Centre for Archaeological Fieldwork

School of Geography, Archaeology and Palaeoecology
Queen's University Belfast

DATA STRUCTURE REPORT No.92

FIVE INVESTIGATIONS IN DERRY/LONDONDERRY

FEBRUARY TO MARCH 2013

1. Bishop's Street Within
2. St Brecan's Church
3. Prehen
4. Elagh Castle
5. Boom Hall

NIEA Northern Ireland Environment Agency
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INTRODUCTION TO THE ARCHAEOLOGY OF DERRY~LONDONDERRY

Ruairí Ó Baoill

Introduction

The modern city of Derry~Londonderry is located in County Londonderry in the north-west of Northern Ireland near the mouth of Lough Foyle. The city is easily accessible by sea, and the river gives access to deep into the interior of Ulster. It is only 20 miles [32km] from the open sea of the northern Irish coast, and only 5 miles [8km] from the narrow Foyle estuary. The settlement is now situated on the western bank of the River Foyle but what marks it out as special is that the original settlement was on an island in the middle of the River Foyle where it narrows before reaching the sea at Lough Foyle, and originally split to curve in a semicircle around its western bank. Over time the channel around the western side gradually silted up and partially dried out, leaving this part marshy and boggy (giving the area is modern name, the 'Bogside'), but still providing a defensive barrier. The core of what is now the city centre is a hilltop that is virtually an island. It is roughly oval-shaped covering an area of about 80 hectares and, at its highest point, is almost 40m above sea level. The slopes are steeper at its broader northern end and gentler as it narrows to the south, where it is wedge-like in appearance. The island is bounded to the east by the River Foyle, which is tidal at this point, and on the west by the dried-out former course dried out of the river, and is overlooked by hills on both sides of the river course. The high ground of the island made it attractive for both defence and the siting of buildings. Geologically, most of the historic core of the City consists of glacial deposits of boulder clay overlying schists of the Pre-Cambrian period. Settlement expanded from this central core, especially after the creation of the walled town in the 17th century. There has been human occupation for least 6,500 years in the environs of what is now the city centre but which was for several millennia an island in the River Foyle, and for almost 1500 years in the core of the city. Today, it contains the last, and most impressive, walled city constructed in Ireland.

The placename "Derry" originates from the regional pronunciation ("dirrah") of the Irish word *doire,* meaning "oak grove", a name suggesting that an ancient pre-Christian religious or sacred centre once existed here. It could be that travelling to the 'island' from either bank of the River Foyle during the prehistoric period meant travelling from a secular landscape over to a sacred one. Before around AD 500, Derry was known as 'Doire Calgach' meaning the 'oak grove of Calgach'. Later, the Christianised settlement was called 'Doire Colmcille' meaning the 'oak grove of St. Colm Cille', after the celebrated Irish saint who probably founded a church here. Tudor sources referred to 'the Derrie', and the prefix 'London' was

given in 1613 when the new Plantation settlement was granted its charter by James I. The name 'Londonderry' was intended to emphasise the connection with and funding by the City of London. In 1984, the Council voted to rename 'Londonderry' as the 'City of Derry'.

Prehistoric Archaeology

There is some evidence of the earliest settlers in Ireland living in the area around the River Foyle. The country would have provided abundant resources for the Mesolithic people who came to live here, the River Foyle and all of the tributaries and lakes, as well as Lough Foyle, providing fish and shellfish. A flint knife, of possible Mesolithic date, was found at Enagh in 1998, while Bann Flakes were reportedly found in the lowest levels on the excavations at Rough Island in Enagh Lough. In what is now County Donegal, Early Mesolithic flint axes, cores, blades and other flint artefacts were found on the beach at Greencastle, while Later Mesolithic material was excavated at a raised beach at Urrismenagh, Dunaff Head, Inishowen, and on Inch Island in Lough Swilly. Evidence for Neolithic settlement have been found in the form of flint scatters at Ballyarnet (SMR 014:022) and at Curryneirin (SMR 033:037), and at several sites in the area around the city, including Ballynagard (SMR 14A:030), Campsie Upper (SMR 15A:005), Coolkeeragh (SMR 14A:033) and Shantallow (SMR 14A:029). The most important prehistoric excavation carried out in the area, however, took place in 2000 at Ballynashallog and Ballynagard townlands, beside Thornhill College (SMR 14A:023). The site was a Neolithic settlement located on a low ridge overlooking the mouth of the River Foyle. Assessment excavations on the site of the flint scatter uncovered a series of palisaded enclosures covering an area of approximately 4000m^2 and dated to the Neolithic period. The enclosures consisted of several phases and surrounded the sites of at least five timber houses, both round and rectangular. Along with the buildings, hundreds of stake-holes, post-holes, pits and spreads of occupation debris indicated a wide range of activities undertaken on the site. A series of ritual pits were also uncovered. There was also archaeological evidence of conflict, with at least one of the palisades having been deliberately burnt down. Among the outstanding artefacts uncovered were several dozen stone and flint axes and fragments of axes, flint projectile points, various flint and stone tool types, stone beads, saddle querns and pottery as well as evidence for the working of quartz.

In 1998, three archaeological sites were excavated at Enagh (SMR 14:012, SMR 14:065) within a clear line of sight between Enagh and Thornhill. The excavated archaeological evidence suggests that the settlement at Enagh was smaller and it may have been a satellite of the much larger Thornhill settlement. Other Neolithic houses have been discovered at Caw (SMR 014:066), approximately 3km to the south of Thornhill, plus the three examples

uncovered during archaeological monitoring of the new A2 Maydown to Derry Airport road scheme.

Settlement of Bronze Age date has been found in the form of flint scatters at Curryneirin (SMR 033:037) and at Site 1 of the three sites excavated in 1998 near Lough Enagh (SMR 14:012, SMR 14:065). At Coolkeeragh (SMR 14A: 033) three fulachta fia (burnt mounds) were discovered, with another example uncovered at Ballynagard (SMR 14A:028), and another at an excavation at Woodside Road. The area around Ballyarnet, 2½ miles [4km] to the north-west of the city centre, seems also to have been intensively settled in this period, and several occupation sites are known. These include three, or possibly four, fulachta fia (SMR 014A:025, SMR 014A:031 and SMR 014A:032).

At another site nearby in Ballyarnet (SMR 14A: 026) significant evidence of Bronze Age lake settlement was uncovered in 2002, while at Maydown Industrial Estate 19 pits containing Bronze Age pottery were found in an excavation in the same year (SMR 014:078). A number of Bronze Age burials have been found close to the city centre, including a Late Bronze Age cist cemetery discovered in Shantallow in 1952 (SMR 014:019). Other sites of similar date discovered in the same area include a cist burial, uncovered in 1988, a pit-burial unearthed in 2004, and a simple cremation within a decorated urn set in a pit (SMR 014:079) also discovered in that year. In 1994 a cist burial (SMR 022:035) was excavated in a large field at Clampernow, overlooking the Foyle. On the summit of Holywell Hill at Whitehouse and Ballymagrorty, is a large cairn with a cist (SMR 013:002), while at Creevagh Upper (SMR 014:024) the site of a cist burial was also recorded. A number of other cist burials are known within some 4 miles [6.5km] from the 1988 Shantallow sites At least four cist burials have also been recorded in Co. Donegal, within a few miles of Shantallow.

Between 2001 and 2004, a 40-acre site being developed as a new campus for Oakgrove Integrated College on the eastern bank of the River Foyle, some 2½ miles [4km] to the north-east of the City centre and close to Lough Enagh West, was monitored by archaeologists. Amongst the various features uncovered was a series of sub-soil-cut features, interpreted as an enclosed late Bronze Age cemetery but might actually be the remains of a Bronze Age house. Further excavation in 2004 at Oakgrove uncovered Middle to Late Bronze Age pottery and a possible Early Christian structure, interpreted as a workshop. A major Bronze Age discovery was made during the monitoring of a pipeline corridor at Ballyoan in 2006. An Early Bronze Age cemetery comprising two inhumations and two cremations, each in a stone-lined cist, and at least two pit cremations in un-lined pits, was uncovered. One of the inhumations was of a child, the other an adult. The adult

was buried with a bronze dagger in a leather sheath. The site also included four fulachta fia as well as several pit groups and linear features.

During the excavations in 2009 carried out during the archaeological monitoring of the new A2 Maydown City of Derry Airport dualling scheme (see above), a number of Bronze Age discoveries was made, the most significant being two pennanular ring-ditches. A burnt mound was also found at Site 8, Tully, and cremation, cist and urn burials at Site 6, Maydown, and Site 7, Upper Campsey. The only excavation to date that has uncovered material dated to the Iron Age in the environs of the City was that at Caw in 2003 (see above) and took the form of bowl furnaces, indicating that the ironworking on the site took place in the Late Iron Age.

The Early Medieval Period

Apart from its setting, the importance of Derry in its early history is that it also lay at an important junction between the two main parts of the territory of the Cenél nEógain in Inishowen and Tirowen (whose later principal families include the McLaughlins and the Ó Néills), and that of the Cenél Conaill (whose name is the main element of Tirconnell and whose principal family was the O'Donnells). These were the two principal dynastic family groupings that came to power in the north-west of Ireland during this period.

The person who people most associate with Derry was St Colm Cille, also known as Columba or 'Dove of the Church and it is with his life and works that the area first comes to prominence. According to tradition, Colm Cille was born at Gartan, outside Letterkenny in Co. Donegal on 7th December, AD 521 into one of the most powerful families in Ireland that also had connections in Gaelic Scotland (known as Dal Riada). After entering the priesthood, he was taught by St. Finnian at Movilla in Co. Down and, later, at Clonard in Co. Meath. After completing his education, he began to found churches (collectively known as the Columban *Familia*), including at Durrow and Derry. Later he sailed from Derry in 563 AD with 12 companions and founded the great monastery of Iona (also known as 'Hy'), on an island off the west coast of Scotland. Colm Cille died in AD 597, and we know much about him because of two manuscripts, the first called the 'Life of St Columba', composed around AD 700, by Adomnán, an Abbot of Iona and a relation of Colm Cille's, and the second by Manus O' Donnell in 1532 called the 'Life of Colm Cille'. Although Adomnán refers to places (possibly a church), a harbour and a cemetery at Derry, nowhere does he explicitly state that Colm Cille founded a church there. The foundation of his first church at Derry, however, is recorded in the *Annals of Ulster* (*AU*) under the year AD 546 while in *The Annals of the Four Masters* (*AFM*), in the entry for the year AD 535. Whether Colm Cille was the original

founder of the monastic settlement at Derry, however, is uncertain. It has been suggested that another cleric, Fiachrach mac Ciárain, who died in AD 620, established the original church either alone or perhaps in conjunction with Colm Cille.

Because of the association with St Colm Cille, Derry became an important centre of Christianity until the end of the Medieval period. The church traditionally founded by St Colm Cille in Derry was called the *Dubh Regle*s and was probably prominently sited on high ground in the location where the Medieval Augustinian abbey and the current St. Augustine's Church of Ireland church (itself with origins in the 17th century), now stands. Although the local tradition was that St Colm Cille established the monastery, the earliest written evidence for this claim only dates to about 500 years later. The original church was probably re-built as an Augustinian Priory in the Medieval period. The Archbishop of Armagh, John Colton, made a famous visitation in AD 1397 and the description of this visit confirm the Dubh Regles to be the site of the abbey of the Canons Regular or Augustinians. As an important church foundation, the ecclesiastical settlement at Derry attracted the attention of the Vikings, as did many other churches in Ireland. From the Annals of Ulster we know that Cenél nEógain lords, based at Aileach, the strongest fort in the north-west, won a great victory over the Vikings at Derry in AD 833. However, in AD 990 and again in AD 997, the Vikings plundered the settlement.

Monuments associated with this period in the area include raths at Gortinure (SMR 022:008), Coshquin (SMR 14A:024), and at Kittybane (SMR 022:012), while several examples of crannog settlements are known, including at Campsey Lower (SMR 15A:002) and Green Island and Rough Island in Lough Enagh East (SMR 014:009; SMR 014:011). Surviving examples of souterrains include those at Enagh (SMR 014:061), Ballynagalliagh (SMR 14A:038), two from Coshquin (SMR 014:038/ 040 and SMR 014A: 007), and Shantallow (SMR 014:071). While no remains of any of the Early Christian churches or other ecclesiastical foundations have yet been discovered in the city centre, a church that possibly has its origins in this period is Killea Church and Graveyard (SMR 013:001). Another Medieval church, with its origins in the Early Christian period, is known variously as St. Columb's or St. Brechan's (SMR 014: 002), and is located located in modern St Columb's Park in the townland of Clooney, roughly three miles north-east the modern Ebrington Barracks (see Evaluation 2 in this report).

Medieval Derry

The association with St. Colm Cille was vitally important to the success of the religious foundation in Derry, and although never actually claiming to have any relics of the Saint, it

remained a major religious centre throughout the Medieval period. A renowned abbot of Derry was Flaithbertach Ua Brolcháin (died AD 1175) who called himself the *coarb* or 'successor' to Colm Cille in AD 1150. During the renewed building that went on, we are told that Flaithbertach demolished over 80 houses that had encroached too closely on the abbey church of Derry and he also built a circular wall (*Caiseal an Urlair- The enclosure of the level*) around the abbey church to protect it. In AD 1164, the *Tempull Mór* (Irish for "great church"; SMR 014:025) was constructed and in time gave the parish of Templemore its name. This was the first cathedral in Derry, and the Long Tower – a high, circular stone tower or round tower – was subsequently constructed as part of the *Tempull Mór* religious complex. The *Tempull Mór* is presumed to have been located in the area of modern Long Tower Street.

In 1254, the *Tempull Mór* became the cathedral of the diocese of Derry, despite opposition from the Cenél Conaill. In 1566, Derry was garrisoned by English forces and at that time the *Tempull Mór* was in a ruinous condition. It is shown on several 17th-century maps as having been located in the area of Charlotte Street / Longtower Street / Longtower Primary School / St. Columba's Church. There were still evidently traces of the monument in 1689 when Nevill drew his map of the city, although the round tower is conspicuously absent. A medieval convent or nunnery (SMR 014: 030) was founded at Derry in AD 1218 by the branch of the Ó Néills based in Strabane, and there may have been an earlier foundation in the early 12th century. A reference in AD 1512 describes the house of St Mary, but there are no visible remains of the convent and the site is not securely located. However, it may have been close to the present location of St Columb's Cathedral, which is built on the highest point of the Island. The English maps of Derry compiled in 1600 and 1601 both appear to show the ruins of the nunnery. Although the Dominicans had come to Ireland in AD 1224, it was not until AD 1274 that a Dominican Priory was founded in Derry (SMR 014:031) by one of the O' Donnell chiefs of Co. Donegal. Its exact location is unknown, but tradition suggests that it was not founded on the 'Island', but to the north-west of it, possibly in the region of modern Abbey Street, close to St Columb's Wells. The 'foundations of a church' discovered in the Abbey Street/William Street/ Rossville Street area in the early nineteenth century may have been part of the Priory. On the map portraying the fortifications at 'the Derrie' erected by Docwra following his arrival in AD 1600, the ruins of the Priory appear to be depicted.

In the 15th century there was a resurgence of Gaelic power. During the late-Medieval period Derry sat at the crossing point of four powerful Gaelic lordships – the O'Donnells and O'Dohertys west of the River Foyle, and the Ó Néills and O'Cahans of Tír Eoghain, east of it. An inauguration stone in the form of a large slab of sandstone called 'St. Columb's Stone'

(SMR 014:018) and thought to have been the inauguration stone of the O'Dohertys is also currently on display in the Tower Museum. In the late 1400s or early 1500s the O' Dohertys built a tower house (SMR 014:032), sited close to the present Magazine Gate, in the area of the modern Tower Museum. The castle was converted into a Magazine and Store after the English conquest of Derry in the seventeenth century and is illustrated on several seventeenth century maps. Another important O'Doherty castle of this period was Elagh (Aileach) Castle at Elaghmore (SMR 14A:003; see Evaluation 4 in this report), while Enagh Castle, located in the south-eastern corner of Lough Enagh East (SMR 014:009**)** was a tower house constructed by the O' Cahans on a crannog. Enagh Church (also known as Domnach Dola; SMR 014:015) overlooks the crannog and castle but is almost totally ruinous.

In the 16th century, particularly after the accession of Elizabeth I in AD 1558, Gaelic Ulster came into increasing conflict with the post-Reformation English government. Lough Foyle became strategically important as a gateway for getting troops into the heartland of north-western Ulster, and in September 1566, during the revolt of Shane O' Neill, Derry was garrisoned by English forces under Colonel Edward Randolph. Although Randolph was killed in fighting in November 1566, the garrison of some 700 troops inflicted serious losses on the forces of Ó Néill. In April 1567, however, their powder magazine was destroyed by an accidental gunpowder explosion. Short of supplies and marooned, the garrison was eventually evacuated, and the settlement reverted to Gaelic control. The English were not to return until late in the Nine Years' War (1594–1603), which led to the ultimate defeat of the Gaelic lords of Ulster, when in May 1600 an English force of 4,000 men and 200 cavalry under the command of Sir Henry Docwra sailed up Lough Foyle and landed close to Culmore Point. Having seized Culmore and Elagh Castle, and with his route back to the sea secure, Docwra then occupied Derry, which appears to have been undefended and probably unoccupied. Docwra fortified the island by building earthwork defences around some of the Medieval buildings and re-edifying the O'Doherty tower house.

Such is the layout of the new settlement portrayed on the map 'The Island and Forte of the Derry', drawn up in 1600, more than one thousand years after the first annalistic references to the settlement there. This map is the first-ever detailed illustration of buildings on the Island. It shows on high ground a large earthen fortification, whose defences are punctuated by at least six bastions of different sizes and five of which contain cannon. Inside the fort are a number of buildings, including a hospital and Docwra's lodgings. Elsewhere on the Island, the Long Tower is shown, as well as the fortified Storehouse and Magazine (encompassing the O' Doherty tower house) on low ground near the river. On higher ground above this is

shown a ‘chapell’ which would appear to be the remains of the Medieval nunnery and the map shows that Docwra had an earthen bank thrown up around the building for defence.

Another map was drawn up by Griffin Cocket in c. 1601, and is known as ‘Derry’. This shows in detail the fort illustrated in the 1600 map, though the perspective is now looking up from the small fort, now described as a ‘Castle’, defending the river crossing and the ‘Storehouse’ between it and the river’s edge. More buildings, including ‘the Governor’s House with his Garden’ are shown within the great fort and a large defended house and bawn, ‘Babington’s House’, and the ‘Hospitall’ are shown between it and the ‘Castle’. For the first time streets within the new settlement are marked, as is the outline of potential extension to the settlement (‘A Paterne to make the Towne by’) to the south-east of the great fort. At the top of the map a building, ‘The Governor’s Horstalls’ may have occupied the site of the ‘chapell’/ nunnery shown on the 1600 map and that commanded the fort. Despite the potential for expanding the settlement, it seems as if this did not happen, as Docwra became disillusioned and in 1606 sold his interest in the fledgling town to Sir George Paulett, who took over as Vice-Provost and Commander of the Garrison. In 1608 Sir George Paulett, the governor of Derry, fell out badly with the local Gaelic nobles led by Sir Cahir O’ Doherty. Sir Cahir rose up in a revolt that was quickly crushed, though not before Paulett had been killed and the settlement at Derry burnt to the ground. This event, along the flight of the Ulster Gaelic lords to Europe in September 1607, paved the way for the Ulster Plantation of their forfeited estates.

The Plantation City

From the start of the 17th century onwards, we have considerably more information – in the form of maps, documents and archaeological evidence – about events, people and buildings at ‘the Derry’ and its environs. And it was early in the 17th century that the island underwent the most dramatic change in its long history of settlement, with the creation of a new, carefully planned and walled town creating yet another exciting milestone in the story. To defend the new settlement from any further Gaelic rebellions substantial stone defensive walls were built around the new settlement between 1613 and 1618. These are the walls that still make Derry such a dramatic monument 400 years after their construction.

The companies or trade guilds of the City of London were invited to settle lands in a newly created ‘County of ‘Londonderry’, which was an amalgam of the County of Coleraine along with parts of County Tyrone. Along with bringing tenants over to plant the whole county, one of the conditions that the companies agreed to was the rebuilding of the newly named town of ‘Londonderry’. The twelve companies involved in the County Londonderry land

grants, known as The Honourable The Irish Society were given a new Patent or Charter on 29th March 1613, known as the Charter of Londonderry, to complete the building of the new settlement, which was renamed 'Londonderry', and replacing the charter awarded to Docwra a few years earlier. The solid defences around the town meant that it could attract settlers, mostly merchants, craftsmen and their families, and act as both a market and port so that goods and commodities could be both imported and exported. In the grounds of Prehen House, built in 1740, are the possible remains of a 17th century bawn (SMR 014: 083), overlooking the River Foyle, approximately 2½ miles (4km)) south-west of the city. The townland of Prehen was part of the Plantation period grant given to the Goldsmiths Company in 1612 but is not mentioned in early records. In 2006, a small excavation was carried out at the site by Dr Colin Breen, Centre for Maritime Archaeology, University of Ulster, but no direct evidence of the 17th century bawn was uncovered. A further archaeological evaluation was carried out in March 2013 under the direction of Cormac McSparron, Centre for Archaeological Fieldwork, QUB, was more successful (see Evaluation No.3 in this report).

The area occupied by the Walled Town was roughly 13 hectares, enclosing much of what had been the Early Medieval and Medieval settlement. Much of the original 17th century town layout survives, although as far as we know, all of the original buildings are gone, with the exception of the slightly later St Columb's Cathedral, built in the 1620s. Archaeology is, therefore, central to uncovering new information about the development of Derry in all periods, with excavations having taken place at the Diamond, Fountain Street, Linenhall Street, Richmond Street, Shipquay Street, Magazine Street and Castle Street. Features uncovered included wells and well shafts, storage pits, the 17th century extra-mural town ditches and, intriguingly, a series of earthworks of uncertain date at Long Tower Street that might be related to the *Tempull Mór*. Half-a-million sherds of pottery, clay pipe, wine bottles, gun flint, lead shot, roof tiles, coins, leather and fabric have been found during these investigations.

Recent excavations in the city have included the investigations carried out in 1998 in advance of the construction of the new Millennium Theatre which uncovered a series of 17th-century house frontages and associated cellars (SMR 014:034 and SMR 014:035). A third excavation was undertaken at the site in 1999 (SMR 014:039). The excavation examined the construction method of the earthen rampart behind the stone facing of the city wall. On site, the rampart was found to be 7–8m wide and 2–3m high. It had been constructed by building a low bank of clay to the rear of the stone-built city wall. The rest of the material making up

the rampart was then piled against the low bank using it as a revetment for the material massed the inner face of the wall.

In 1999, an excavation was also undertaken just outside the city walls at Bishop's Gate Without (SMR 014:064/ 014: 039) by Paul Logue, which uncovered two phases of 17th-century activity. The earliest was a series of drainage gullies, rubbish pits, possible property boundaries and cobbled surfaces, suggesting a phase of occupation dating to the first half of the 17th century, followed by secondary occupation during the latter part of the century. No direct structural evidence for the actual 17th-century houses was recovered, as these were almost certainly removed during a phase of activity on site dating to the period immediately before the start of the siege of 1689. This second period of activity on site was defensive in nature. An extra-mural defensive earthwork and ditch known as a 'ravelin', was created to give extra protection to the stretch of Town Wall between Bishop's Gate and the Double Bastion. This took the form of a ditch oriented eastwards and fronting the destroyed earthwork before Bishop's Gate, with the remains of a sally port 2.6m wide interrupted the ditch. A larger ditch, a maximum of 9.8m wide and 2.8m deep and scarped from the sloping ground outside Double Bastion, was exposed to the north-west of the ravelin. The larger ditch may have been part of an earthwork constructed to protect the flanks of the ravelin and Double Bastion during the 1689 siege.

