeological heritage and that an archaeological impact assessment is submitted as part of the planning application documentation*" (Fingal County Council 2011, 210).

It is an Objective (AH12) of Fingal County Council to:

"*Review the Record of Protected Structures on an on-going basis and add structures of special interest as appropriate, including significant elements of industrial, maritime or vernacular heritage and any twentieth century structures of merit*" (*ibid*., 213).

Field Inspection Results

The field inspections sought to assess the proposed pipeline corridor, its previous and current land use, the topography and any additional environmental information relevant to the report. The site visits took place on 16th and 23rd September 2011 and 9th May 2014. Weather at the time of the site visits was dry and bright.

Bond Drive, in the very eastern end of the proposed pipeline corridor, consists of a level road surface with storage and industrial areas to either side. The proposed Above Ground Installation at the Alexandra Road Oil Depot will be located inside an existing facility. A petrol station is located at the northern end of Bond Drive and at its southern end is the east/west oriented Tolka Quay Road. Storage facilities in the form of container lock ups and car parking spaces are located either side of Tolka Quay Road. Due to the construction of Dublin Port Tunnel there is no longer direct access from Tolka Quay Road to East Wall Road.

East Wall Road is a busy north west/south east oriented road. The area from the eastern end of East Wall Road to Alfie Byrne Road consists mainly of industrial buildings on either side, while the area north of Alfie Byrne Road contains two storey houses to the south and Tolka River to the north.

Alfie Byrne Road crosses Tolka River at its southern end. It is mainly single carriageway with a cycle path on the eastern side and partially along the western side.

Clontarf Road is a busy east/west oriented road with houses partially along the northern end within the area of the proposed pipeline corridor.

Howth Road is single carriageway with on-street parking to either side. Two-storey houses with railed gardens front on to Howth Road in the vicinity of the proposed pipeline corridor.

Copeland Avenue is single carriageway with on-street parking. Semi-detached two-storey houses with small gardens front on to the tree-lined road.

Malahide Road is a busy mainly four-lane road with footpaths to either side. It generally contains a combination of private housing (frequently ex-Corporation early to mid-20th century), small-scale business premises and green-space to either side. The northern end of the Malahide Road has more commercial properties than the southern end.

N32 is a busy National road with some industrial premises located at the north eastern end and residential units and open space along the southern end.

The environment surrounding Clonshaugh Road north of N32 is noticeably more rural, with one-off houses and fields to either side. The area of the proposed pipeline corridor at the Athletic Union Sports Ground is north of well-maintained football pitches. The proposed pipeline corridor inside Dublin Airport is confined to the vicinity of car parking spaces and a small stretch of wasteland. The Above Ground Installation will be located inside an existing facility.

All seven Protected Structures recorded within 50 m of the proposed pipeline corridor were visited and assessed as part of the site visits.

No previously unidentified archaeological, architectural or cultural heritage features were revealed within any areas of the proposed pipeline corridor as a result of carrying out the walkover surveys.