In 2005 excavation uncovered much structural remains of buildings on the site of the Rialto Theatre. The earliest building, located in Area 4 of the site, at its northern end, dated to the 17th century and comprised the well-preserved remains of a large 17th-century house. The house was interpreted, on map evidence, to have been built between 1625 and 1685 and demolished by 1738. Evidence of the 1689 siege was possibly uncovered during an excavation at 10–12 Artillery Street in 2006. Three pits were found, one of which contained the partially articulated remains of a human skeleton dating to the siege. Further archaeological evidence for the 1689 siege may have been found during an excavation inside First Derry Presbyterian Church, Magazine Street, in 2010. In 1672, a Presbyterian Meeting House seems to have been constructed possibly on, or close to, the site of the later First Presbyterian Church, which dates to 1690 the First Derry Presbyterian Church on Magazine Street Upper. This church was rebuilt in 1780 and repaired in 1828 when a new façade was added. Further restoration work was carried out in 1896 and again in 1903. Several stone walls possibly related to the original 1690 church were uncovered in the investigation. Below these were the remains of at least three individuals in graves cut into 17th-century soils that were dated by artefacts found in them. The aberrant near south-north orientation of a skeleton found in Trench 2, suggests that it may have been buried less

formally than usual and suggests that the individuals may possibly have been victims of the 1689 siege. Another possible interpretation is that if the church was built on the site of an earlier Meeting House then the burials might actually relate to that building.

In 2012, as part of a proposed programme of renovations at St Augustine's Church, an excavation was carried out at the northwest corner of the porch under the direction of Cormac McSparron. St Augustine's church is situated on what may be the site of earlier Augustinian and Columban monasteries. A single small trench was excavated which showed that the walls of the nave of the church were located on top of what are likely to be the foundations of an earlier church, whereas the porch was footed on a 19th century foundation which was itself set into graveyard soil and not upon subsoil. Large amounts of, mostly small fragments of apparently human bone were found during the excavation. Pottery types from the 17th century to the 20th century was recovered.

In 1991 Nick Brannon carried out an archaeological evaluation before the surface of the current Bishop Street Carpark, located in the area close to the suggested location of the Medieval Dubh Regles church and adjacent to St Augustine's' Chapel of Ease and the city wall [Grand Parade}, was laid. His investigation found 17th century artefacts but no evidence for *in situ* remains of any masonry or earthwork structures. In February 2013, Dr. Emily Murray from the Centre for Archaeological Fieldwork, QUB, excavated three trenches in the same carpark on behalf of NIEA and found an urban or garden soil at approximately 1.5-1.6m below several layers of hardcore/rubble and at 2.3-2.5m below the surface human bones were recovered (see Evaluation No.1 in this report). The range of bones present indicates that they most probably derive from articulated skeletons (i.e. *in situ* burials). These were not exposed in plan and excavation ceased in the trench where the bones were found, at this point. The excavation established that an extensive area of a garden-soil horizon, and presumably also underlying deposits, survives in this part of the site. The site was reinstated and resurfaced on completion of the investigations. The discovery of *in situ* human remains is extremely important but only further excavation will determine which of the churches and what period that the burials relate to. Finds recovered included a tin-glazed earthenware (Delft) sherd, probably Dutch, and a sherd of an English Blackware tyg (an ornamental mug decorated with highly ornate handles), both of probable late 17th/ early 18th century in date. There were also decorated clay pipe stems are of 18th century date, along with a copper-alloy lace chape or tag all of which came from the garden soil horizon.

The possible location of the Jacobite army's siege works in 1689 have been investigated in the vicinity of Boom Hall, Ballynashallog, during March 2013 by Philip Macdonald and Grace

McAlister of the Centre for Archaeological Fieldwork, QUB, on behalf of NIEA (see Evaluation No.5 in this report). The site is on land that formed part of the grant to The Honourable, The Irish Society during the Ulster Plantation and takes its name from the house's close proximity to the boom (SMR 014:068) constructed across the Foyle by the Jacobite army during the siege of Derry in 1689. The evaluation sought to identify the location of the Jacobite siegeworks shown on contemporary maps. While no definitive physical evidence was uncovered in the two excavated trenches, the recovery of lead-shot and a gun-flint strongly suggests that the investigation was close to the area of 17th-century military activity.

EVALUATION No. 1: BISHOP'S STREET WITHIN

Emily Murray

SMR No. LDY 014:029
Grid Ref. C4326016570
Ex. Lic. No. AE/13/16E

Introduction to the site

The Bishops Street Within car park in Derry City centre is the location of the medieval Augustinian priory, and probable site of St Columba's (Colmcille) monastery (LDY 014:029. Figure 1). Lacy (1990, 24) has argued that the *Dub Regles* or Black Church was the original Columban foundation in Derry, dating from the late sixth century. In the annals there are multiple references to the office of 'coarb' of Colmcille, the latest dating to 1220, while there is reference to a refectory in 1192 (Lacy 1988, 385). Lacy suggests that by the middle of the thirteenth century the monks of the Black Church had adopted the Rule of Saint Augustine and in 1397 the Black Abbey is described as a monastery of the canons regular (Lacy 1988, 285). In the 1530s it was reputedly still referred to as the 'Dubreiglés' and in the inquisitions of the early seventeenth century the Black Abbey is known as the monastery of St Colmcille (*ibid*. 385). There is therefore a strong possibility that the site of the Augustinian Priory is also the site of the *Dub Regles*, possibly dating back to the sixth or seventh century – although it is unlikely that the same buildings stood throughout.

The earliest maps of the town, dating to the early seventeenth century (Figures 2-5) indicate that a church and what can be interpreted as monastic cloistral buildings were sited inside the walls, in proximity to the westernmost bastion on the northern side. The cartographic and documentary sources record that monastic buildings were taken over by the seventeenth-century settlers (Lacy 1990, 25) and Sir Henry Docwra established his camp around the ruins of these ecclesiastical buildings (*ibid*. 74). On a map of Docwra's fort dated to *c.*1601 (Figure 3), the building adopted by the 'Governor' can be interpreted as the depiction of a monastic cloister. Cloistral buildings of surviving Augustinian Canons' abbeys and priories in Ireland, with just two exceptions, lie to the south side of the church (Doggett 1996, 10). If Raven's map (Figure 5) is taken as the best surviving record of the cloistral buildings in Derry, along with the *c.*1601 map (Figure 3), it would suggest that the Augustinian cloister in Derry was separate from the church - perhaps the location was dictated by the reuse or rebuilding of an older church.

The church associated with the Augustinian monastery continued to be used by the English settlers, and was renovated by them, until St Columb's cathedral was finished in 1633 (Lacy

1990, 99-100). Lacy (1988, 393) suggests that the renovated church survived until the mid-eighteenth century with two churches occupying the same site since then including the present St Augustine's Chapel of Ease. There is no clear reference to the pulling down of the other monastic buildings but by the late-seventeenth century, on the 1689 and later maps, the Palace is depicted at the southern end of the large plot fronting onto Bishop's Street. It seems likely that the building of the new Palace was undertaken around the same time as the construction of the new cathedral. On the 1780 map of the city, formal gardens are located where the former cloister buildings would have stood - *'Bhps house and Gardens'* (Figure 6).

In the later eighteenth century the palace and gardens were taken over by the army as recorded on the 1799 map - '*Bishops Palace now converted into a Barrack'* (Figure 7). They were returned to ecclesiastical ownership sometime in the early nineteenth century and gardens and paths are shown on the 1831 (Figure 8), 1873 and 1899 (Figure 9) maps. A rectangular building is shown, roughly where St Augustine's church hall now stands, on the 1873, 1899 and 1904-5 (Figure 10) maps with the building labelled as 'conservatory' in the 1899 map (Figure 9). The gardens were turned into a car park in the early 1990s.

Previous archaeological investigations

An archaeological evaluation was conducted at the site by Nick Brannon (DoE-NI) in 1991, before the car-park was laid. His investigation comprised seven mechanically-excavated test-trenches (each 2m x 8m) opened across the 'front garden of St Augustine's rectory' (Figure 1 – precise location not recorded). No evidence for *in situ* remains of any masonry or earthwork structures were found. The laying of the car-park reduced the levels by 0.8m on average while the average depth of the subsoil in the evaluation trenches was found to be 1.2m. The strata above the subsoil 'were interpreted as… a succession of dumped deposits - perhaps garden heightening or drainage - and buried topsoils' and finds included fragments of roof tile, clay tobacco pipes and pottery (SM7 files – NIEA MBR).

Geophysical survey *by Alastair Ruffell (QUB) and Ronan McHugh (CAF)*

In November 2012 a ground-penetrating radar (GPR) survey was deployed to assess the ground conditions beneath the car-park at Bishop's Street Within, as requested by the NIEA. The south-western corner of the car-park was targeted (Figure 1 – area highlighted in red). Three GPR lines were gathered NW-SE through the survey area where thirty-eight 500Mhz and five 200MHz lines were shot. The 500MHz and 200MHz lines all show consistent results, with substantial built ground to 1m depth and then non-natural materials to about 2m, varying from 1.75m to 2.15m over the survey area (Figures 11-14). The urban location

of the survey area makes it unsurprising that tarmac, aggregate, other made ground occurs to ~1m depth, with a further 2m of this 'worked' ground. The exact nature of this ground cannot be determined and requires further survey, including high-resolution geophysics and coring or excavation as such complicated ground is not easy to assess by remote methods. Nonetheless this survey has been successful in predicting one layer of made ground to 1m depth and a further, different layer of made ground to around 2m (average) over the survey area.

2013 evaluation: method statement

Trench size and location

The target area identified for the 2013 evaluation was at the north-western corner of the car-park covering a wedge-shaped plot (Figure 1). The historical cartographic evidence indicates that this was the approximate area in which medieval monastic buildings were located. The investigation and closing off of this area of the car-park also does not compromise the flow of traffic. The site was agreed following discussion with members of the NIEA inspectorate and Roads Service (DRD).

The area to be investigated was first traversed with a cable detector to determine the presence of electrical cables (NIE mark-up map had also been acquired in advance). This demonstrated that a cable ran from the street light located within the investigation area northwards towards the boundary-wall. Both the location of this cable and a drain towards the north-eastern corner of the site, and working within a safe distance from the walls, reduced the maximum available length (NNE/SSW) for investigation to 16m.

Three trenches in total were opened covering an area of approximately 54m^2 (Figure 15);

- Trench 1: 14m x 2m – only partially excavated (northern 8ms)
- Trench 2: 6m x 2.3m
- Trench 3: 12m x 2m

Methodology

The evaluation trenches were cut using a concrete saw and then excavated using a mini-digger fitted with a sheugh bucket. All excavations were conducted under archaeological supervision. The site records comprise a site diary and photographs and the location of the trenches was recorded using an EDM. On discovery of human remains the NIEA inspectorate was immediately informed and excavation ceased. The recovery of the human remains was reported to the local PSNI Community Officer, Sam Young (Police Ref. No. 819: 11-02-13) who informed the coroner's office.

The area to be investigated was fenced off with Harris fencing and signage warning of an open excavation was displayed. This area of the car-park is owned by DRD-Roads Services and permission to excavate was granted in advance. On completion of the excavations the site was reinstated in accordance with DRD requirements and was 'handed-back' to DRD on Friday 15th February.

Account of the evaluation

Trench 1: Trench 1 was opened at the northern-western corner of the car-park running parallel to the western retaining wall of the car-park and Grand Parade (Figure 15). A trench measuring 14m by 2m was marked out and cut. The tarmac (C101: 0.08m thick) and loose angular quarry-gravel below it (C102: 0.05-0.07m thick) was removed by a mechanical excavator across the northern 8m of the trench (Plate 1). This exposed the surface of a compacted demolition rubble deposit containing mortared brick, stone, slate and concrete (C103: >1.5m). A sherd of tin-glazed earthenware (Delft), probably Dutch based on the green glaze on the base (Plate 3) and of late seventeenth/early eighteenth-century date (R. O'Baoill and A. Horning pers. comm.), was recovered from this demolition rubble (C103) along with occasional oyster shells and bottle glass. This deposit became increasingly looser and less stable with depth, with the sides of the trench collapsing-in and undercutting the tarmac surface of the car-park (Plate 2). Excavation ceased at approximately 1.6m and the trench was backfilled.

Trench 2: It was decided to open the second trench, Trench 2, as far apart from Trench 1 as was possible within the confines of the area allocated, to determine how far this rubble deposit (C103) extended. The length of the trench was limited by the presence of cables to the south, and a drain to the north. It was opened over the outline of a parking bay, roughly parallel to Trench 1, and measured 6m x 2.3m (Figure 15).

The tarmac was cut and lifted (C201: 0.09m thick) exposing a dirty black-brown hard-core deposit comprising angular quarry-gravel, larger stones, demolition rubble and occasional lenses of clay (C202: approx. 0.7-0.8m thick). Below this was a more compact yellow-brown clay layer containing large rounded stones and demolition rubble (brick, slate and mortar) but was otherwise relatively sterile (C203: approx. 0.4-0.5m). Below these dumped deposits, at a depth of 1.2-1.5m below the surface of the car-park, was a dark brown loam (C204) with frequent inclusions – lumps of mortar, coal/charcoal, fragments of slate and brick, ceramics and tobacco clay-pipe stems (Plate 4). The ceramics included a couple of pieces of

creamware and a sherd of an English Blackware type - an ornamental mug decorated with highly ornate handles (Plate 3), probably late seventeenth/early eighteenth-century in date (R. O'Baoill and A. Horning pers. comm.). On exposure of this loam deposit (C204), a garden or urban soil, excavations were continued by hand in the northern half of the trench. Given the reported discovery of the subsoil at 1.2m in the 1991 evaluation, it was not expected that this loam horizon would extend to any great depth. However, half-a-metre was dug by hand with no sign of any change. Given the depth below the surface (approx. 2m) and instability of the upper hard-core deposit (C202), it was decided to resume excavations with the mechanical excavator. This loam (C204) horizon continued to extend downwards with no apparent change and with increasing difficulty in monitoring safely and effectively from the sides of the trench. It was decided to cease excavations at approximately 2.5m deep and in the final bucket human remains were recovered.

The range of elements suggested that the digger had disturbed a minimum of two articulated skeletons, one adult (lower torso: pelvis, proximal femur, ulna shaft, distal humerus, metapodials and phalanges) and one juvenile (lower legs – two immature tibae), though these were not exposed in plan. In section a slightly darker, blacker loam (C205) was just discernible below the garden loam (C204) which may represent the burial horizon (Plate 3). A copper-alloy lace chape or tag was also recovered from the trench (C204/205). Lace chapes range in date from the fourteenth/fifteenth century through to the nineteenth-century (P. Macdonald pers. comm.). Excavation in Trench 2 ceased at this depth and the trench was partially backfilled. On completion of the excavation of Trench 3 both Trenches 2 and 3 were backfilled concurrently.

Trench 3: Trench 3 (12m x 2m) was opened roughly perpendicular to Trenches 1 and 2 and linked the two. The location of this trench was agreed in discussion with Paul Logue, NIEA (Feb. 11th), and was opened with the purpose of determining the extent of the garden soil (C204) discovered in Trench 2.

The two dumped deposits encountered in Trench 2 (C202 and C203) extended across Trench 3 below the tarmac (C301): the darker black-brown dirty-gravel horizon (C302) and yellow clay and stone layer (C303). As in Trench 2 these horizons were not homogenous with a layer of black plastic hessian in one section face and lenses of clay and gravel in other sections. Despite this variability the two principal dump layers were clearly distinctive across the two trenches (see Plates 4 and 5). Below the lighter clay layer (C303) the urban or garden soil (C304) was found to continue northwards across the full extent of the evaluation trench (Plate 5). The surface of this deposit was exposed but not excavated. Two

lengths of decorated pipe stems, of 18th century date (Plate 3) were recovered from Trench 3 along with miscellaneous animal bones. On reaching the garden soil horizon in Trench 3, Trenches 2 and 3 were backfilled and resurfaced.

Discussion

In advance of the evaluation the expectations of discovering surviving *in situ* archaeology were low given the results of both the 1991 evaluation and the GPR survey. The results of the limited evaluation in 1991 suggested that there is the potential for surviving archaeology in the 0.8m-1.2m depth-bracket across the eastern extent of the car-park, fronting onto Bishops Street Within. The 2012 GPR survey data, however, suggests that some form of rubble or hard-core (possibly two different layers) extends to this depth (1-2m) at the south-western corner of the car-park. If the subsoil is at a depth of around 1.2m across the car-park there is therefore the possibility that archaeological horizons have been removed. Alternatively, the ground may slope downwards to the west from Bishops Street Within with the area artificially heightened at different times to provide a level surface for the western extent of the car-park (and former military Parade Ground and formal gardens). The evaluation has demonstrated that the latter is the case and that the western extent of the car-park has been significantly artificially built up. The made-ground, detected by the GPR survey and substantiated by the evaluation, appears simply to have been built up overlying earlier deposits rather than levelling or removing old archaeological horizons. It is likely, however, that with further more detailed investigation some truncation of deposits and horizontal discontinuities will be identified.

The surface of the car-park is noticeably higher than the wall-walk of the City Walls (Grand Parade) to the west and the graveyard of St Augustine's church immediately to the north (Plate 6) - the surface of the car-park is raised at least 1.5m above the height of the latter. Levels were not recorded during the evaluation but a rough correlation would suggest that the surface of the modern graveyard is higher than the level at which burials were encountered in Trench 2. Presumably if burial has continued in St Augustine's this could in part explain the heightening of the ground relative to the burials encountered in the evaluation trench. Alternatively, the burial horizon in Trench 2 may have been partially truncated and levelled at some time.

The discovery of the articulated skeletons suggests that the graveyard that now survives is a much reduced version of the original graveyard that once existed here associated with St Augustine's church – a version of this church has existed at the same site since at least the sixteenth century if not centuries earlier (Figures 7-10). The burials could be as late as the

seventeenth century and date to the period before the site was converted into formal gardens, possibly even date to the 1689 Siege of Derry. Alternatively, the burials could date to the period of occupation of the site by the Augustinian monastery sometime between the thirteenth and late sixteenth centuries. There is also the possibility that if this is the site of the Columban church that the burials may potentially be centuries older again stretching back as far as the seventh century and historical documentation indicates that a graveyard existed in Derry since at least the seventh century (Lacey 1998, 39).

Overlying the burials (C205) in Trench 2 was over a half-a-metre in depth of brown loam (C204). No features were identified and it appeared to be relatively rich in occupation debris. This can be identified as an urban or garden soil and probably dates to the late seventeenth and eighteenth centuries and represents the formal gardens that accompanied the new Bishops Palace fronting onto Bishop's Street (Figure 6).

Above the garden soil (C204/304) were two layers of dumped material and 'made ground' (C203/303 and C202/302) sealed by the tarmac (C201/301). The upper gravel horizon (C202/302) can be identified as a constituent of the car-park groundworks (1991+). The layer (C203/303) in between, below the car park horizon (C202/302) and above the garden soil (C205/305), must date to the intervening period sometime between the late eighteenth century and the 1990s. It seems probable that this horizon dates to when the site was in use by the army as a Parade Ground from the late eighteenth century. This is illustrated on the 1799 map where the site is labelled 'Bishops Palace now converted into a Barrack' (Figure 7). In Trench 3, a cap or surface to the made-ground layer (C303) was discernible in the north-facing section with a possible continuation of the same identified at the northern end of Trench 2 (see Plate 5). This upper lens of C203/303 (Plate 5) could represent the compacted surface from this period of use. Additionally, or alternatively this horizon could represent the formal paths of the gardens as shown on some of the maps (Figures 8 and 9).

In Trench 1 the extensive dump of demolition rubble (C103) appears to be relatively localised and corresponds with a notable rise or bump in the corner of the car park. The rubble may derive from a levelled building that once stood within the grounds, possibility the conservatory shown near this spot on the Goad map of 1899 (Figure 9) or the material may have been imported from elsewhere in the town.

The results of the research undertaken to date (evaluation and desk-based) can be summarised as follows (the dates are approximate and based on the cartographic evidence; dates/features in italics are speculative);

Layer	Depth (approx.)	Feature	Date
201/301 (tarmac) & 202/302 (hardcore gravel)	0 – 0.8/1m	car park	1991+
103 (building rubble)	0.1->1.5m	Dump of demolition rubble – conservatory?	*c.1990*
- *203/303?*		Bishops gardens & conservatory	*c.* 1856-1899; + *earlier*
203/303 (yellow-brown clay, stone)	0.8/1 – 1.2/1.5m	Army Parade Ground accompanying barracks (i.e. former Bishop's Palace)	1780s/90s - *mid-19thC (or earlier)*
204/304 (brown loam & occupation debris)	1.2/1.5 – 2.5/2.6m	formal gardens accompanying the Bishop's Palace	1630/80s - 1780/90s
205 (loam & burials)	> 2.5m	graveyard - associated with the Augustinian monastery	Mid 13thC (1220+) -1630/80s

Recommendations

It is recommended that an additional GPR survey is conducted at the site with a transect running across the car-park from Bishops Street through to Grand Parade. In light of the results of the evaluation, this would potentially show the depth of made ground which could be interpreted as a good proxy and reflection of the underlying natural topography of the hill. The transect would also be a good indicator of the depth at which archaeology is likely to be encountered, where it survives.

Given the promising results from the limited evaluation and potential for buried archaeology at the site, it is recommended that it is revisited and that a larger area is opened and investigated. Within the same zone agreed by DRD for the evaluation (Figure 1), and avoiding cables, a maximum area of 12m x 12m could be opened. The upper hard-core horizons could be excavated by a mechanical excavator down to the surface of the garden soil with excavation thereafter proceeding by hand. In order to allow the safe excavation of the trench below this depth, the trench will have to be shored and/or sloped/stepped which will reduce the area available for excavation.

Acknowledgements

Permission to excavate and close-off a section of the car-park was granted by Adrian Doherty, DRD Road Services. Tommy Campbell (NIEA) provided the fencing and other assistance on site. Eric Hall and Trevor Robinson visited the site and illuminated the street lights so that the cables could be detected with the scanner. The trenches were mechanically excavated, reinstated and resurfaced by Seamus Canning (SC Tarmac Ltd.).

Sapphire Mussen (CAF) and Ronan McHugh (CAF) surveyed-in the trenches and Cormac Duffy (CAF) assisted with the evaluation. Photocopies of the 1856, 1873 and 1899 maps of this section of the town were kindly provided by Dr Avril Thomas.

Bibliography

Doggett, D. 1996: "The medieval monasteries of the Augustinian Canons Regular", *Archaeology Ireland* 10(1), 8-11.

Lacy, B. 1988: "The development of Derry, 600-1600", in G. Mac Niocaill and P.F. Wallace (eds.), *Keimelia: Studies in medieval archaeology and history in memory of Tom Delaney,* 378-396*,* Galway. Galway University Press*.*

Lacy, B. 1990 *Siege City: The story of Derry and Londonderry*. Belfast. Blackstaff Press.

Thomas, A. 2006 *Irish Historic Towns Atlas: Derry/Londonderry.* Bray. History Publications Ltd.

Plate 1 Trench 1: excavation of the tarmac (C101) and quarry gravel (C102) (facing SE).

Plate 2 Trench 1: the loose demolition rubble (C103) below the tarmac (C101) and quarry gravel (C102)

Plate 3 Finds from the evaluation: a sherd of tin-glazed earthenware (Delft), from Trench 1 (C103), and a sherd of an English Blackware type from Trench 2 (C204). Both pieces are probably late seventeenth-early eighteenth-century in date. The decorated pipe stems (from Trench 3; C303/304) are of eighteenth-century date (R O'Baoill and A. Horning pers. comm.).

Plate 4 Trench2: east-facing section showing the gravel hard-core horizon (C202), the clay (C203) and the loam 'garden' or 'urban' soil (C204). A darker, black-brown deposit (C205) is just visible at the base of the trench/ranging rod. The trench was too deep to enter safely to allow the trench sides to be cleaned back.

Plate 5 Trench 3 (looking WNW) showing the continuation of the stratigraphy encountered in Trench 2 across the length of Trench 3.

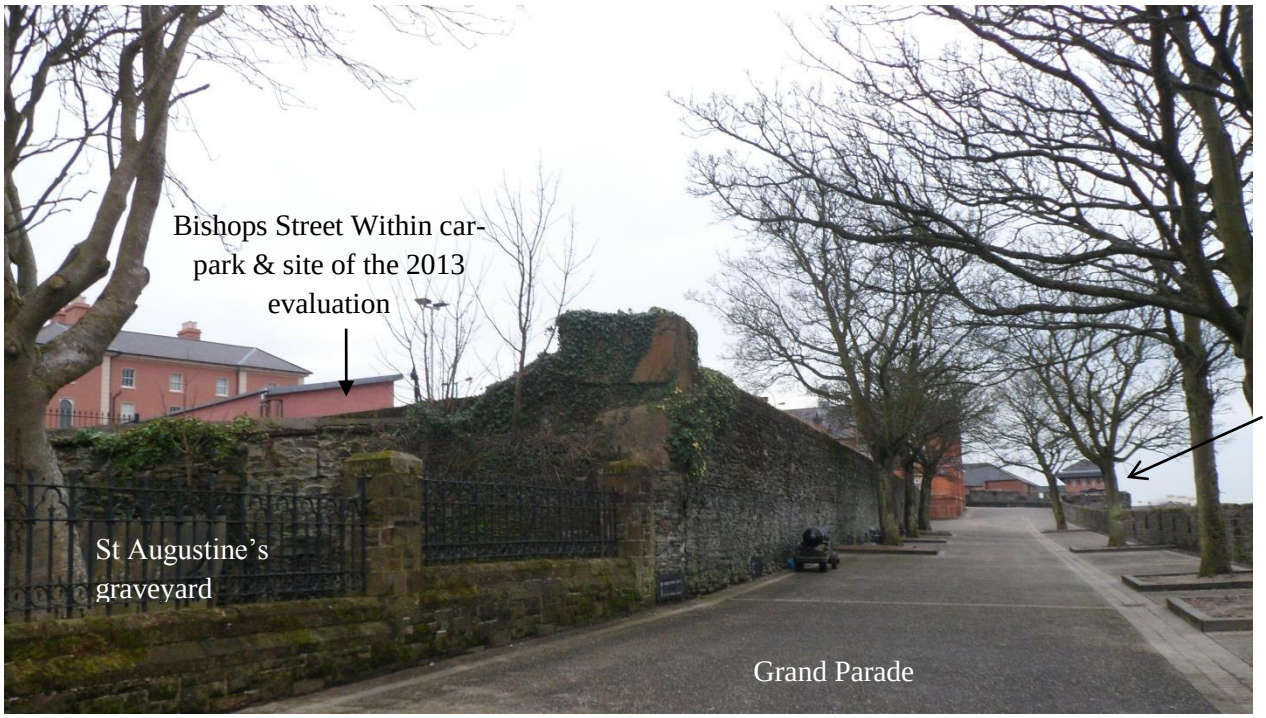

Plate 6 Photo taken from the City Walls (Grand Parade), looking towards Double Bastion with the graveyard of St Augustine's Church on the left and the external face of the walls of the Bishops Street Within car-park.

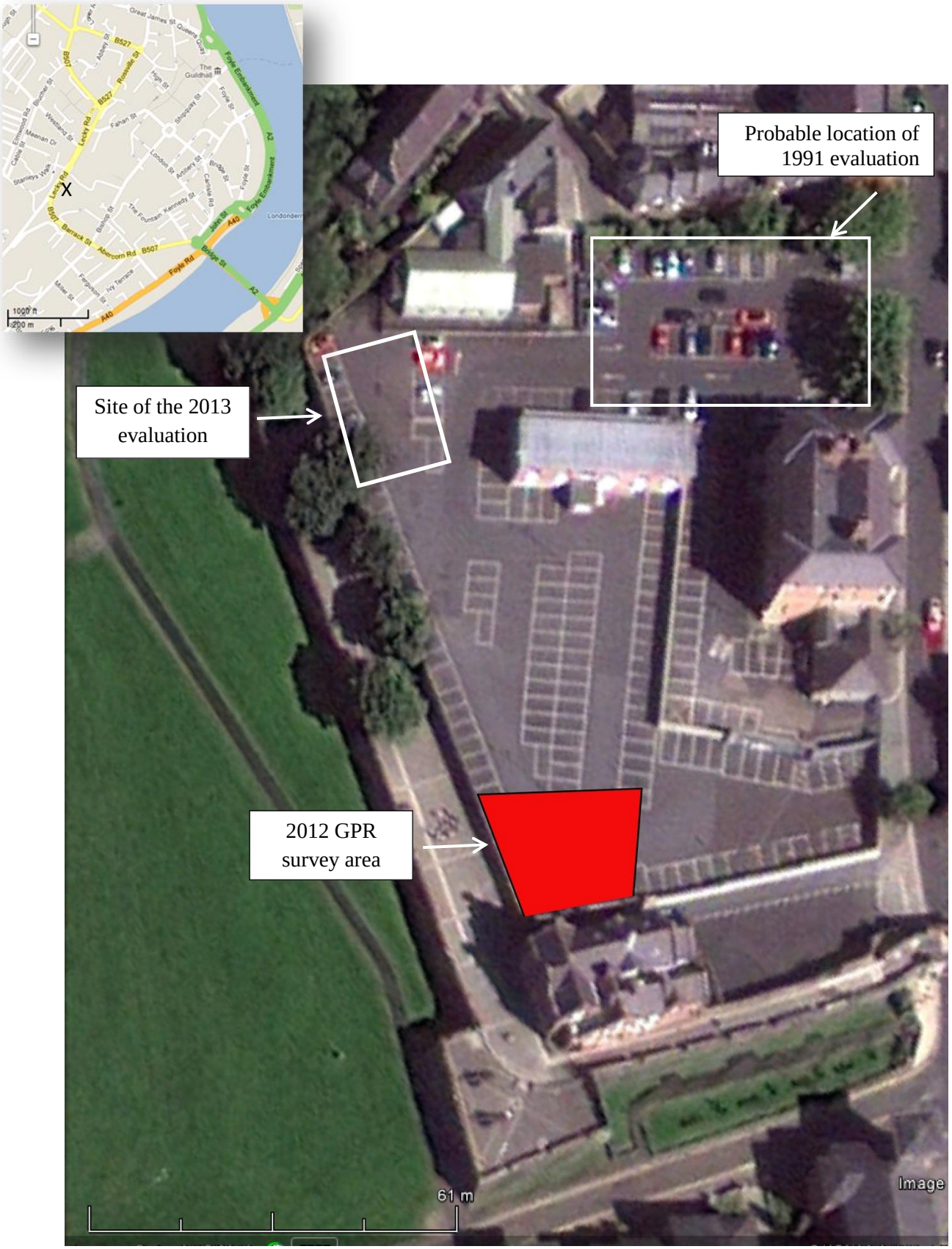

Figure 1 Google Earth image of the Bishop's Street Within car-park showing the GPR survey area and the site of the 2013 archaeological evaluation (see Figure 2 for the location of the trenches). Inset shows location in Derry city centre.

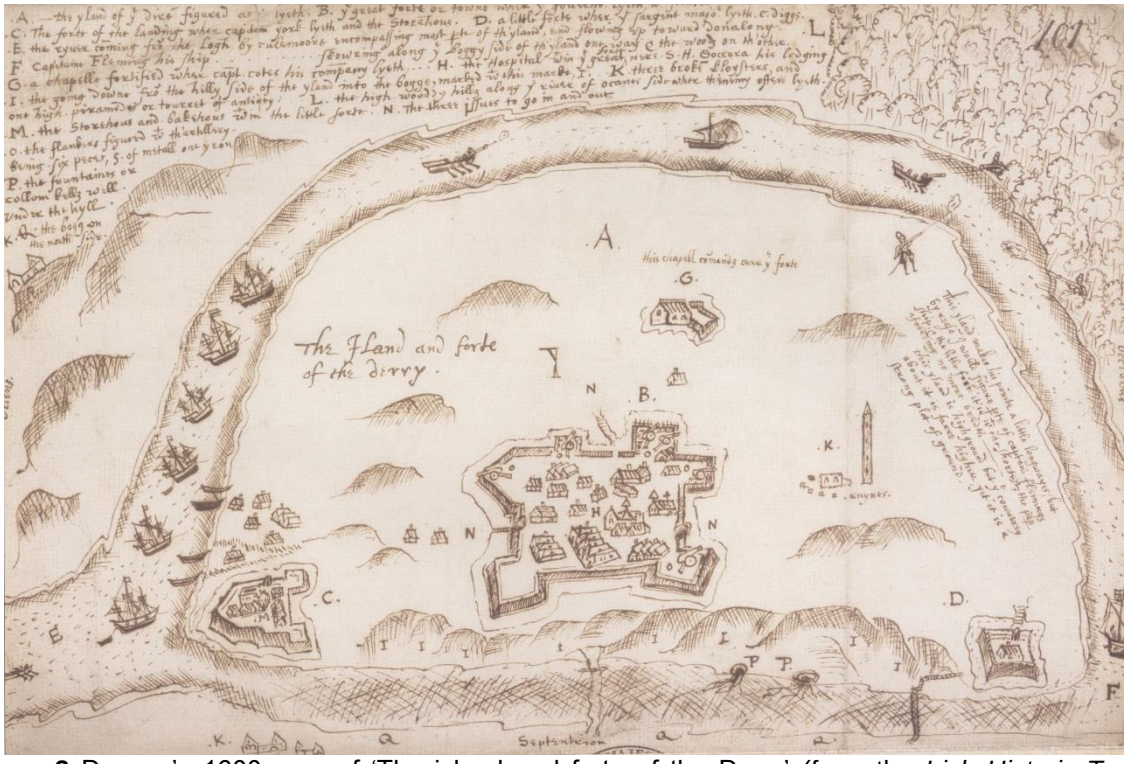

Figure 2 Docwra's 1600 map of 'The island and forte of the Derry' (from the *Irish Historic Towns Atlas).*

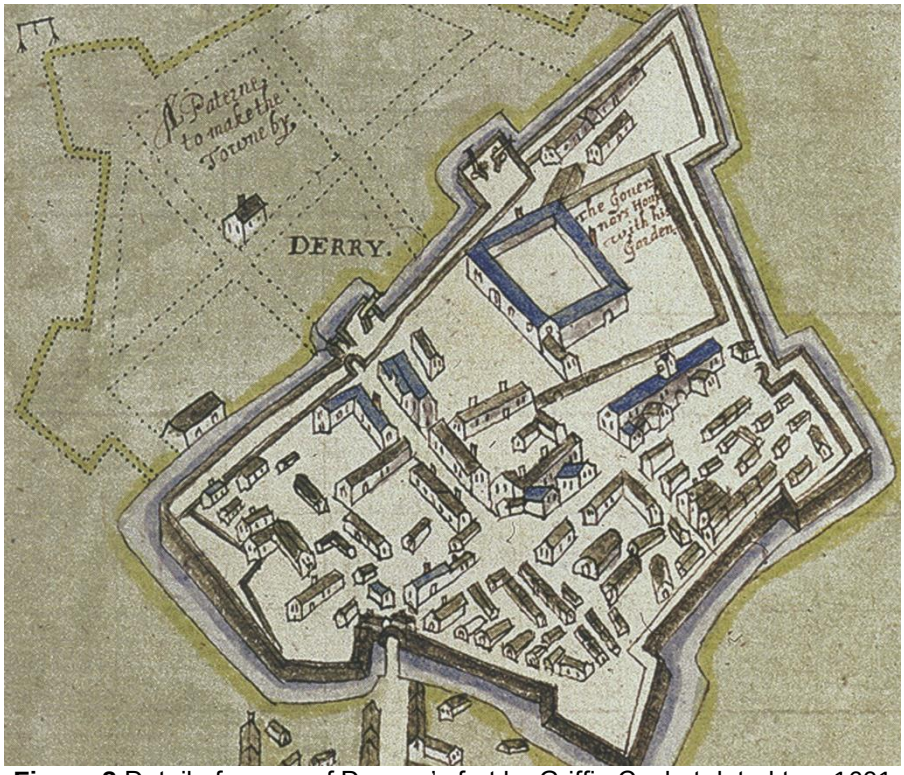

Figure 3 Detail of a map of Dowcra's fort by Griffin Cocket dated to *c.*1601 (from the *Irish Historic Towns Atlas).*

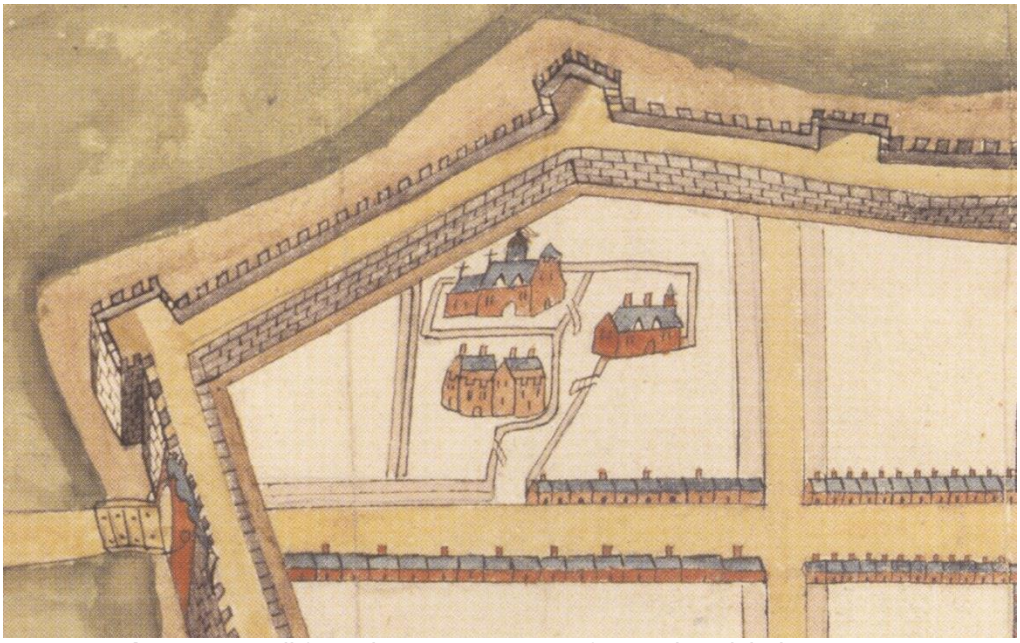

Figure 4 Detail from the 1618-19 map of Derry by Nicholas Pynnar (from The *Irish Historic Towns Atlas*).

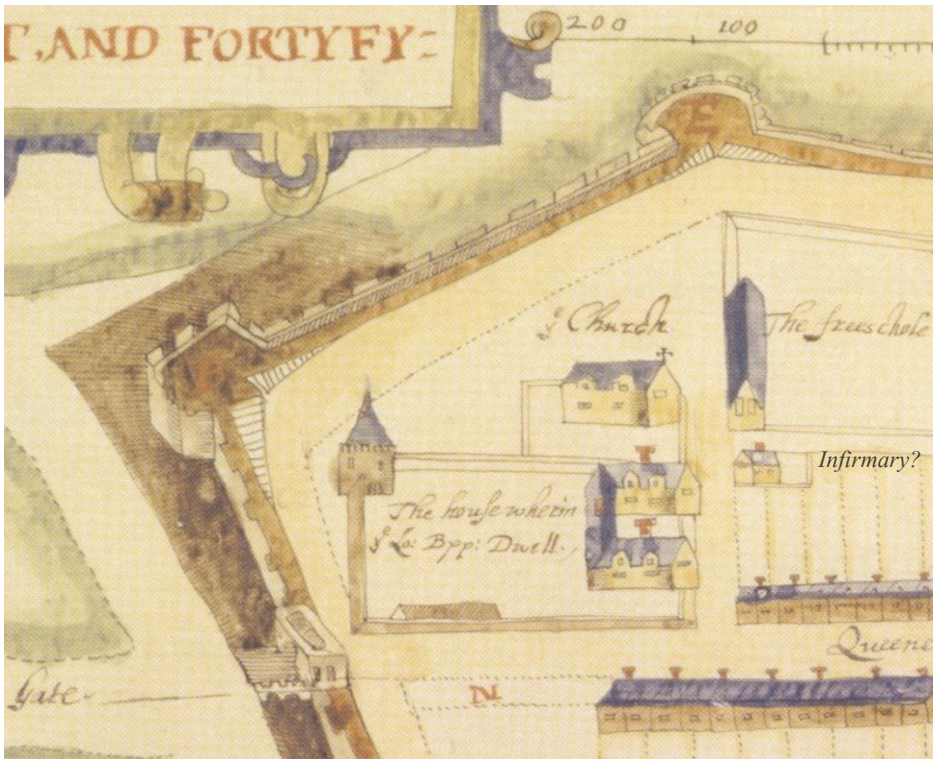

Figure 5 Detail of the 1622 map of the walled town by Thomas Raven (copied from the *Irish Historic Towns Atlas*) showing an east-west orientated building, (*'ye Church'*), the bishop's house due south of it (*'the house wherein ye Lo. Bpp. Dwell'*), and '*the free schole'* to the east of it. In medieval monasteries the monk's infirmary is typically located away from the cloistral buildings, most often to the east (Doggett 1996, 10) and it is possible that the other small building depicted to the east of the Bishop's house could be the monks' infirmary.

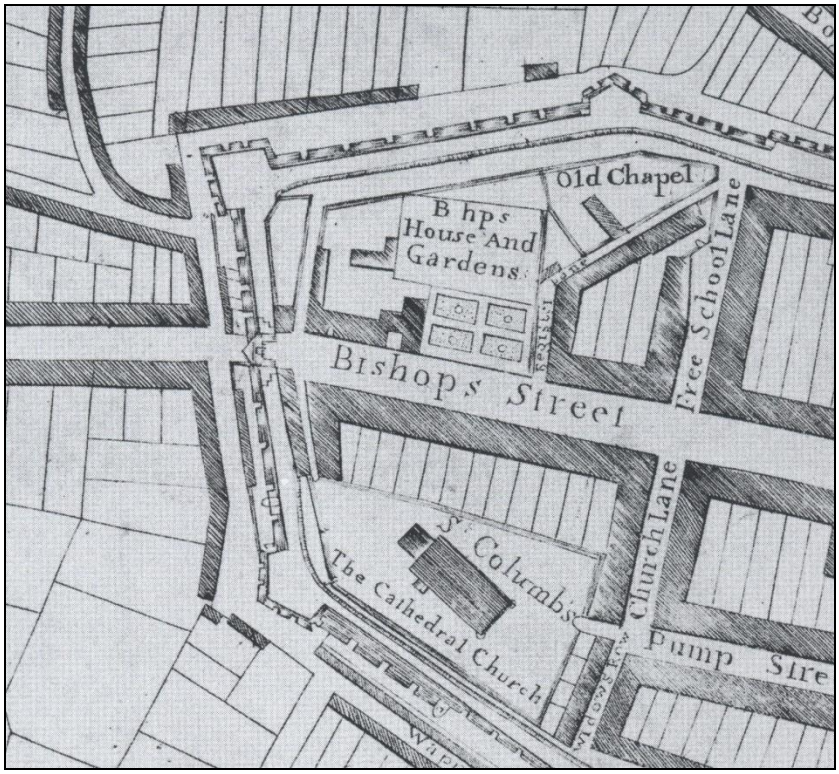

Figure 6 Detail of the map of the city of Derry dated to *c.*1780 (from the *Irish Historic Towns Atlas*).

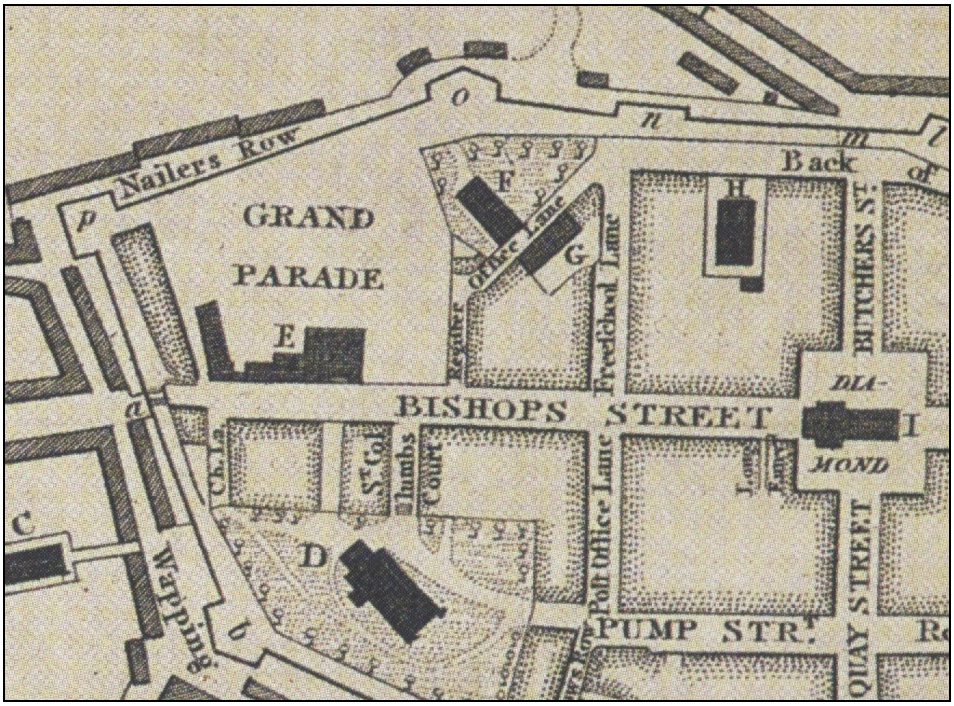

Figure 7 Detail from the 1799 map of the town by Robert Porter (from the *Irish Historic Towns Atlas*).
The key identifies the buildings as; E = 'Bishops Palace now converted into a Barrack'; F = 'Chapel of Ease and Old Churchyard'; G = 'Diocesan School'.

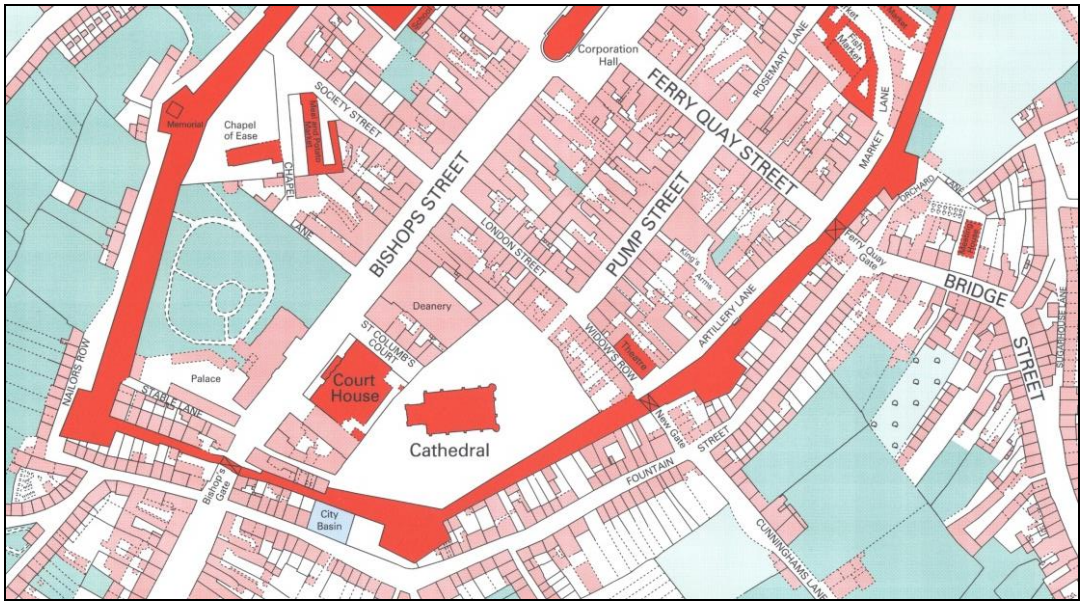

Figure 8 Detail from the OSNI map of the city 'Londonderry circa 1831' (image from *Irish Historic Towns Atlas*).

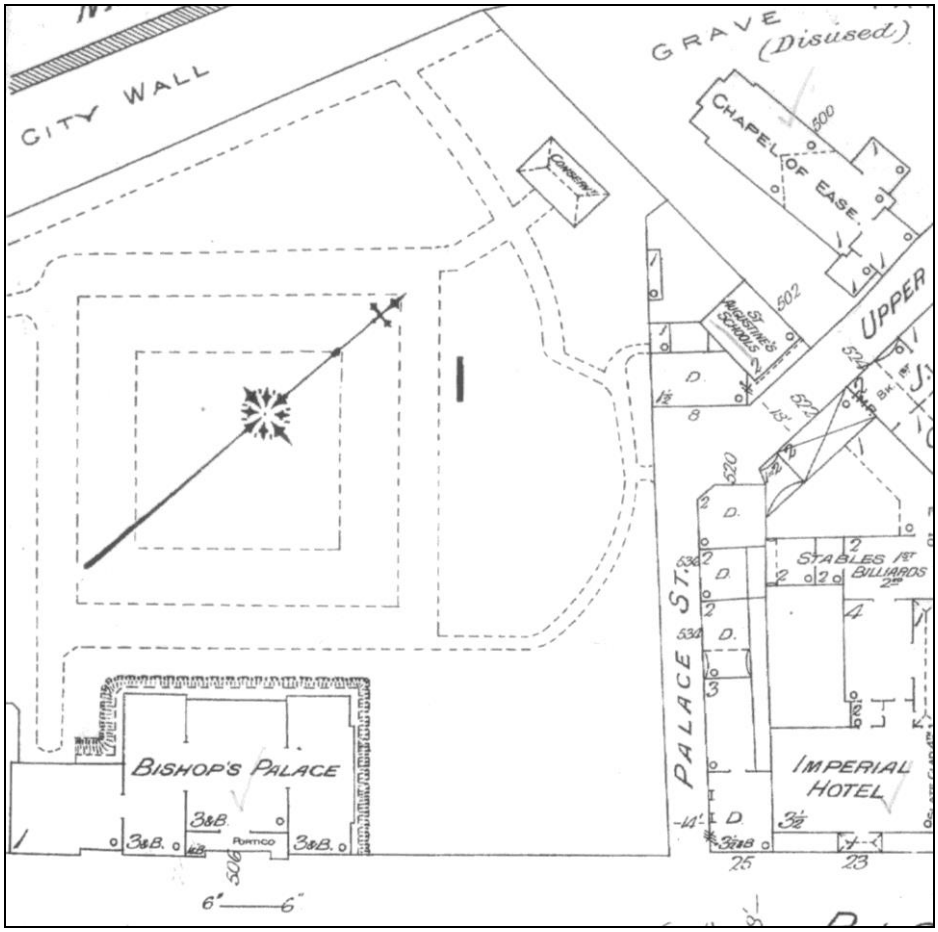

Figure 9 Extract from the Goad 1899 map of Derry showing the Bishop's gardens and conservatory (copy of the map provided by Avril Thomas).

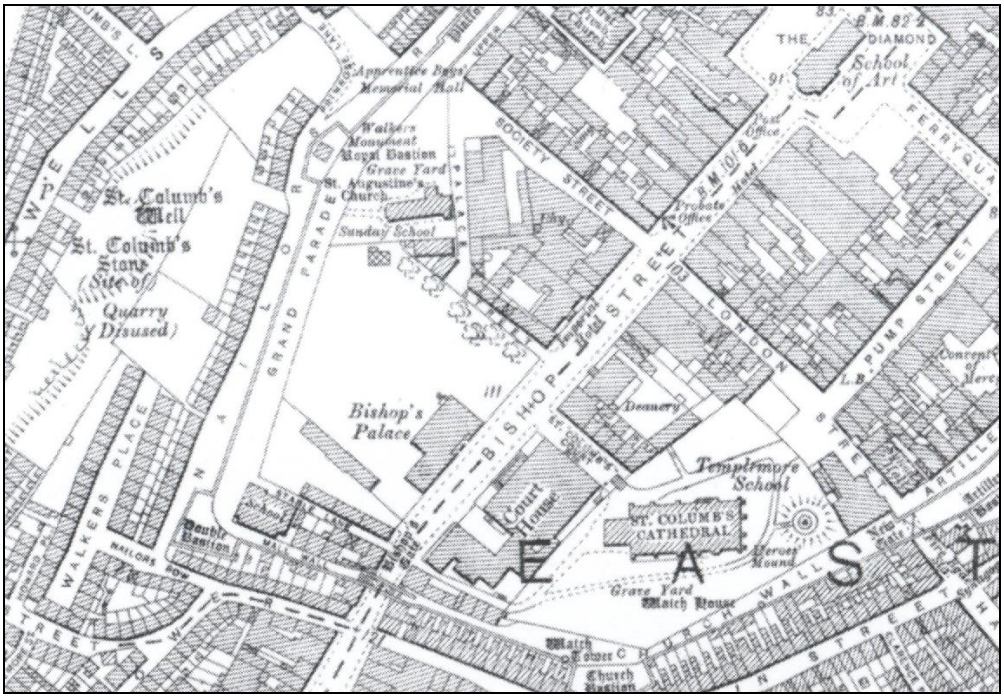

Figure 10 Detail from the OSI map of the city (1:5000) from 1904-5 (from *Irish Historic Towns Atlas*)

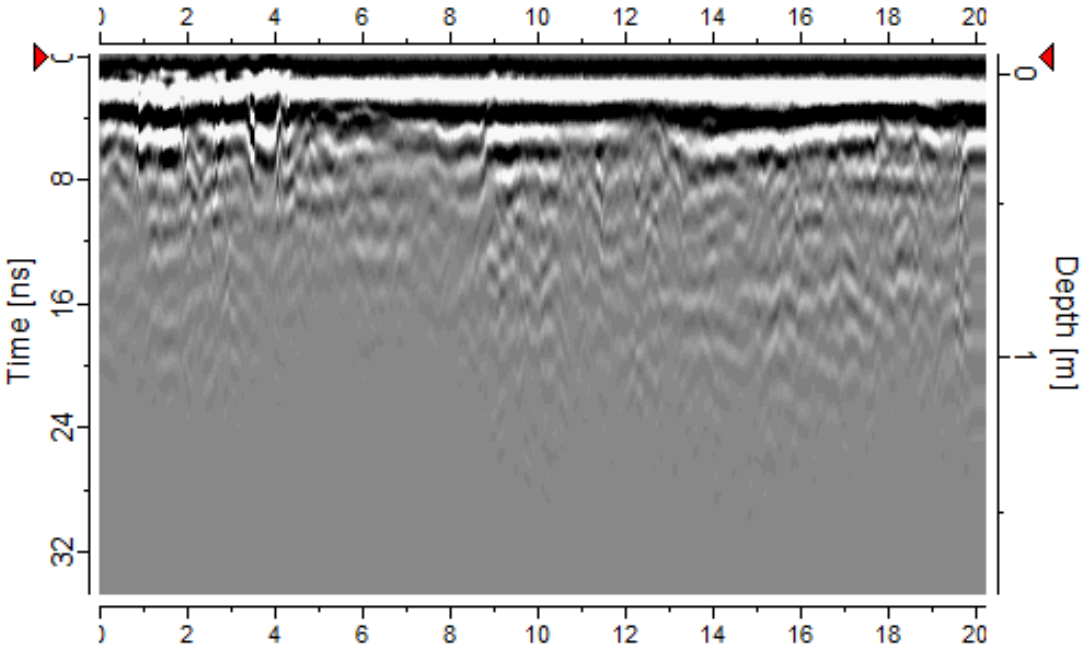

Figure 11 GPR survey data: Line 1139 (500MHz unprocessed), through the centre of the survey area, showing reflections to 1m (image provided by Alastair Ruffle).

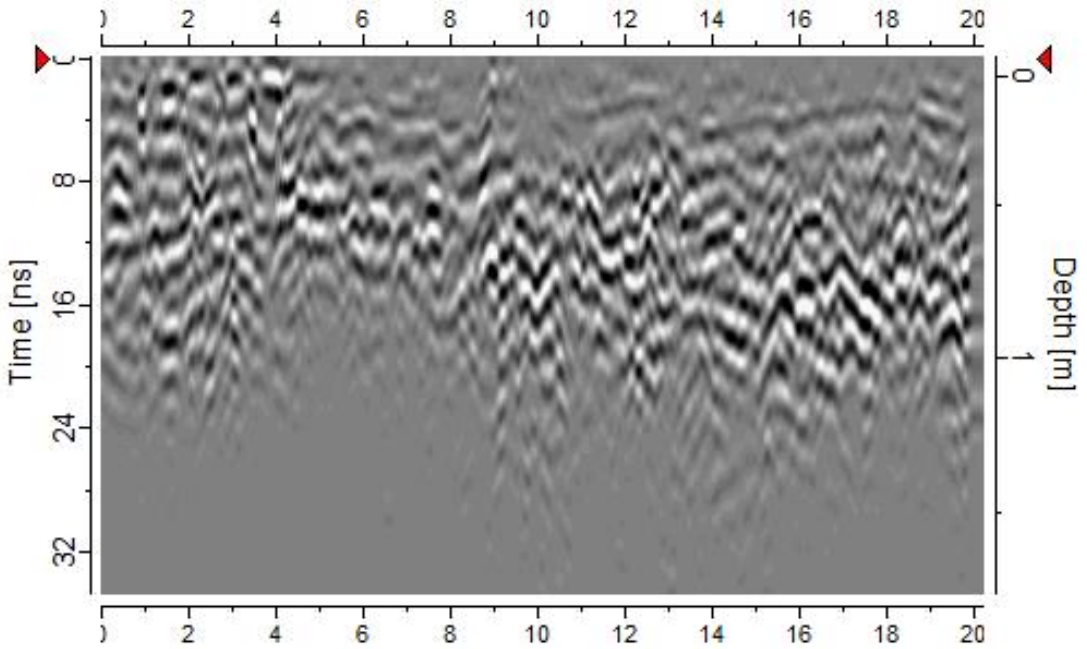

Figure 12 GPR survey data: Line 1139 (500MHz processed), through the centre of the survey area, showing reflections to 1m (image provided by Alastair Ruffle).

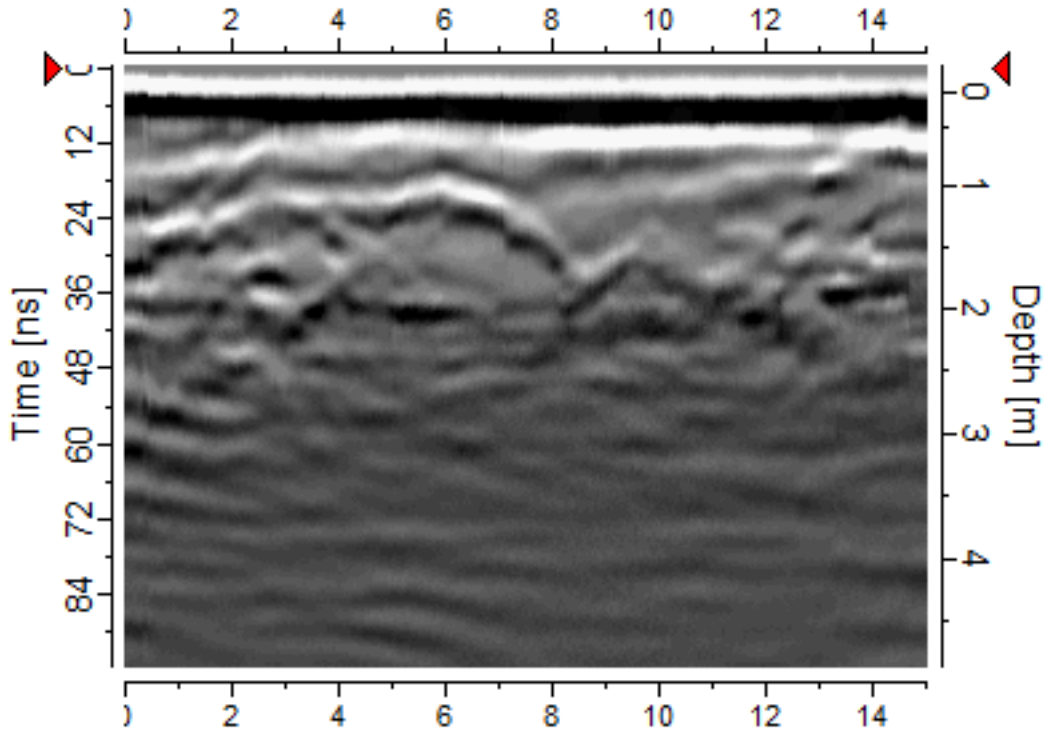

Figure 13 GPR survey data: Line 1160 (200MHz unprocessed), through the centre of the survey area, showing reflections to 2m (image provided by Alastair Ruffle).

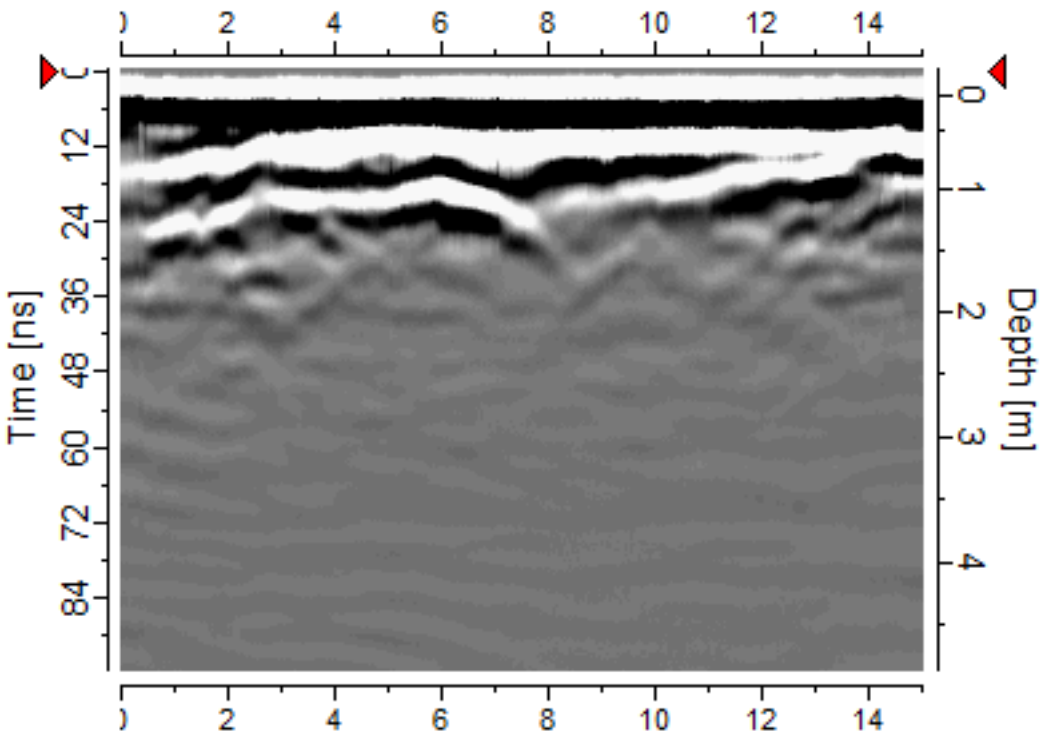

Figure 14 GPR survey data: Line 1160 (200MHz processed), through the centre of the survey area, showing reflections to 2m (image provided by Alastair Ruffle).

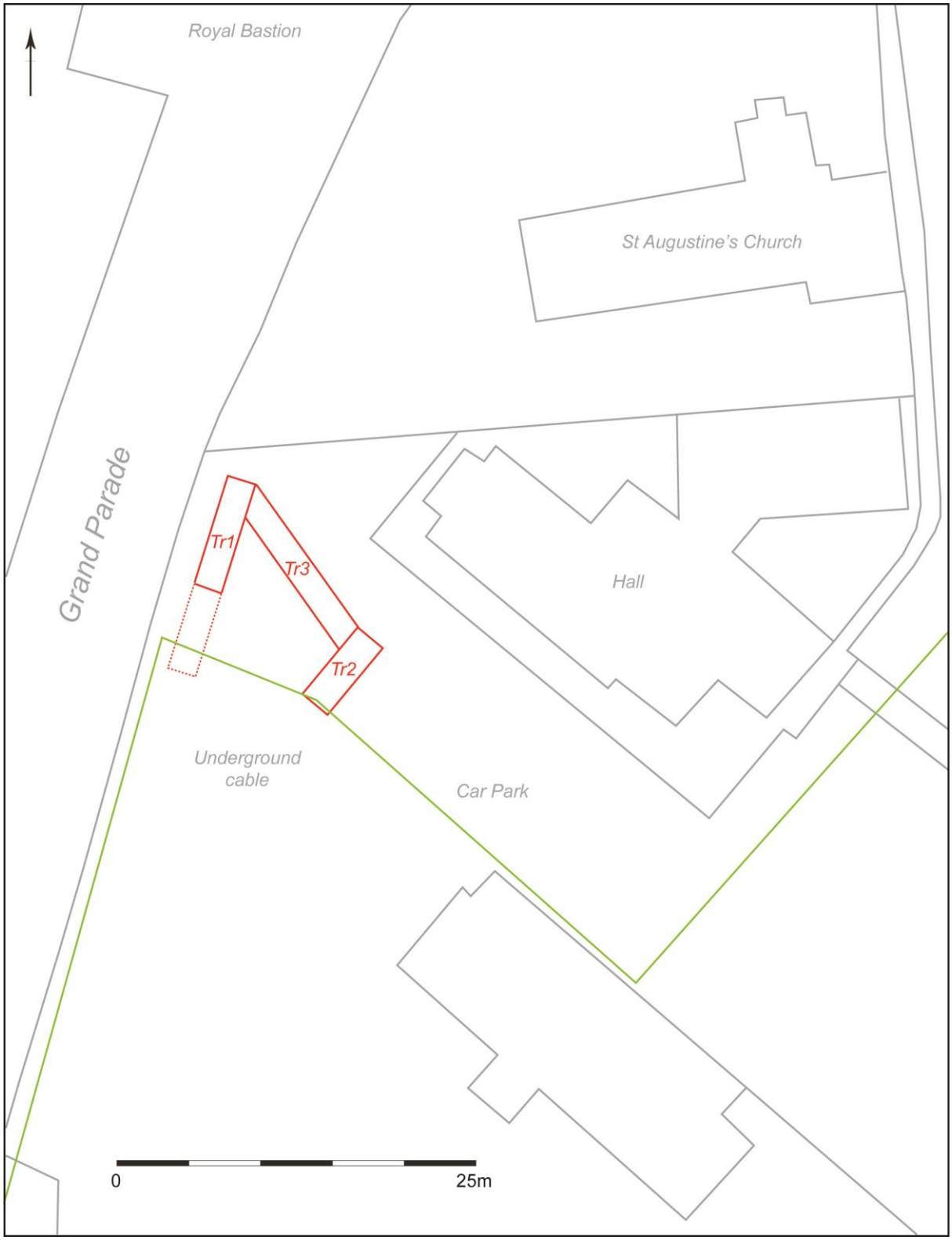

Figure 15 Location of the evaluation trenches (image prepared by Sapphire Mussen) with NIE cables (green line) also shown. The NIE line traversing the car-park from Grand Parade to Bishop Street within follows the line of a former wall, removed sometime post-2005 (wall marked on the 2005 OSNI map of the city).

APPENDIX A: GPR – How the Method Works

GPR uses the transmission and reflection of radio waves (typically 25 to 2GHz). Radar waves, introduced in the ground, may reflect back to surface when they intersect objects or surfaces of varying dielectric permittivity. Thus a GPR system requires a source antenna and receiving antenna (manufactured to measure the same frequency). The transmitting antenna generates a pulse of radiowaves that the receiver detects at a set time interval: the longer the time interval, (potentially) the deeper the waves will have travelled into the ground and back again, or slower the medium they have travelled through. As the antennae pass over discrete objects with different dielectric properties to the surrounding medium (boulders, pipes, coffins), they may generate hyperbolae, or arc-like reflections.

Radar waves also travel horizontally from the transmitting antenna, which in open ground simply dissipate with distance. However, in areas with upstanding structures, especially those that have a significant dielectric contrast to their surroundings, interference from such surface objects can create artefacts on the radargram. When such isolated objects (metal poles, trees) are passed during a traverse, a series of hyperbolae may be generated that appear like a subsurface object but are simply out-of-plane reflections. Radar antennae are commonly elongate, generating radar waves in a widening arc from their long axis. Thus when moved in parallel to the antennae axis, the radar waves may reflect from a larger subsurface area (the so-called footprint) than when moved with the antennae at right angles to survey direction. Antennae may be shielded with radio-wave attenuating materials that reduce such out-of-plane interference, such as the 500MHz antenna used for the bulk of this survey. Unlike other forms of electromagnetic radiation used in geophysics, radio waves have far higher rates of attenuation, and thus penetration and reflection depths are typically low. The receiving antenna has either electronic or fibre-optic link to a recorder that converts incoming radiowaves to digital format and displays these graphically as wavelets.

As the transmitter-receiver array is moved, so these wavelets are stacked horizontally to produce a radargram, a kind of x-ray slice into the Earth, but recorded in the time taken for radar waves to penetrate and reflect, as opposed to real depth. The speed of radiowave propagation is determined by the makeup of the transmitting medium: in this case the speed of light and dielectric permittivity. Magnetic properties can also influence radar wave speed. Changes in dielectric permittivity can cause radar wave reflection, without which GPR profiling would be impossible. Radarwave attenuation, or signal loss is extreme in conductive media such as seawater, clays (especially hydrous) and some leachate. GPR has good depth penetration (tens to hundreds of metres) in ice (with minor fracturing/interstitial water),

hard rocks like limestone and granite and clay-poor quartz silts or sands. Vertical resolution *vs.* depth penetration is of major concern when choosing antenna frequency. Low frequencies (15-50MHz) achieve deep penetration with poor vertical resolution in the received signal, due to the long wavelength. High frequencies (500-1000MHz) show high resolution with weak penetration (centimetres to metres). Low-frequency antennae are large (a few metres long), high frequency antennas are small (tens of centimetres). Again, this can influence the use of the method, as deeply-buried targets in enclosed spaces are virtually impossible to survey.

As with all geophysical methods, some intelligence concerning the likely size and makeup of the target is useful: where unknown or questioned, then a range of antennae should be used, and in very poorly understood locations, with other geophysical and invasive techniques (Blunderbuss Approach). Moisture contents influence radar wave velocity because in homogenous media porosity has a direct relationship to dielectric permittivity. Thus dry sand will allow increased wave propagation: sand with high freshwater content will give improved vertical resolution. A major problem with early antennae was the effect of 'out-of-plane' reflections. It is easy to think of the radar wave as a focused beam (the ray-path at right-angles to the wave) when in fact the radar wave as it travels into the subsurface is more like a bubble, hemispherical at first, expanding and becoming distorted as it travels at different speeds into the ground. Thus lateral to the antennae, on or in the ground surface may be structures (buildings, posts, drains) that cause reflections at ground level. The effect of these surface features can be diminished by altering the orientation of the antennae, or by shielding the above-ground portion of the antennae, such that the radio wave is only allowed to penetrate the ground. GPR has found it is best uses in imaging glaciers, frozen ground, sand deposits (river deposits, non-saline coastal sands), aquifers (porous nature), archaeological features (moats, buried buildings) and concrete/pavements.

EVALUATION No.2 ST BRECAN'S CHURCH

Sarah Gormley

Introduction

An evaluative excavation was carried out over the course of a week in St Columb's Park, close to the remains of St Brecan's Church (LDY 014:002; C4425 1745). The purpose of the work was to investigate the archaeological potential of the site as a possible candidate for a 'community dig' excavation, an NIEA event which is to be held as part of the City of Culture 2013 celebrations. The evaluation work followed a programme of geophysical survey undertaken by Ronan McHugh, which identified a number of targets for further investigation. Four trenches, measuring 3m x 1m were located over these anomalies and were hand excavated to subsoil. No archaeological remains associated with St Brecan's Church were uncovered and the remains exposed instead are likely to relate to more recent landscaping and cultivation of the area.

St Brecan's Church

Within Derry City Council's St Columb's Park (Figure 1) are the picturesque remains of a ruined church, known as St Columb's Church. The remains are located on a natural rise, possibly modified in antiquity, which has excellent views to the north through west to the south. There are good views across the Foyle to the city at the south-west. Mature trees stand on the mound at the east where the land drops down to a stream. The church measures around 11.4m east-west and 6m north-south and the east and west gables stand fairly intact, although the abutments have clearly undergone conservation in more recent times (Figure 2). The gable walls are 0.7m thick and stand at a height of up to 5.5m. They are each are pierced with a window opening (Figure 2). The north and south walls have been reduced almost to ground level, and stand up to 0.3m high in places. The Preliminary Survey notes 'Apparently a ditch surrounded the little eminence on which the chapel was built' (1940, 194) but there is now no sign of this.

A small archaeological excavation undertaken within the church and against the gables in 1939 uncovered the remains of two successive paved floor layers and a charcoal filled cut containing slag which was interpreted as a smithy. Pottery, thought to be possibly 16th century in date was recovered during the work. The lower paved floor sat on the subsoil and the foundations of the church rest on the upper paved floor. The excavation report refers a number of times to the presence of human burials in the excavated areas, for example 'Excavation at the east gable outside and inside was hampered by inhumations.' (Ferguson,

SMR file), however, no drawings or photographs of the burials remain with the excavation archive in the SMR. The account details that the upper paved floor was heavily disturbed by burials.

The present church is likely to have been built around the end of the 16th century, during the time that Redmond O'Gallagher was bishop of Derry (1569-1601) and had gone out of use by the early 17th century. It is clear, however, that there were churches on the site prior to this and it has even been suggested that the site is a Patrician foundation. St Brecan's Church has been identified as Domnach Minchluaine (i.e. Clooney), one of the seven churches which St Patrick founded near the Faughan River as detailed in the Tripartite Life of St Patrick (Hamiln 1976, 561). St Columbkille is also historically linked to the church and it has been suggested that he dedicated the church in Clooney to the service of God in the name of his relative St Brecan, who became the patron saint of the parish (Anon 1902, 284). In 1197 the Four Maters record that, along with other churches in the area, St Brecan's was plundered by Roitsel Peyton. The church is mentioned in Archbishop Colton's Visitation of 1397, where it is recorded that an altar was prepared outside the west door of the church so that mass could be celebrated in front of thousands of people in order to purify the burial ground around the church which had been defiled by the spilling of blood (Reeves 1850, 31). According to O'Donnell's 'Life of St Columba', Nicholas Weston, Bishop of Derry (1466-1484) tried to take the building down in order to reuse the stone to build a house, however, the scheme had to be abandoned due to a curse pronounced by St Columbkille on anyone attempting to destroy the church (Anon 1902, 283). By the 18th century the ruined church lay within the demesne of Chatham House, built by John Rea, a naval officer who constructed the building now known as St Columb's Park House (listed HB 1/9/1). His daughter married Sir George Hill around 1830 and so the estate and ruined church were in the ownership of the Hill family of Brook Hall. St Columb's Park was bought by the Londonderry Corporation in 1845 and it is now used as a public park (historic garden inventory no. L-050).

Geophysical Survey

It is clear from the historical sources that there has been a church on the site for some time. Geophysical survey was identified as the best way to isolate any possible remains which might be associated with an older ecclesiastical establishment. As such both resistivity and magnetometer surveys were undertaken by Ronan McHugh in a large grassed area immediately to the south of the church (Figure 3 and 4). Five grid squares measuring 20m x 20m were fully surveyed and 3 were partially surveyed for resistivity (Figure 3) and 6 grids were surveyed with the magnetometer (Figure 4). What is apparent from the resistance survey results is that the area coinciding with the modern cut lawn returned generally

higher levels of resistance, whilst the area immediately at the base of the rise upon which the church sits gave a comparatively low resistance reading. The most striking feature of the results is the series of alternating low and high resistance stripes which were detected over much of the hillslope. The most obvious explanation for these anomalies is that they are imaging cultivation ridges, and indeed these are visible on the ground surface (Figure 5), although this is anomalous with the use of the area as landscaped gardens by the Rea and Hill families. No targets immediately suggestive of an ecclesiastical foundation (such as an enclosing ditch or building foundations, for example) were apparent in either dataset.

However, processing of the data did identify a number of anomalies which warranted further investigation (Figure 6). The first of these was a high resistance curvi-linear feature which circled the base of the mound on an approximate north-east to south-west alignment. Trench 1, measuring 3m x 1m was sited to investigate this target. Trench 2, the same size, was located over a sub-rectangular low resistance anomaly. An area of high resistance, which coincided with a magnetic spike was targeted by Trench 3 (3m x 1m) and Trench 4 (3m x 1m) was laid out over a linear low resistance anomaly which ran approximately north-south.

Results of the evaluation

The excavation was undertaken over the course of one week, between 18-22 February 2013. As detailed above, four trenches measuring, 3m x 1m, were laid out over anomalies identified by the geophysical survey.

Trench 1

Trench 1 was located at the base of the mound upon which the church remains sit, immediately to the south. The trench was approximately 14m from the south-western corner of the church. The thickness of the sod (c101) and topsoil (c102) varied considerably across the trench between 0.07m and 0.2m.

On removal of the topsoil a number of contexts were revealed, in particular a metalled pathway (c103; Figure 7). A clay loam (c104) had silted up a dip or gulley in the pathway. This fairly compact grey silty clay loam (c104) was 0.02m-0.03m deep and ran in a strip across the trench from east-west, following the line of the metalled path. It was 0.30m wide north-south. On removal of the clay loam from the dip the extent of the metalled path (c103) was revealed. The path runs in an approximately east-west direction. It is 1.9m wide in the trench; however, it continues out if the trench at the south. The path is comprised of small compacted sub-rounded stones, 0.03m-0.10m in size (Figure 8). On removal of the path (c103) a loose mid-brown loam (c105), 0.14m thick was revealed, and underlying that a

more compact, although still friable mid-brown loam (c106), 0.26m thick was uncovered. These contexts were topsoil-like and may be slump from upslope. Brick, slag, Medieval Ulster Coarseware sherds and burnt bone were recovered from the mid-brown loam (c106).

An orange-brown charcoal flecked clay loam (c107) was revealed on removal of the mid-brown loam (c106). This context (c107) covered the whole trench and was 0.18m thick at the north of the trench, while it was 0.52m deep at the south. It lay directly over the subsoil. At the base of the trench a cub-circular cut (c110) was apparent measuring 0.72m east-west and 0.7m north-south and 0.12m deep (Figure 9). It is likely that this is a tree root bowl. Natural subsoil was revealed on removal of the orange-brown charcoal flecked clay loam (c107), it was 0.5m below the ground surface at the north of the trench and up to 0.9m below the ground surface at the south of the trench. It seems likely that the metalled pathway is the high resistance anomaly picked up by the geophysical survey and the lower resistance readings in this general area have been caused by the thicker topsoil layers, which have possibly accrued due to hill wash.

Trench 2

Trench 2 was set out across a portion of what appeared as a subrectangular low-resistance anomaly. The sod (c201) in this area was 0.15m thick and the topsoil was grey-brown gritty loam (c202)which contained up to 20% small rounded pebbles and gravel and was 0.2m thick. Brick, window glass and pottery were recovered from the topsoil (c202). The pottery assemblage is made up of a sherd of stoneware, possibly from the neck of a bellarmine jug, creamware sherds, a sherd of blackware and possible staffordshire slipware sherds. The natural subsoil was revealed on removal of the topsoil (c202). Two cuts were apparent in the subsoil. The first, a shallow linear cut (c207) measured 0.53m long north-east to south-west and 0.25m wide north-west to south-east. The shallow cut was 0.06m at its deepest point. It seems likely that this is the base of a cultivation furrow and it is parallel to the others which are visible on the ground in this area. The second cut (c206) was cut into the natural subsoil at the north-eastern end of the trench (Figure 10). It extended into the trench 0.73m at the south-east and 0.4m at the north-west. The cut was 0.28m deep and was filled by a grey-brown charcoal flecked gritty loam (c203). The purpose of this cut is unclear, no finds were recovered from the fill (c203), which was esentially the same context as the topsoil (c202).

Trench 3

Trench 3 was located over an area of high resistance that coincided with a magnetic spike. The sod (c301) and topsoil (c302) in this area were the same as that described for Trench 2, above. Brick, post-medieval pottery sherds and a small fragemnt of a clay pipe stem were

recovered from the topsoil (c302). The topsoil was removed to reveal the natural subsoil, a gritty orange-brown which had a high content of subrounded and rounded stones (0.1m-0.3m in size) within it. It seems likely that the high concentration of stones in the gravelly natural in this area caused the high resistance reading in the geophysical survey.

Trench 4

Trench 4 was located across a north-south aligned low-resistance linear feature. Below the sod (c401, 0.08m thick) in this area, a layer (c402, 0.06m-0.16m thick) was revealed which appears to follow the rise and fall of the cultivation furrows, apparent on the ground surface running approximately north-east to south-west in this area (Figure 11; see also Figure 5). Two stoneware sherds and some blackware sherds were recovered form this context (c402). Below this, a grey-brown gritty loam topsoil (c403), was revealed which was up to 0.3m thick. Bottle glass, brick, pottery, including glazed red earthenware and blackware and a nail were recovered from the topsoil (c403). Once the topsoil was removed, the subsoil was apparent and cut into the subsoil was a feature 1.64m wide which extended beyond the trench at the north and south (Figure 12). The cut (c405) was up to 0.4m deep and was filled with a grey-brown gritty loam (c404), which was similar to the topsoil (Figure 13). No finds were removed from the fill (c404) of the cut. It is likely that this is the low-resistance feature which was apparent on the geophysical survey.

Conclusion

The geophysical survey and excavation have highlighted that this area within St Columb's Park has been cultivated in the past and indeed ridge and furrow lines are visible on the ground surface. It is difficult to say when this is likely to have happened, as it is unlikely to have been cultivated whilst in use as a demesne. The excavation uncovered two features in Trenches 2 and 4 (c206, c405) for which it is not possible to suggest a function. Both were subsoil cut, appear to be linear and aligned approximately north-south, and are backfilled with topsoil. No finds were recovered from either feature. A metalled pathway, skirting the base of the mound on which the church is located, was uncovered in Trench 1 and is likely to relate to the use of the area as parkland for Chatham House. Unfortunatley, no remains associated with the church were encountered during the excavation. Some of the artefacts recovered, for example the Medieval Ulster Coarseware sherds and the sherds of stoneware, hint at the antiquity of the site. No further light has been shed, however, on the extent or nature of any remains associated with the ecclesiastical foundation. Any future investigations into the archaeological potential of the church site should concentrate on the area immediately around the church itself or in the areas to the north and east of the church.

Bibliography

Anon. 1906: ‘Proceedings’, *Journal of the Royal Society of Antiquaries Ireland* 32, 283-284.

Chart, D.A. 1940: *A Preliminary Survey of the Ancient Monuments of Northern Ireland*, HMSO.

Hamiln, A.E. 1976: *The Archaeology of Early Christianity in the Northern of Ireland*, unpublished PhD thesis, QUB.

Reeves, W. 1850: *Acts of Archbishop Colton in his metropolitan visitation of the Diocese of Derry: AD MCCCXCVII*. Irish Archaeological Soicety, Dublin.

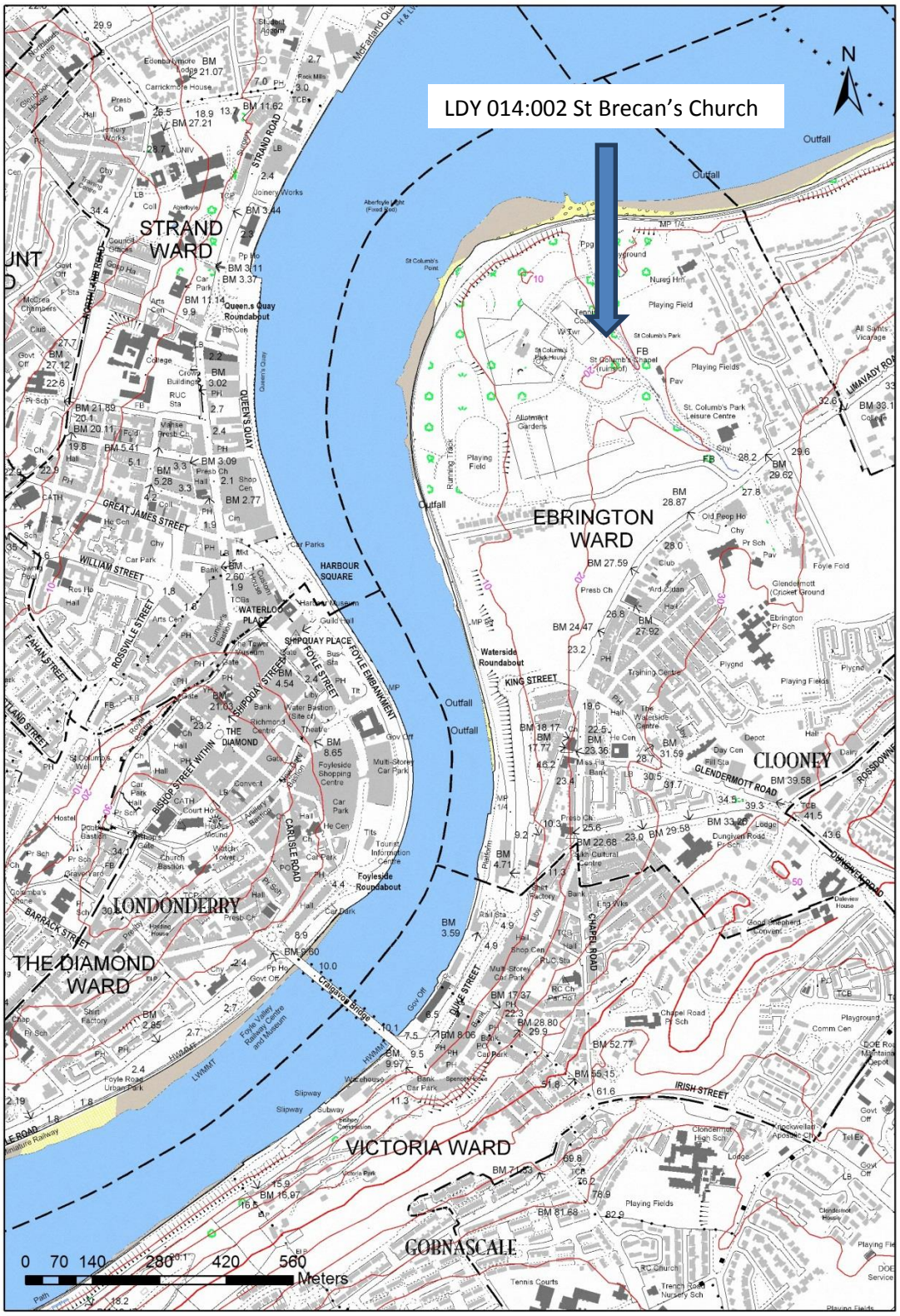

Figure 1 – Location of the church site in St Columb's Park, on the eastern bank of the Foyle, opposite the city.

Figure 2 – St Brecan's Church, looking north-east.

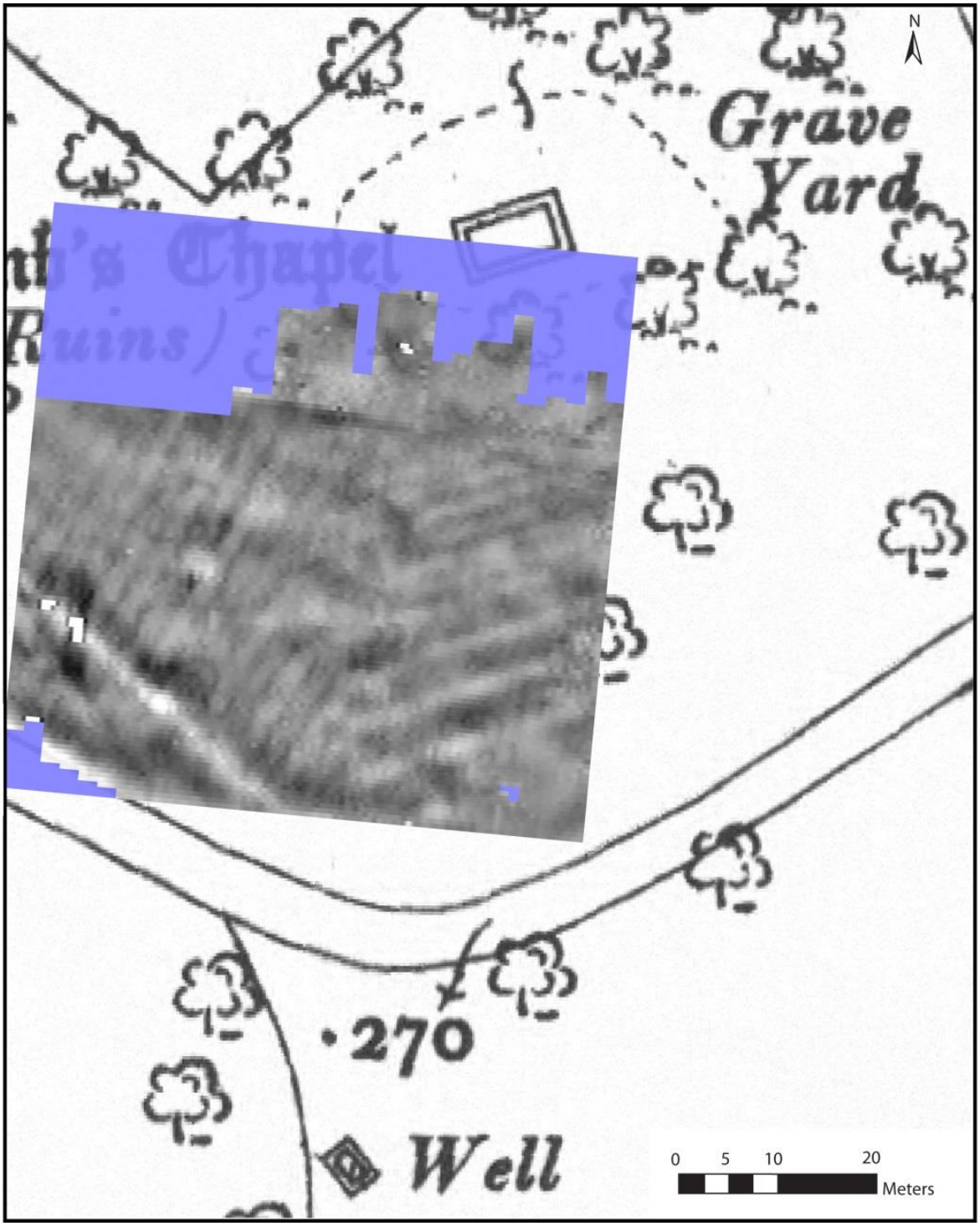

Figure 3 - Resistivity survey results

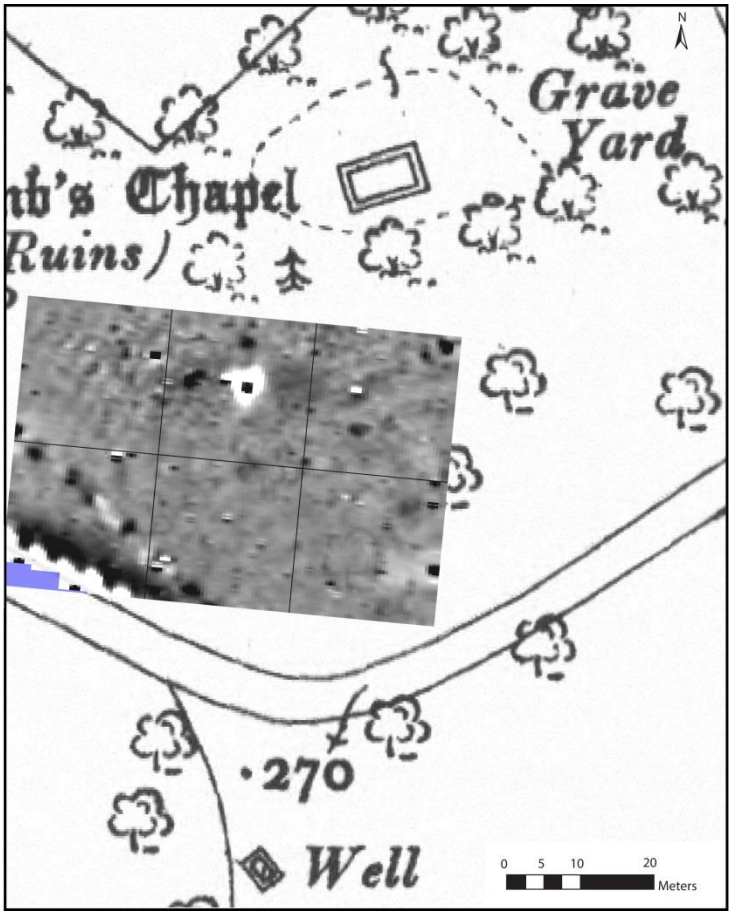

Figure 4 – Magnetometer survey results.

Figure 5 – Cultivation ridges are visible on the ground surface, looking south west.

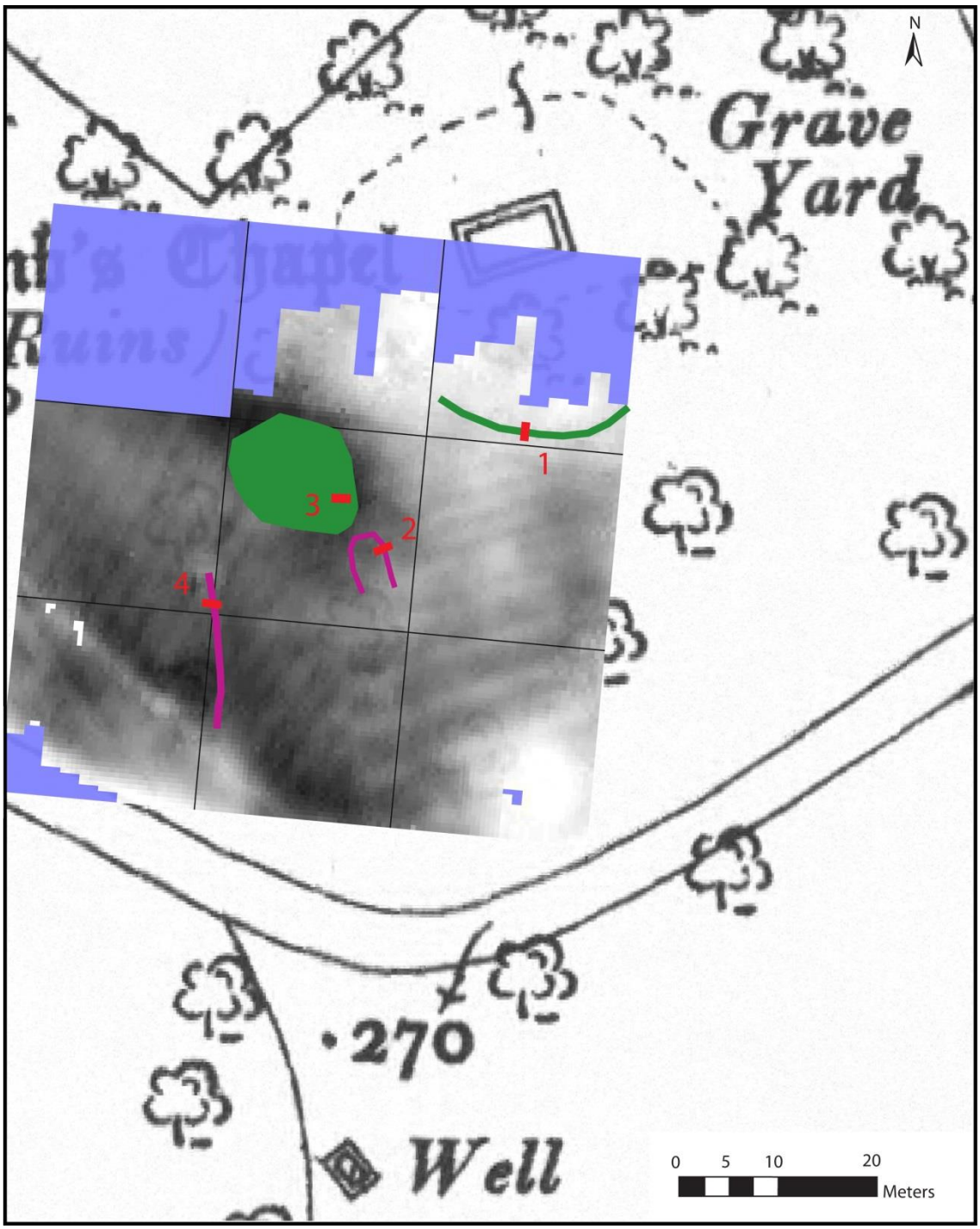

Figure 6 – Location of high resistance anomalies (green) and low resistance anomalies (pink) which were targeted by the four trenches (red).

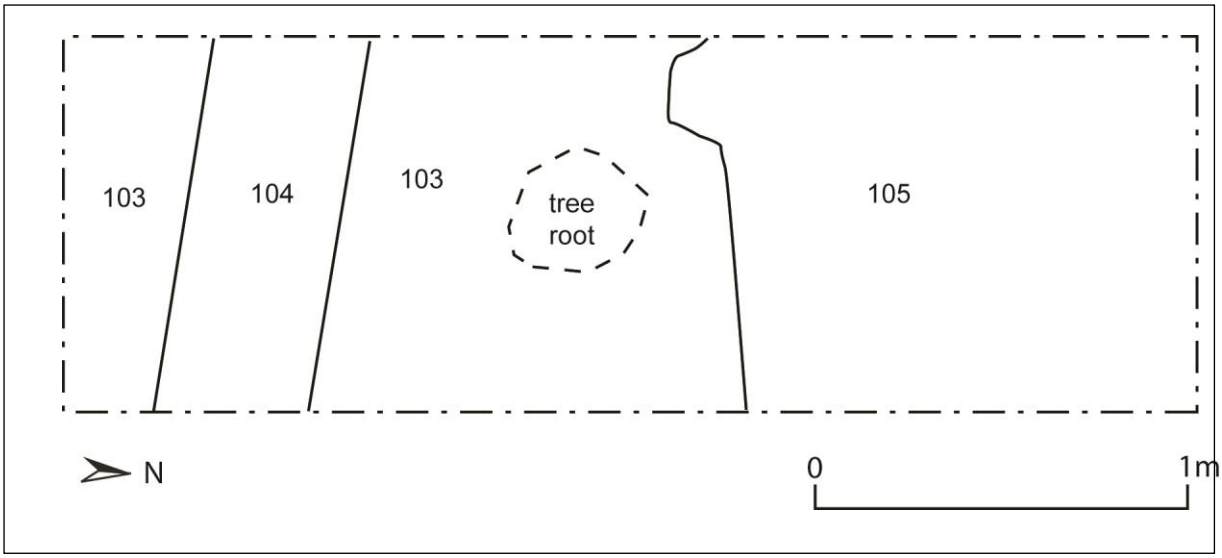

Figure 7 – Plan of trench 1, on removal of topsoil (c102).

Figure 8 – Surface of the metalled path (c103).

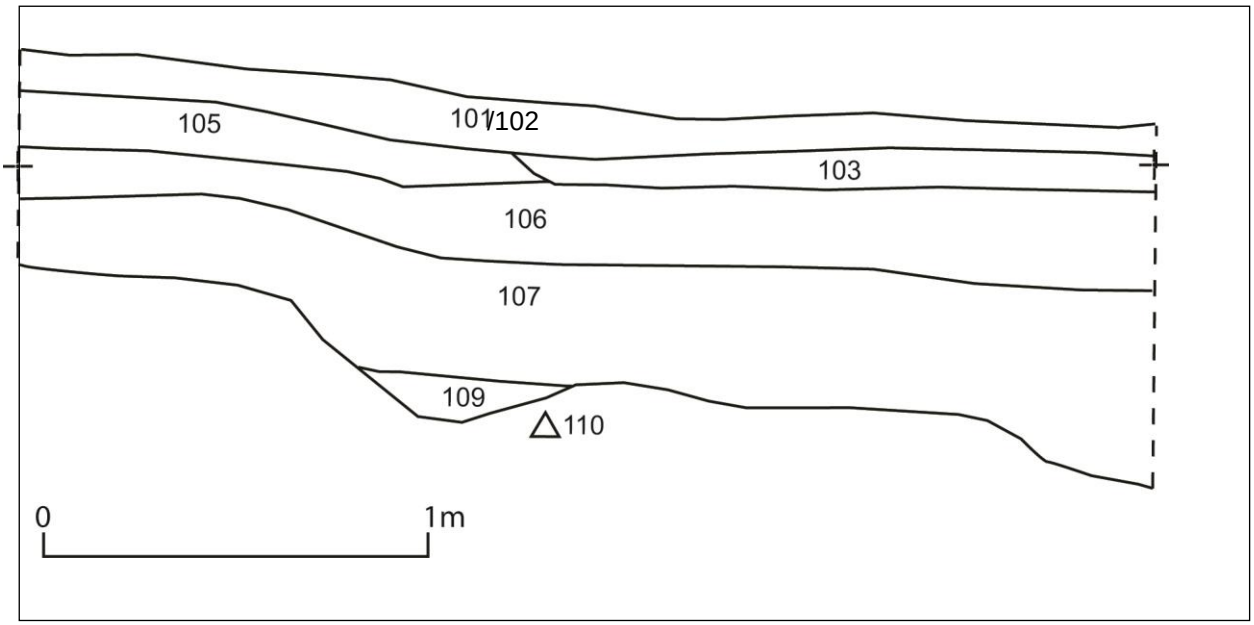

Figure 9 – West facing section of Trench 1.

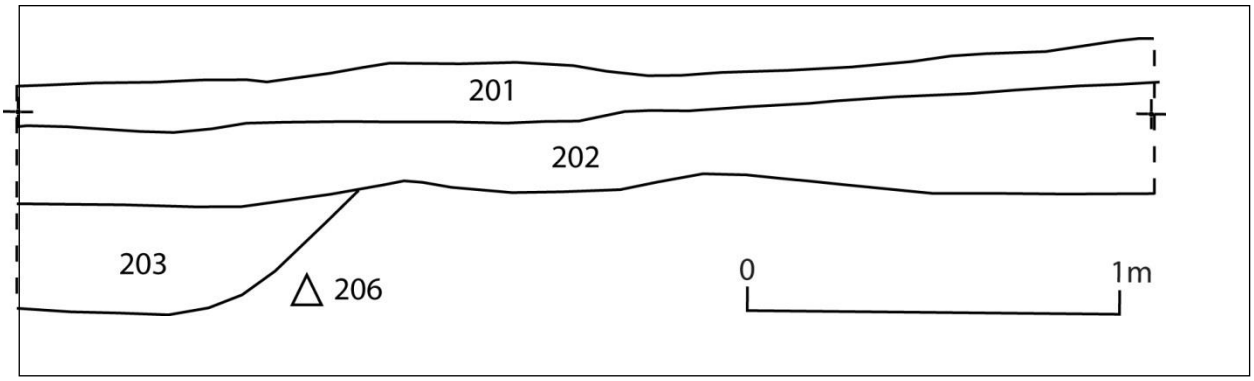

Figure 10 – North west facing section of Trench 2.

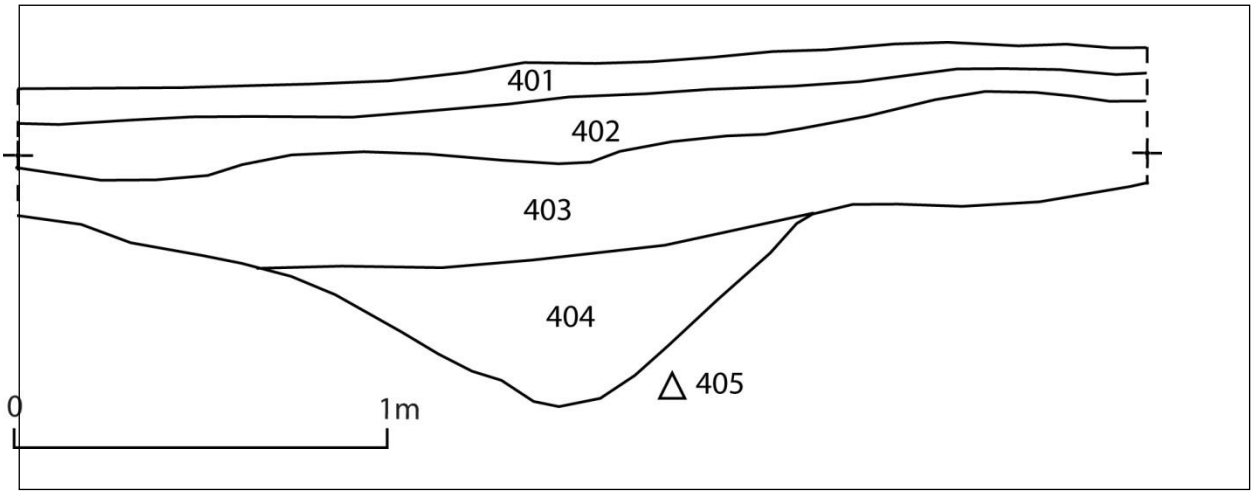

Figure 11 – South facing section of Trench 4.

Figure 12 – Subsoil cut feature (c405), filled by grey-brown loam (c404).

Figure 13 – South facing section of cut (c405) in Trench 4.

EVALUATION No.3 PREHEN

Cormac McSparron

Townland: Prehen
Parish: *Clondermot*
Barony: *Tirkeeran*
Grid Ref: C419134367
NISMR No: LDY14: 83
Protection: Scheduled

Introduction

The Northern Ireland Environment Agency asked the Centre for Archaeological Fieldwork to conduct an archaeological evaluation in the grounds of Prehen House, on the south east of Derry / Londonderry. Documentary records indicate that Prehen was allocated to the Goldsmiths Company in the Plantation. Prehen House is located approximately 4km southwest of the centre of the city. It is situated on rising ground to the east of the River Foyle. The current land use, to the north and west is residential, with the land to the south and east part of a golf course (Figure 1). At the request of NIEA a geophysical survey was carried. It seemed to indicate the presence of a circular flanker close to the location of the curving masonry discussed above and what appeared to be a wall running off it. It seemed to indicate part of a plantation era bawn or fortified house.

A single “L” shaped trench measuring 7m by 1m was excavated across the possible flanker. The masonry wall of a flanker was visible almost as soon as the sod was removed from the trench. It was approximately 60cm wide and was composed of mortared stonework, most of the stones being shale or schist. The flanker, although only partially exposed, appears to have had an internal diameter of approximately 4m and an external diameter of about 5.2m. A stretch of walling butted the flanker. This wall was slightly thicker than the flanker, about 80cm thick and ran approximately thsou. It is probably a stretch of the bawn wall surrounding a plantation period, fortified house.

Background

Prehen is first mentioned in 1613 as an area of land allocated to the Company of Goldsmiths (Moody 1938. 301). This entry is not detailed and records no details beyond the name of the parcel of land and its cost. There is no depiction of any surviving buildings in the Prehen area in the 1610 map of the escheated counties (ibid) so it seems likely that there were no significant pre-plantation buildings at Prehen (Figure 2). The landscape in and around Prehen is described as being partially wooded on this map, with the rising ground behind Prehen depicted. In the Hearth Money rolls a John Miller is mentioned as living at Prehen (O’Diobhlin 1979). This entry simply indicates the head of a house hold living at Prehen, however the absence of other entries for the townland may indicate that there were no other households at Prehen and that Millar was the primary tenant.

There is a piece of curving masonry, with an apparent gun loop, which appears to be the surviving fragment of a flanker, either of a bawn or possibly of a fortified plantation period house, which is attached to the roofless remains of an outbuilding to the south east of Prehen House. It may be a fragment of plantation period architecture at Prehen (Photo 1 and 2).

Survey and Geophysical Survey (Figure 3)

In advance of the excavation a geophysical survey of two areas around Prehen House was conducted by Sapphire Mussen of the CAF. A plan of the house and associated buildings was made using an EDM. This was followed up by a resistivity survey at a resolution of 0.5 by 0.5m The area to the rear of Prehen house was examined as was an area of ground to the south and west of some abandoned agricultural buildings located to the southeast of the house, in which the curving masonry, suspected of being part of a flanker, had been found The results of the geophysical survey of the area behind Prehen house were disappointing, failing to identifying anything which seemed like a significant archaeological feature, however the area to the south and west of the agricultural buildings proved more fruitful. Just southwest of the curving wall section there was a large curving anomaly, consistent in size and shape with a flanker. In addition what seemed to be a line could be seen running from it. Its size, shape and geophysical signature were all consistent with a masonry wall, seemingly leading from the flanker.

Methodology

Based on the results of the geophysical survey two small 2m by 1m trenches, separated by a 1m baulk were opened in what was hoped would be the interior of the flanker. These trenches were quickly assimilated into a single trench measuring 5m by 1 with a single series of context numbers. The trench was extended by a further 2.2m excavated at right angles to the southern end of the trench making a final excavation “L” shaped trench measuring 7.2m by 1m (Figure 4). All excavation was carried out by hand. A site context record supplemented by photographs and scale plans and sections was maintained. Artefacts were recorded by context and bagged.

Account of the Excavation (Figure 4, Photo 3 and Photo 4)

A layer of loam topsoil (101/102) covered the entire trench. It contained considerable amounts of stone and red brick rubble. It was initially given two separate context numbers as the flanker wall (104) interrupted them, they are however the same layer.

The flanker wall (104) was visible almost as soon as the sod was removed from the trench. It was approximately 60cm wide and was composed of mortared stonework, most of the stones being shale or schist. The flanker, although only partially exposed, appears to have had an internal diameter of approximately 4m and an external diameter of about 5.2m. Immediately beneath the topsoil (101/102), to the north of the trench was a layer of earth and pieces of slate, many of them

perforated, (103). To the south of the trench, beyond the outside of the flanker wall, the topsoil sat above a stone box, into which a lead pipe ran, possibly some sort of water trough for animals. Beside this was a section of walling (113) which appeared to abut the flanker wall. This wall was slightly thicker than the flanker, approximately 80cm thick and ran approximately south.

Beneath the slate layer (103) to the north of the flanker wall a darker loam (105), also rich in rubble fragments, was encountered. As it was removed it became apparent that there was a second wall of curving masonry (108) on the inside of the flanker (104). This curving wall was also about 0.6m thick and similarly constructed. It was however much smaller with an external diameter of less than 3m. On the inside of the inner wall (108) and stratified below the slate rich loam layer there was a deposit of grey brown clay loam (110) which was above a sand with brick fragments layer (111). Between the inner curving wall (108) and the outer flanker wall (104) but beneath the dark loam (105) there was a gap of about 60cm which was filled by a dark grey loam with collapsed render from the wall of the flanker (109). As the purpose of the excavation was simply to assess whether there were surviving archaeological features at the site, rather than to fully resolve them, the excavation was paused at this stage, the exposed features were recorded and the trench backfilled.

The Artefacts

There were a considerable number of artefacts found during the excavation. Some of these, such as the render and slate are related to decay and collapse of the building, others such as the bottle glass and pottery are evidence of use of the site. None of the ceramic finds can be shown to date to the seventeenth century however. The pottery is all nineteenth or twentieth century in date and while it is possible that some of the glass may be eighteenth century, none of it is capable of being confidently dated to the seventeenth century.

Context Number	Bag Number	Description
101	1	Four pieces of render with impressions of masonry on one side
101	2	Two corroded nails, some twisted wire and one small piece of animal bone
	3	One small sherd of pottery, creamware type fabric with a royal blue glaze on both sides.
	4	Six sherds of a light green glass bottle, slightly curving profile suggests a large vessel
	5	Neck and rim sherd of a light green glass bottle, possibly same vessel as above sherds.

	6	Two sherds of dark green bottle glass, one fragment of animal bone and one fragment of corroded iron
	7	Four sherds dark green bottle glass, two pieces of render
102	1	Several small pieces of oyster shell
	2	One dark green glass bottle base sherd, two light green glass bottle body sherds, a small piece of corroded nail and a piece of “china” pottery with green foliate painted, overglaze, decoration
103		Six representative slate fragments, largest a perforated slate measuring 27cm X 17cm X 0.5cm thick. Large slates, not 17th century.
104		Fourteen representative render fragments, some showing impression of masonry on one face.
105	1	One fragment of dark green curving, thick, bottle glass; one base sherd reddish earthenware; several small fragments of render
	2	Two separate bases and three body sherds of dark green glass bottles
106	1	One base sherd and three body sherds of a dark green bottle and one small clear, very slightly greenish, fragment of glass, which from its flat profile is possibly window glass.
	2	One fragment of animal bone
109	1	Four fragments of base and body of a finely made earthenware vessel, one base sherd perforated, probably a flower pot.
	2	Eight large fragments of render
	3	Twenty five small fragments of render
110	1	Two sherds of dark green bottle glass, one very heavily patinated
112	1	One sherd of light green bottle glass, three pieces of relatively modern “china” with white glaze and gold painted, overglaze, decoration.

Discussion and recommendations

The walls revealed by the excavation at Prehen, along with the still extant masonry, are the remains of a flanker butting a wall, either of a bawn surrounding a fortified house or the actual wall of a fortified house itself. Given that the higher ground is to the southwest of the trench it seems more likely that this flanker is attached to the front bawn wall to provide projecting defence and flanking fire across the entrance into the enclosure, which is presumeably located some metres southeast of the current trench.

By comparison with the nearby Brackfield Bawn (Brannon 1990) the suggested bawn at Prehen may have dimensions of at most 20m by 20m. A hypothetical plan of this bawn, loosely based on Brackfield Bawn is presented in Figure 5. This plan shows a slightly more rectangular enclosure than Brackfield with the flanker (a) at the west side of the bawn enclosure' a fortified house (b) to the northeast, with the rear wall of the house also making up part of the bawn wall (although it is also possible that the house could lie in the southeast corner of the bawn). The entrance to the bawn is likely to be about 10m south of the flanker in the west wall and several metres wide (c). There could be a second flanker at the south corner of the bawn (d), diametrically opposed to the flanker found during the trial excavation, although there is a sub-circular stone platform encountered during the survey which may indicate a flanker close to where the eastern corner of the bawn might be expected.

The excavation revealed that there was an inner curving masonry wall (108) inside the outer flanker wall (104). The scale of the excavation have made it difficult to interpret the function of this wall, there seem to be a number of possibilities. It may be that this is the base of an earlier flanker wall, which was abandoned before completion. It is also possible that this may be the base of a flanker, which was constructed but then demolished to make way for a larger flanker. A third possibility is that it was intended as an internal step within the flanker, possibly having a countersunk interior allowing a gunman to shoot through loops positioned at a number of different heights up the flanker wall.

Although there were no strata which could date the initial construction of the flanker and no artefacts which were earlier than the 18th century, the presence of a horizon of perforated slates may be of some use. These slates are quite large, larger than the small rectangular slates which would typically be found on a 17th century building. These may simply be the slates from the nearby agricultural buildings however it is also possible that they indicate a late re-roofing of the flanker, possibly indicating that the bawn remained intact into the eighteenth century or even early 19th century, although we know that no trace of it is shown on the first edition of the ordnance survey map.

Recommendations for further excavation(Figure 5)

There are a number of target areas for further excavations at this site. The excavations to date have revealed the location of one flanker and the direction in which the probable bawn wall runs from it. It is proposed that:

A large 6m by 6m trench (1) is excavated to reveal the entire flanker and the beginning of the bawn wall.

A second 6m by 1m trench (2) is excavated to detect the wall of the front wall of the fortified house which it is suggested here is likely to be located to the southeast of the flanker. If this trench finds evidence of the wall of the house it may, if time and staffing levels permit, be extended.

A 6m by 1m trench (3) is excavated midway along the line of the bawn wall to locate the entrance way to the bawn and confirm the continuation of masonry in that direction.

A 6m by 1m trench (4) is excavated in the south of the bawn to reveal more of the bawn wall and interior and also to test a sub-circular stone platform, which may be a second flanker. If time and staffing levels permit this trench may be expanded if it proves fruitful.

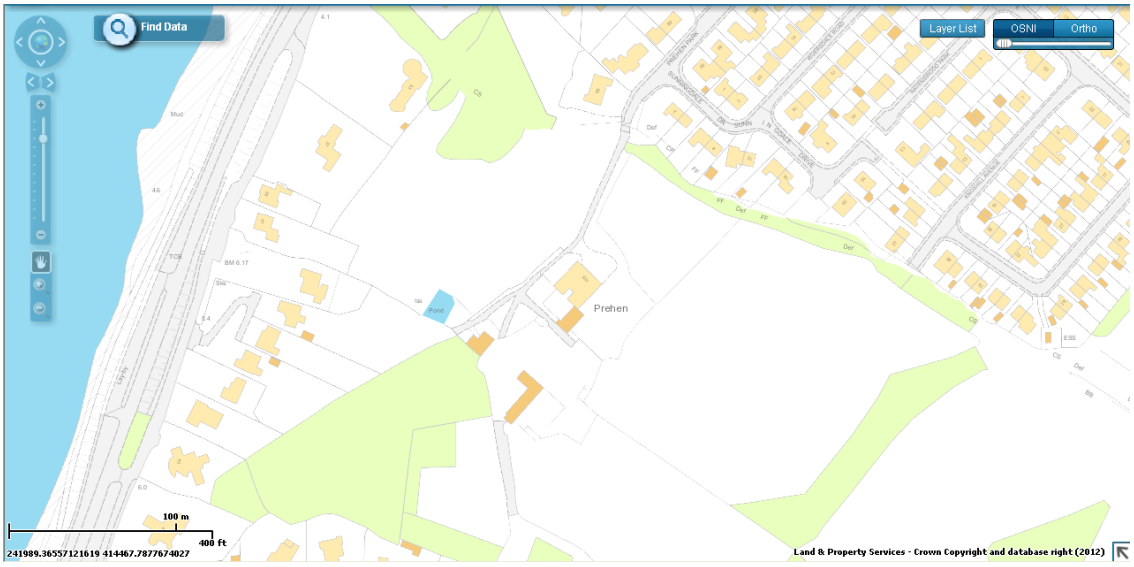

Figure 1: General location map

Figure 2: Detail of the Map of the Escheated Counties of Ulster (after Moody 1938), showing Prehen as a wooded area on the east bank of the Foyle

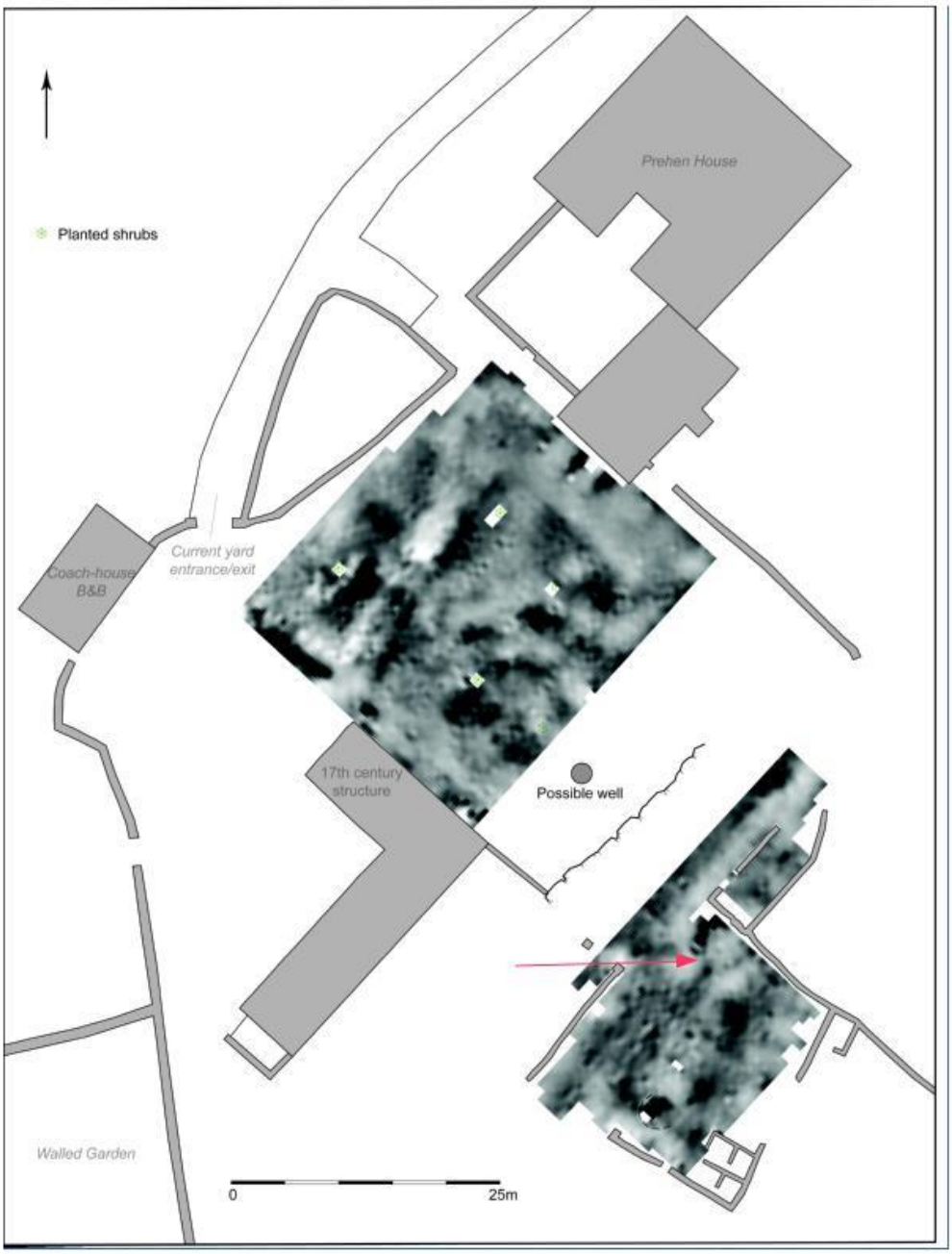

Figure 3: Resistivity Survey of Prehen house grounds showing geophysical anomaly identified as flanker (arrowed)

Figure 4: Plan of excavation trench showing location of trench on inset resistivity survey plot

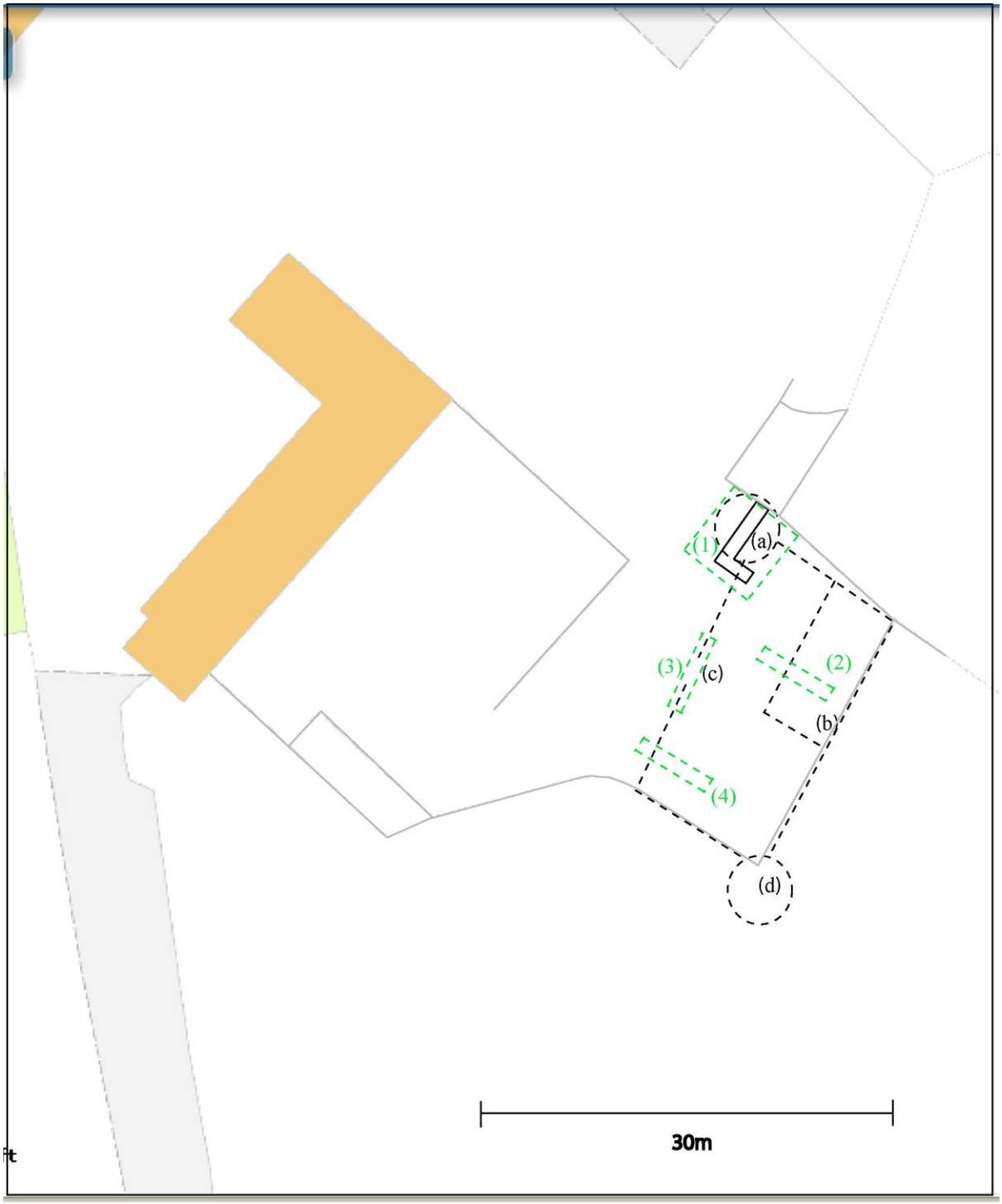

Figure 5: Hypothetical outline of Prehen Bawn and proposed location of future trenches

Photo 1: Section of curving masonry from south, showing brick blocked gunloop

Photo 2: Detail of gun loop from north side of curving masonry section.

Photo 3: View of outer (104) and inner (108) curving masonry walls of flanker, from west.

Photo 4: View of outer curving masonry wall of flanker (104) and section of possible bawn wall running off to the south, from west.

EVALUATION No. 4

ELAGH CASTLE (DOHERTY'S TOWER), ELAGH MORE

Cormac McSparron, Colm Donnelly and Paul Logue

Townland: *Elagh More*
Parish: *Templemore*
Barony: *North-West Liberties of Londonderry*
Grid Ref: *C4158021650*
NISMR No: *LDY14A:003*
Protection: *Scheduled*

Introduction

Elagh Castle is situated on the uplands to the northwest of Derry / Londonderry. The upstanding fabric of the castle is set on the eastern edge of an outcrop of Dalriadian rock, some 25 m in width from north to south by 35 m in length from east to west, and comprises a semi-circular block of masonry that is 6 m in width, 2 m in thickness and 8 m in height. It has been suggested that this is the eastern D-tower of a twin-towered gatehouse that provided access to the outcrop which was enclosed by a perimeter wall with a possible tower located at the south-west corner. The masonry that survives today is of probable 14th century date and it can be suggested that it may have been constructed – or, at least, certainly occupied – by the O'Doherty lineage, the Gaelic lords of Inishowen in the Late Medieval period.

Two trenches, Trench 1 and Trench 2, were excavated on the summit enclosure. Trench 1 revealed a late levelling deposit of schist sealing traces of Seventeenth Century occupation material which contained within it fragments of North Devon Gravel Tempered and Medieval Ulster Coarse pottery, bottle glass, bone and oyster shell. Beneath this occupation deposit was a thin layer of greyish loam and mortar which sat directly upon the bedrock. In the centre of the trench was a large outcrop of bedrock, also sitting beside it was a large boulder, too large to shift and extending beyond the trench parameters, which had apparently been cleaved from the main outcrop, probably as part of the levelling procedure. Trench 2 uncovered topsoil on top of clay subsoil in either end of the trench and a bedrock outcrop in the trench centre. This outcrop had been quarried, leading to a pit at the base of the bedrock, this quarrying activity is likely to have happened in the modern era. A piece of North Devon Gravel Tempered and a piece of Medieval Ulster Coarse pottery were found in the topsoil in this trench.

Historical Background

The exact date when the O'Dohertys established themselves as the ruling lineage in Inishowen remains elusive; given this – and the physical similarities in form that the castle

shares with Harry Avery's Castle in Tyrone – Tierney has tentatively suggested that the O'Neills may also have had a hand in the construction of Elagh Castle: "The territories of both Inis Eoghain and Cenél Moain (in which Einrí Aimhreadh Ó Néill built his castle at Newtownstewart) were highly contested during this period … and in light of this it might be worth considering Ó Néill involvement in the construction of Elaghmore Castle" (Tierney 2003, 185). Be that as it may, the castle certainly became a major centre of importance of the O'Dohertys in the 15th and 16th centuries, as can be elucidated from an English study of their chief places of strength in "Enyshowen" undertaken in 1601, in which it is stated that "From the Derie three miles within the land, towards Loughswillin, is the castle of Elloghe, O'Dougherdie's chief house" (Hore 1857, 140).

It is possible, however, that the site had an earlier origin, perhaps as a fortified outcrop of the type recently investigated in north Antrim by McSparron and Williams (2011, 153-157) who have identified eight (and possibly as many as 14) examples in that landscape and who define these monuments as defended settlement sites "of early Medieval date, constructed on top of a pre-existing natural eminence, enclosed by a stone wall or an earthen wall with a stone façade". The placename "elagh" derives from the Irish *oileach* which can be translated as meaning a rocky or a stoney place. It is a placename that is also represented in the form *aileach* three miles to the north-west at the Grianán of Aileach, a well-known stone fort that crowns the summit of Greenan Mountain across the border in County Donegal, and which Dr Brian Lacey believes was constructed in the late 8th or early 9th century. He has also suggested, however, that "in the sixth – eighth centuries the area of the present-day townlands of Elaghmore and Elaghbeg, to the north-east of the Grianán , may represent the original Aileach, seat of the Cenél nEógain" (Moore et al, 2010). The implication is that the O'Doherty castle at Elaghmore may have been the site of an earlier Cenél nEógain fortification "overlooking the now-reclaimed wetland [the Pennyburn Depression] that separated Cenél nEógain territory from its rivals for the overkingship of the Northern Uí Néill, Cenél Conaill, in whose territory Greenan Mountain was situated" (ibid.)

In 789, however, the Cenél Conaill were defeated at the battle of Cloítech by the Cenél nEógain and Lacey has suggested that "it is possible that shortly after this battle the Cenél nEógain moved their 'headquarters' from Elaghmore, across the wetland boundary [the Pennyburn Depression] to the top of nearby Greenan Mountain where there was already an ancient hillfort" (Lacey 2001, 148). The title of their kingdom – Aileach – would have moved with them from their old capital at Elagh More, while "the Grianán … would have been an ideal, visible symbol of the extent and power of the newly invigorated Cenél nEógain" (ibid). In support of this hypothesis, the castle at Elagh is marked on the Ordnance Survey 1833

six-inch map sheet and its revisions as both “Doherty Tower” and “Castle Aileach (in ruins)”; in addition, Tom McNeill (2001, 353) has noted that it was not until Dr Walter Bernard’s restoration of the cashel on top of Greenan Mountain in the period from 1874 and 1878 that the idea “became generally accepted that this hill was the site of Ailech”.

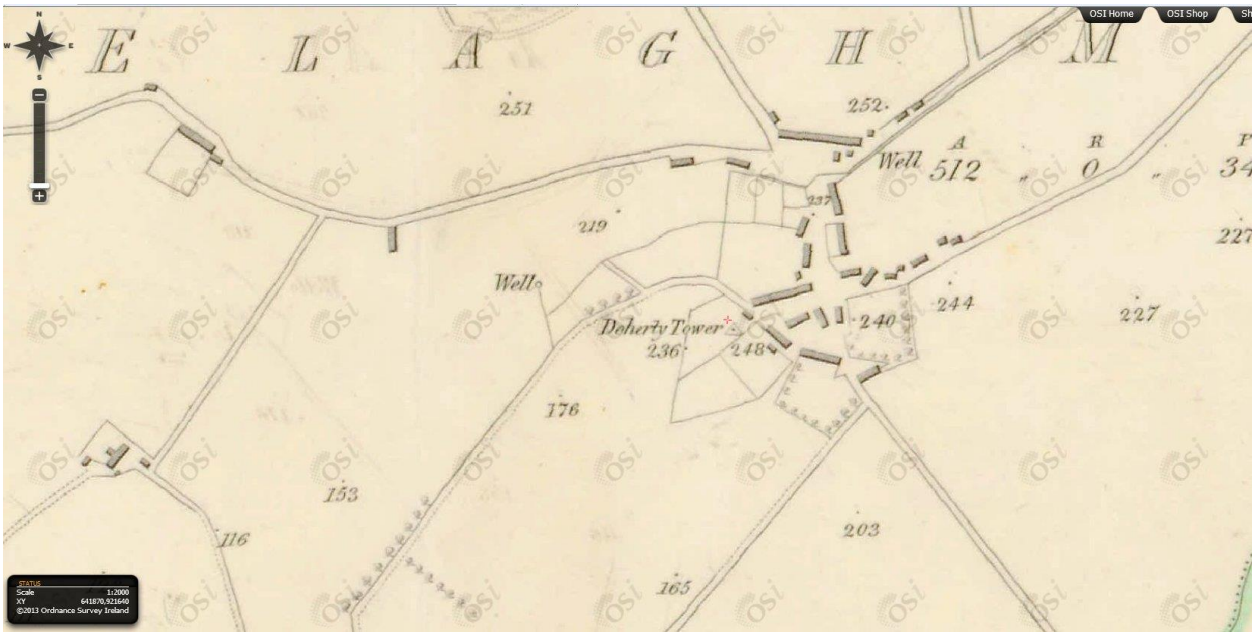

Figure 1: The castle as depicted on the 1st edition Ordnance Survey six-inch mapsheet

The identification of Elagh with Aileach is also suggested by the contents of two Late Medieval bardic poems which have been studied by Andrew Tierney, who concluded that “what seems to emerge from these poems is the fact that in the late 16th century, at least, the castle at Elaghmore was being represented as the ancient site of Aileach” (Tierney 2003, 185). The leading family in the Cenél nEógain in the tenth and eleventh centuries were the MacLaughlins (Mac Lochlainn) who were based in Inishowen and who provided 11 kings and two high-kings between the years 1061 and 1241. Their dynastic rivals, the O’Neills had located themselves in east Tyrone at Tullaghoge, probably by the commencement of the 11th century. Following their fall from power within Cenél nEógain at the hands of the O’Neills in 1241, “the family of Mac Lochlainn sank into obscurity” (Gillespie 1995, 776). While the name remained present in Inishowen into the early 17th-century Plantation era, even here they were no longer in control, for they had been usurped initially by the Anglo-Normans, and then by the O’Doherty family, a branch of the Cenél Conaill who first rose to prominence in 1197 when Echmarcach Ó Dochartaig seized the kingdom of Tír Conaill for a fortnight before being killed (ibid., 800). Originating in the area between Lifford and Letterkenny, the O’Dohertys were establishing themselves in Inishowen during the 14th

century, with Conocobhar an Einigh Ó Dochartiagh at his death in 1413 the first to be formally named as having been the lord of Inishowen (ibid., 800-801).

The building was surveyed by Davies and Swan as part of their study of the castles of Inishowen, published in 1939, and they were the first to develop a historical narrative for the site using the available English documents of the late 16th century: "Elagh, the principal seat of Sir John O'Dogherty, is first mentioned specifically in the patent of 1587, and appears, though much displaced, on Mercator's map of 1580. When Docwra landed at Derry, O'Dogherty had abandoned the castle, and was beginning to dismantle it" (Davies and Swan 1939, 202-203). Sir Henry Docwra and his English force had taken up occupation of the castle on 18th May 1600 as part of a successful attempt to open up a new front in the ongoing war with the Ulster Gaelic lordships by landing a force of 4,000 soldiers in Lough Foyle: "Wee came to Ellogh a castle of O'Doghartey's, which he had newlie abandoned & begunne to pill downe, Butt setting it yet Tennable, & of good vse to be held, I put Captaine Ellis fflоudd into it, and his Companie of 150 men" (Kelly 2003, 43).

With the exception of a raid carried out on the castle by the O'Dohertys 29th June 1600, the castle seems not to have featured prominently in the remainder of the war. "The garrison of twelve men still held the castle on 23rd April 1602 but had been withdrawn before the beginning of 1602. The castle may have been reoccupied by Sir Cahir O'Dogherty in 1608, and was for a time garrisoned by Chichester. It was made a manor, and appears in the grants to him. It was leased to Peter Benson before 1621, but is seldom marked on seventeenth century maps, and had fallen into disrepair before 1665, as it is omitted from the Hearth-Money Roll" (Davies and Swan 1939, 202-203). As Davies and Swan note, in the aftermath of Sir Cahir O'Doherty rebellion of 1608 the lineage's territory of Inishowen was transferred to the Lord Deputy, Sir Arthur Chicester (Hill 1877, 62), the region then remaining outside of consideration during the formal Plantation scheme of 1609. Elaghmore, representing 282 acres of land, remained part of the Chichester estate in the years before the 1641 rebellion, and is reported as such in the Civil Survey, although no mention is made of a castle associated with the property (Simington 1937, 222).

Of particular note is a footnote that Davies and Swan include with their historical account of the site in which they comment on the castle's presence (or lack of it) on 17th century maps: "It appears on Ashby's map (1601) [National Archives, MPF 1/335/1] as a square tower with perhaps an annexe, surrounded by a circular bawn; on the *Generall Description of Ulster* (1608) as a circular castle; on the *Theatrum Imperii Magnae Britanniae* (1616) as a square tower; on Phillip's *True Survey of the Barronie of Enishowen* (1690) as a square tower set

askew in a diamond-shaped bawn. It is also shown on the *Plan of the six escheated counties of Ulster*" (ibid, 203, fn 177). The castle also appears on a map belonging to the time of Docwra's arrival in the area in 1600 and entitled "The Derry", one of four maps dispatched to Sir Robert Cecil (NLI, Ms 2656, no.16). There is clearly a significant variation in the form and format of the castle as depicted in these maps, which suggests that none of them represent an actual or accurate depiction of what existed at the site during that century, but that all of these depictions are actually just notations that this is the location of a castle; and hence "the diversity of its representations" made it difficult for Davies and Swan "to interpret the present remains" (ibid). What the maps do indicate, however, is the fact that the castle was located to the north side of a stretch of bog – the Pennyburn Depression – that stretched from Lough Swilly to Lough Foyle and effectively separated the Inishowen peninsula from all land to the south, thereby making the peninsula like an island.

Architecture and Context

The date for the construction of the D-towered gatehouse at Elagh is a moot point. Presumably based on its similarity in form to Harry Avery's Castle in County Tyrone, a castle that Jope and his co-authors (1950, 91-92) believed to be 15th-century, or possibly late 14th-century in date, but which is more probably a 14th-century construction (Donnelly 1997, 95-97), Elagh Castle may also date to the 14th century, and may have been constructed by the O'Neills as well, or perhaps by the O'Dohertys who had established themselves in Inishowen during this century; this lineage was certainly proved adept at using castles to defend the vulnerable southern boundary of their territory (Ní Loingsigh 1994, 152 & Figure 5).

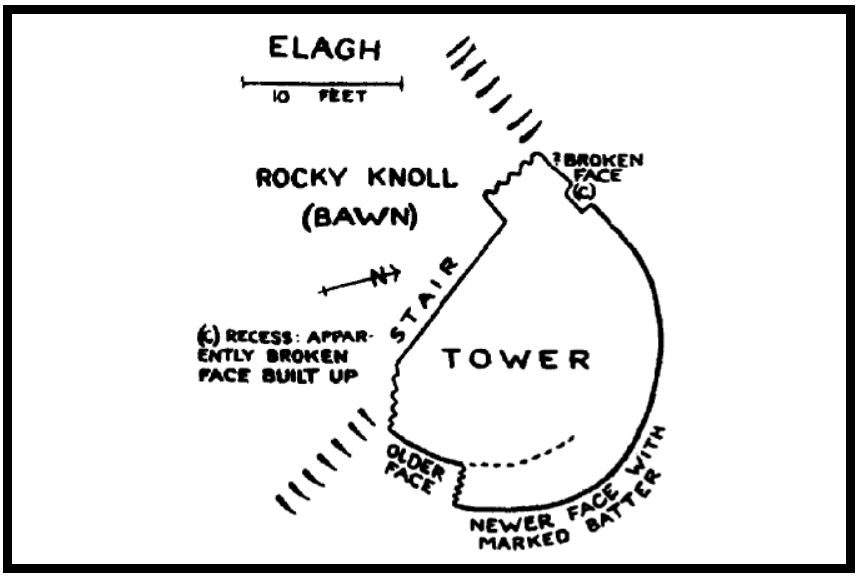

Figure 2: The plan of the remaining D-tower at Elagh Castle by Davies and Swan from their 1939 publication

In their brief study of the site Davies and Swan made a statement that the north side of the outcrop "has been recently quarried away" [ie: within the 1930s?] (Davies and Swan 1939, 203), which is the strongest indication of the damage that had been inflicted on the monument through local quarrying activity and which, doubtless, included the destruction of the western D-tower of the gatehouse building. The authors also noted that "Along the south-west side are the foundations of a wall, and at the south-west corner of a building with thin walls, which does not seem connected with the bawn, and may be more recent" (Davies and Swan 1939, 203). A plan of the upstanding remains of the gatehouse (ibid., Figure 9) was provided with this account and from its contents and those of the accompanying text it seems clear that the authors realised that the tower had "a newer face with marked batter" set against the "older face", and that the building had a stair, but that this was "probably one of a pair [of towers] flanking a gate" (ibid., 204) into the associated bawn.

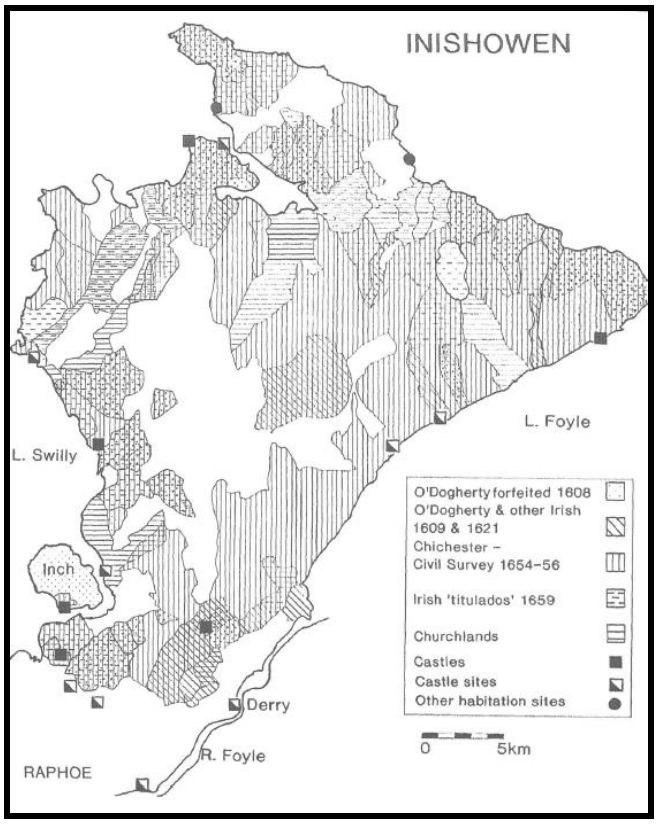

Figure 3: Ní Loingsigh's map of the O'Doherty lands in Inishowen as surveyed in the early 17th-century, with location of their castles and castle sites

Martyn Jope visited the site on 24th June 1950 – presumably as part of his then ongoing research on Harry Avery's Castle – and in his Field Notebook (extract contained in the site's NISMR file) he is fairly dismissive of the account published by Davies and Swan which he judged to be "completely valueless on the structural side, though contains a few useful

historical notes". Jope and his co-authors published their study of the Tyrone castle in the *Ulster Journal of Archaeology* in 1950 and sought an origin point for the design of this castle in 13th-century Anglo-Norman castellated architecture: "... there can be no doubt that the designer of the keep-tower at Harry Avery's Castle had in mind the appearance of the double D-towered gatehouse of the type originating in the 13th century, and of which there were Ulster models [sic] in the areas under English influence at, for instance, Carrickfergus and Castleroche (near Dundalk)" (Jope et al, 1950, 89).

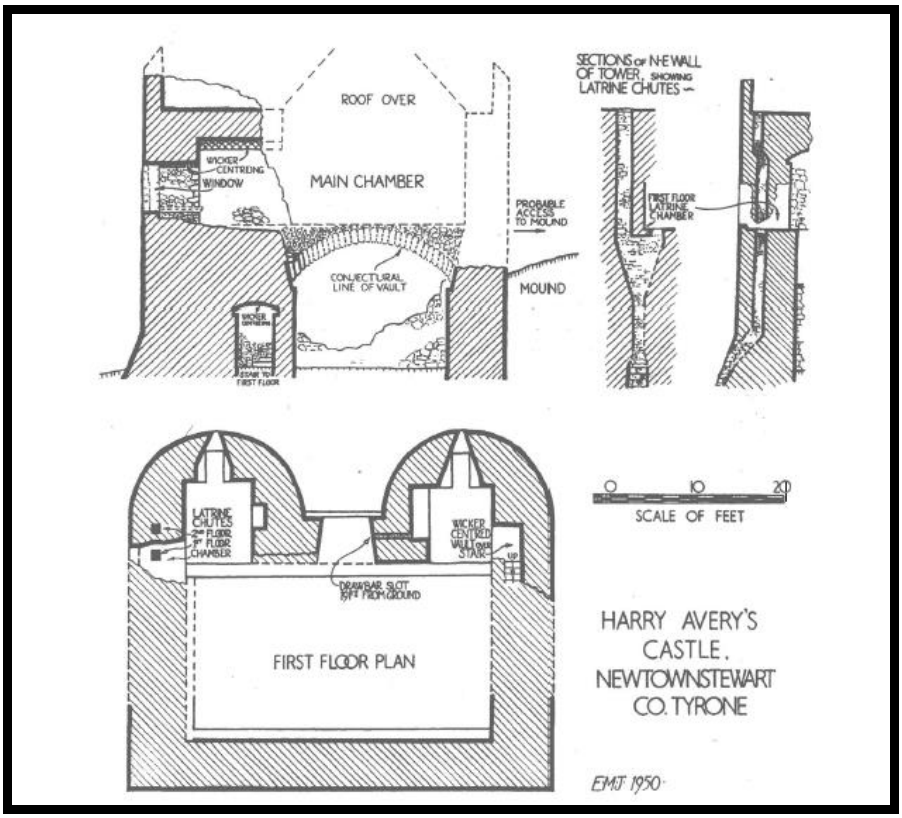

Figure 4: Harry Avery's Castle, County Tyrone, an architectural parallel for the gatehouse structure at Elagh Castle.

Jope *et al* (ibid, 89-90) also made mention of Elagh Castle in their work, noting that "here there remains the greater part of one D-tower, with solid lower story, exactly as at Harry Avery's Castle, and from the surviving drawbar hole and one side of the portcullis slot at Elagh it is clear that a second tower once stood beside it to the north, both the tower and the very outcrop on which stood having been quarried away. It is also clear that at Elagh these two towers flanked an entrance leading straight through to the raised plateau of outcrop about 120 feet in diameter which formed the courtyard, thereby constituting a true gatehouse".

While their architectural assessment of the ruined tower at Elagh Castle remains astute, it is perhaps not clear if the building did constitute "a true gatehouse" or whether it too had its

origins as “tower house” like Harry Avery’s Castle or the revamped version of the great gatehouse at Castleroche which seems to have been converted from gatehouse to tower house in the 15th century, when new wickerwork centred vaults were incorporated into the chambers at ground floor level to either side of the gateway’s passage. Jope *et al* (ibid., 90) then sought an origin point for the castle at Elagh and look northward to Greencastle in Inishowen where the Anglo-Norman castle, constructed in 1305, “is the nearest great English-built castle to Elagh. It had, flanking its gate, with portcullis slot still traceable, two tall polygonal towers, one of which still stands, reminiscent of Edward the First’s great castle at Caernarvon”. They judged it more probable however that the O’Dohertys had been inspired perhaps by the original 13th century gatehouse at Dunluce Castle (which “may well have been a double D-towered building”), or the gatehouses at Carrickfergus and Castleroche. As Tierney (2003, 185) has noted, however, the political situation in north-west Ulster at this time needs to be taken into consideration as well. The evident similarities in design and construction seen at Elagh Castle and Harry Avery’s Castle may be better explained if it were the case that the former had also been constructed by the O’Neills during a period in the 14th century in their efforts to hold down a contested landscape.

Geophysical Survey and Excavation Strategy

In February 2013 a geophysical survey was undertaken by Ronan McHugh and Sapphire Mussen of the CAF, on behalf of NIEA. The results obtained during this exercise (Figure 5 & 6) have enabled five target-features to be identified for archaeological investigation. Two have now been excavated during the evaluation project and three are to be targeted during the more intensive phase of fieldwork (August 2013) at the site.

Size and Number of trenches

The geophysical survey on the summit of the outcrop produced a number of regular anomalies which it had been hoped might have been the remains of buildings that were once located within the castle’s enclosure. As part of an effort to better establish the dimensions of the gatehouse and investigate its possible relationship with a strong anomaly, running roughly from east to west, and set to the immediate south-west, an excavation trench (Trench 1), 10m X 1m in dimensions was excavated (Figure 7). A second trench (Trench 2), measuring 5m by 1m was excavated to the southwest of Trench 1, to intercept the strong linear anomaly which ran on an approximately north to south trajectory (Figure 7). This anomaly might indicate a fragment of the foundations of a large (tower?) house or hall that was set within the castle’s outcrop enclosure.

Account of the Evaluation Excavation

Trench 1 (Figure 7, 8, 9 and Photo 2)

Trench 1 measured 10m by 1m, was located to the west of the surviving D- tower, and was orientated from north-northeast to south-southwest. The topsoil in this trench was a brown, slightly gritty loam (101) which sat above a deposit of small shattered shale fragments mixed with loam (103) in the northern end of the trench and a deposit of larger shale stones (110/111) in the centre and south of the trench. These shale rocks had been laid flat, probably as part of a deliberate effort to level the interior of the site. It is worth pointing out from the outset that the bedrock (102) protruded through these shale deposits and was in direct contact with the topsoil and sod in the south central area of the trench. There were two large bedrock and bedrock-derived boulders in the centre of the trench; one of these was a piece of living bedrock while the second was a piece which had been knocked from the bedrock outcrop, probably as part of the episode of levelling.

Beneath the shattered shale layer (103) in the north of the trench was a layer of gravelly loam with cinder and clay (108) and a dark grey loam (107) with charcoal and burnt bone. The cindery loam (108) was situated above a spread of grey brown gritty loam (109). The dark loam layer (107) and the gritty loam (109) were both above a slightly firmer, but otherwise similar layer (112) from which it had probably been, at least in part, derived. This layer (112) sat above the cindery loam (114).

The large boulder struck from bedrock in the centre of the trench was too large to move and it had to be excavated around. To the south of this rock, between it and the bedrock outcrop, the levelling deposit (110/111) was present, upon the removal of which a dark grey charcoal rich loam (117), probably the equivalent of (107), was encountered. To the south of the bedrock the shattered shale levelling layer (110/111) was present also but upon its removal a mortar-rich stoney loam layer (118) was revealed. At this stage excavation over most of the trench was stopped, apart from two small box sections, BX1 and BX2, which were excavated to test the remaining depth of the stratigraphic sequence in the trench.

BX1 was excavated 1m from the north end of the trench and took the form of a 0.5m cut across the trench. It revealed the presence of a stone setting (113) below a thin spread of occupation material (112) which sat upon an orange clay (115) that may represent a residual skim of subsoil surviving above the underlying bedrock. BX2 was excavated 3.5m from the north of the trench and like BX1 was a 0.5m cut across the trench. It revealed the deposit (114) to be thin, less than 2cm thick, and apparently devoid of artefacts (although only a small portion of this layer was actually dug). It sat on top of the probable natural clay (115).

There was a certain discolouration within this clay subsoil layer, a grey clay band running approximately east-west across the trench at this point. It may just have been natural banding within the clay but it was given a context number (116) as it is possible it may become apparent as an archaeological feature if a larger area was to be excavated at this location in the future.

Trench 2

This trench measured 5m by 1m. It was orientated west-northwest by east-southeast and was located in the southwest quadrant of the outcrop. The topsoil in this trench was a brown gritty loam similar to the topsoil in Trench 1. It sat above a stoney loam (202) at the east end of the trench and a similar stoney loam (203) at the west end. These two layers were probably the same but were separated by an outcrop of bedrock. On its western side this rock had been quarried; the quarry pit was labelled as Context 206 and it was filled by a dark grey silty loam (207). Beneath the stoney loams (202 and (203) and cut into by the west side of the quarry pit (206) was an orange sandy clay (204) which was judged to be a subsoil layer overlying the bedrock. It was similar, but perhaps a little more sandy, than the clay (115) in Trench 1.

The Finds

Several pieces of 17th century North Devon Gravel Tempered pottery, both vessels and ceramic tiles, were found This is interesting as it evidences both occupation and possible renovations at the castle in the 17th century. Several sherds of Medieval Ulster Coarse pottery were also found. This is a type of utilitarian pottery found in Ulster in the middle ages but which continued to be both made and used for a time in the Post-Medieval Period. There are two possibilities for the presence of Medieval Ulster Coarse pottery at Elagh Castle, which are *not* mutually exclusive. The pottery may either predate the 17th century ware, in which case it is evidence for Medieval occupation on the castle summit which has become intermixed with later material, or it may date, like the North Devon pottery, to the 17th century and be evidence of the occupants of the castle at this stage using both locally made and imported pottery.

Context No.	Bag No.	Description
101	1	One Brick fragment, one piece animal bone, one piece of modern iron
103	1	Mortar chunks and one fragment of North devon Gravel Tempered

		pottery
103	2	Three pieses of brick
103	3	Three pieces of mortar, three pieces of brick, one piece of slag, one piece of bone.
107	1	One fragment North Devon Gravel Tempered, four small sherds of Medieval Ulster Coarse pottery, one piece of slightly curved, light green bottle lass
	2	Several pieces of mortar, two brick fragments, four pieces of butchered animal bone, two oyster shells, one fragment of corroded iron
	3	One bag of burnt bone fragments
	4	Four pieces mortar. One sherd of dark green bottle gass, five pieces of bone and one oyster shell
	5	Six pieces of mortar, one piece of brick, one fragment of bone
108	1	Three pieces of slag, one piece of brick, several small cinder pieces and one piece of burnt bone.
109	1	Clay pipe stem fragment
	2	Two fragments of brick
	3	North Devon Gravel Tempered Tile
	4	Two oyster shells, one piece of flattened metal wire, coiled, two pieces of patinated window glass, one fragment dark blue bottle, one sherd light blue bottle, one small undecorated rim sherd of Medieval Ulster Coarse pottery.
111	1	Two fragments of brick, one piece of dark green bottle base, one piece of window glass, two small fragments Medieval Ulster Coarse Pottery
112	1	A bag of burnt bone fragments.
201	1	Ten fragments of iron slag
202	1	One decorated rim of Medieval Ulster Coarse Pottery, two pieces of Blackware one fragment of animal bone

	1	One fragment of North Devon Gravel Tempered Pottery

Samples
One soil sample of approximately 5kg was taken from the charcoal and burnt bone rich layer 107.

Discussion and recommendations
Several things are apparent from the excavation. Neither Trench 1 nor Trench 2 provided any direct evidence for walls. There were a significant amount of mortar fragments present in several of the layers in Trench 1, presumably indicating either construction or demolition in the immediate vicinity, but no actual masonry. Both trenches show that during the period of use of the castle there were bedrock outcrops sitting proud above what must have been the ground level, in the summit interior. This may have been because the bedrock was being used as a base for masonry, the excavation trenches were small and it is possible that a larger excavation would be able to demonstrate whether there were actual masonry structures associated with the castle at these locations.

However if these bedrock outcrops weren't being used as a masonry base it raises a number of interesting possibilities. It seems unlikely that the interior of a functioning castle would have been left with an internal surface irregular with bedrock outcrops. Given the resources used to construct a fortified enclosure such as Elagh Castle it seems ridiculous to suggest that the interior would have been left irregular with bedrock outcrops by accident or neglect. It rather seems to suggest that the interior of the enclosure may have been left in its natural state (or a deliberately constructed pseudo-natural state) on purpose. It is possible that Elagh Castle may not have actually been a defended *residence* in the way that archaeologists usually mean when talking about castles. The builders of this castle may have resided elsewhere but used this castle for public functions, possibly connected with inauguration. In this case the bedrock outcrops may have had some degree of ritual significance.

Phase 2: Archaeological Excavation (August 2013) – Trenches 3, 4 and 5 (Figure5, 6 and 7)
In addition to the two grophysical anomalies investigated during the evaluation excavation on the summit of the outcrop, a number of other interesting anomalies were identified by the geophysical survey. The geophysical survey has confirmed the suggestion of an earlier survey (Marks 1999) which had indicated that a substantial ditch associated with a low earthen bank was located at the base of the outcrop. The CAF geophysical survey noted a

low resistence arc surrounding the base of the outcrop. This may mark the location of an artificial ditch, perhaps some 3 m in width, although “stoney outcrops like this tend to have low resistance hollows around them where water can collect” (McHugh pers comm.); this possible ditch seems to be placed to the rear side of another geophysical anomaly that may be a stone wall surrounding the northern edge of the outcrop. The location of this anomaly is exactly in line with the field boundary to the western side of the monument. This could mean that the feature is the robbed out stretch of boundary wall to the north of the castle, or – alternatively – that the western boundary lies on the line of a Medieval (or earlier?) boundary wall, the northern remains of which have now been shown up through the geophysical survey. Given this, the ditch anomaly may represent either a natural feature or a ditch that predates the construction of the stone boundary wall; establishing whether the wall is of Medieval or Early Modern date might in turn help explain the date and function of the ditch. This, however, would require a large excavation trench and an associated commitment of resources. As such, it is recommended that this area **(**Trench 3: recommended dimensions - 15m X 3m) be investigated in August 2013.

Both Davies and Swan (1939, 203) and Jope *et al* (1950) noted the existence of a what seemed to be the foundation course of a small building located at the south-west corner of the summit enclosure. From its location on the perimeter of the enclosure it can be speculated that this feature is the remains of a wall-tower designed to provide additional defensive strength to this corner of the castle. To establish whether this is indeed the case, however, it can be suggested that a small excavation trench (Trench 4), 3m X 1 m in dimension, be opened across the line of this feature.

The survey identified a regular anomaly to north-east of the outcrop; the appearance of this feature might suggest that it represents the foundations of a building. This might be some form of forework located close to the gatehouse and at the base of the outcrop, but – equally – it may represent the foundations of an early modern dwelling-place or outhouse. Given its position and regular form, however, it is worthy of investigation. As such, it is recommended that a small excavation trench (Trench 5), 5m x 1m, be opened across this feature in August 2013.

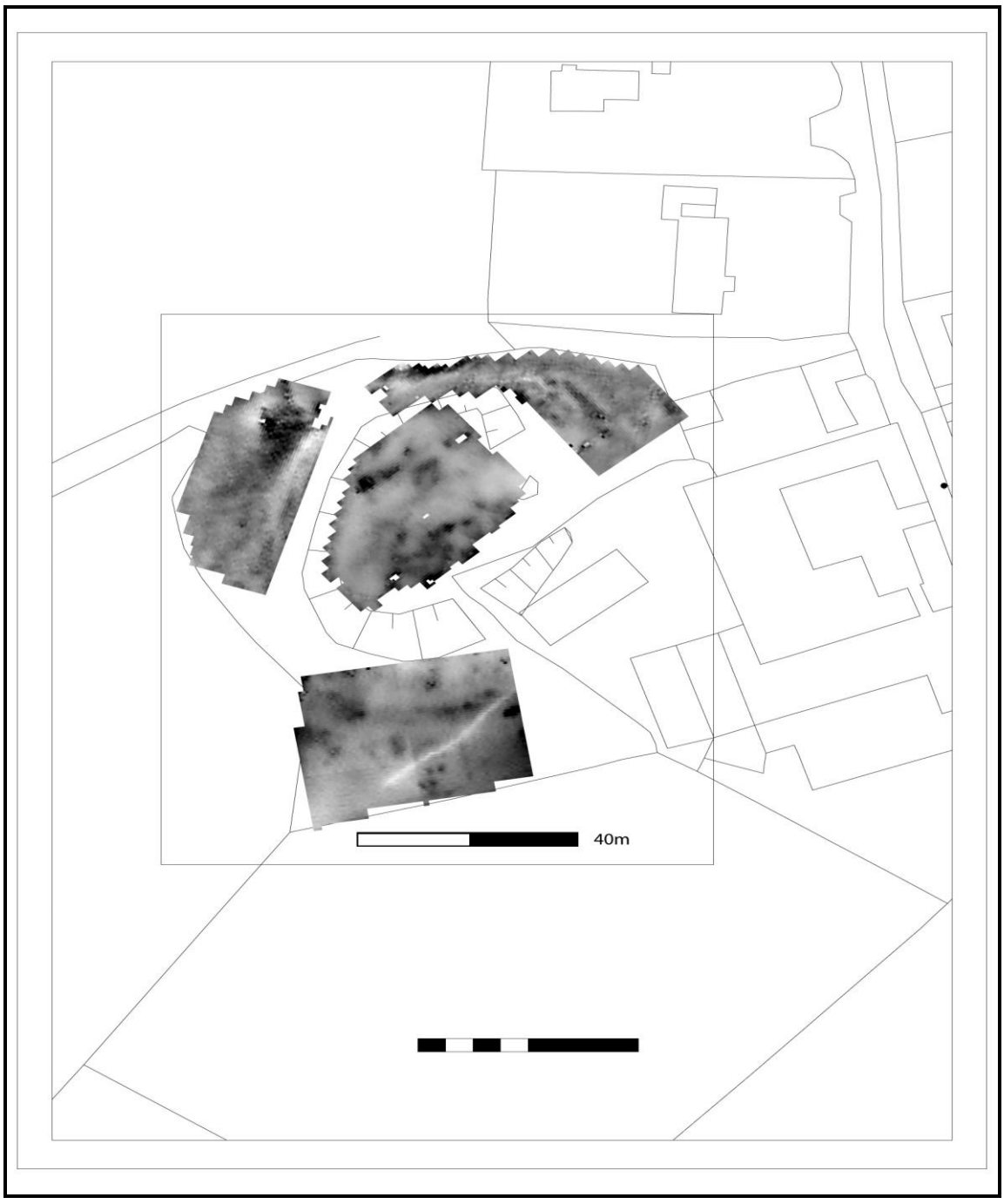

Figure 5: Geophysical survey results obtained at Elagh Castle, February 2013

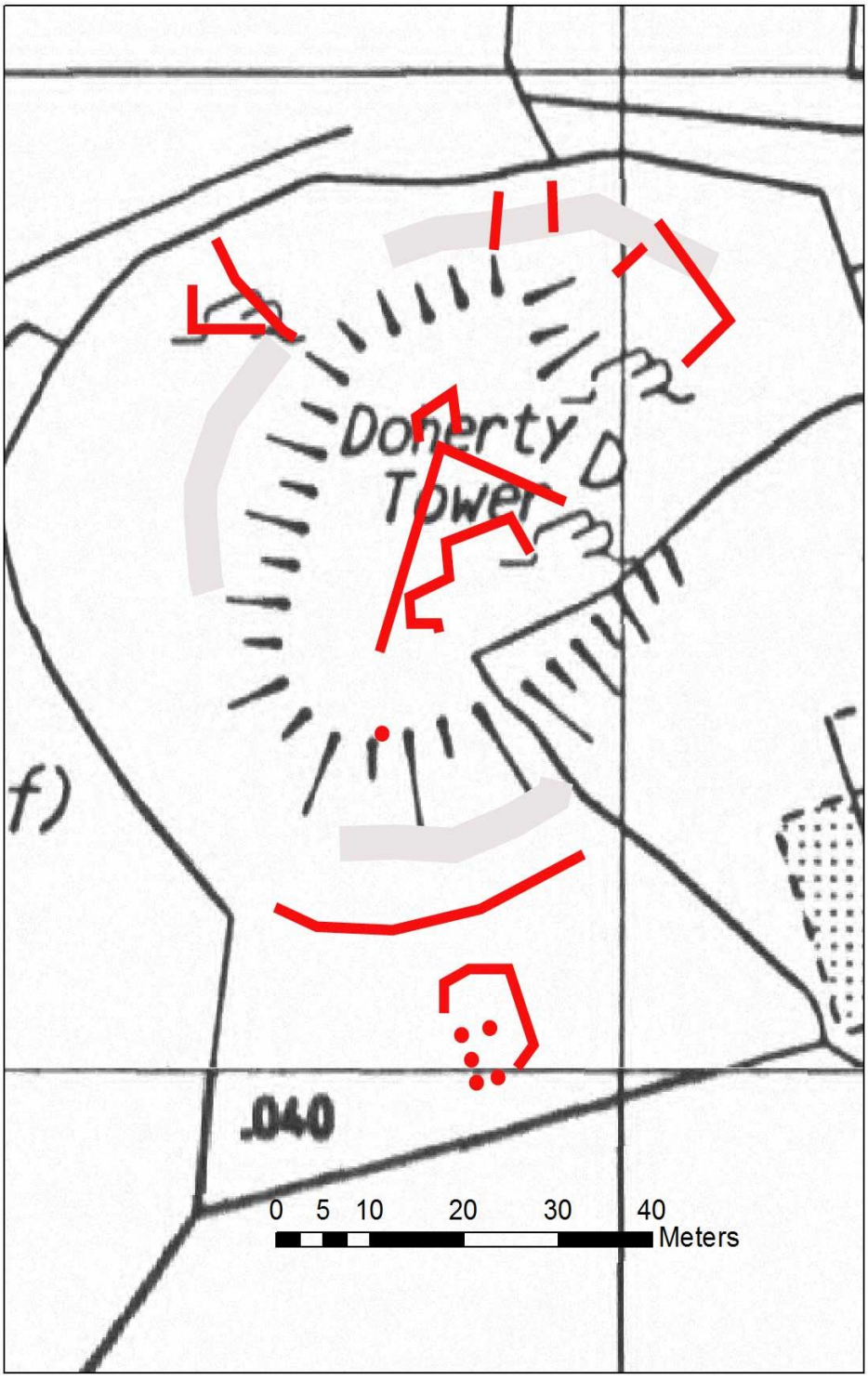

Figure 6: Interpretation of geophysical survey results, with red lines denoting possible wall-footings and grey areas denoting the location of a possible ditch surrounding the outcrop.

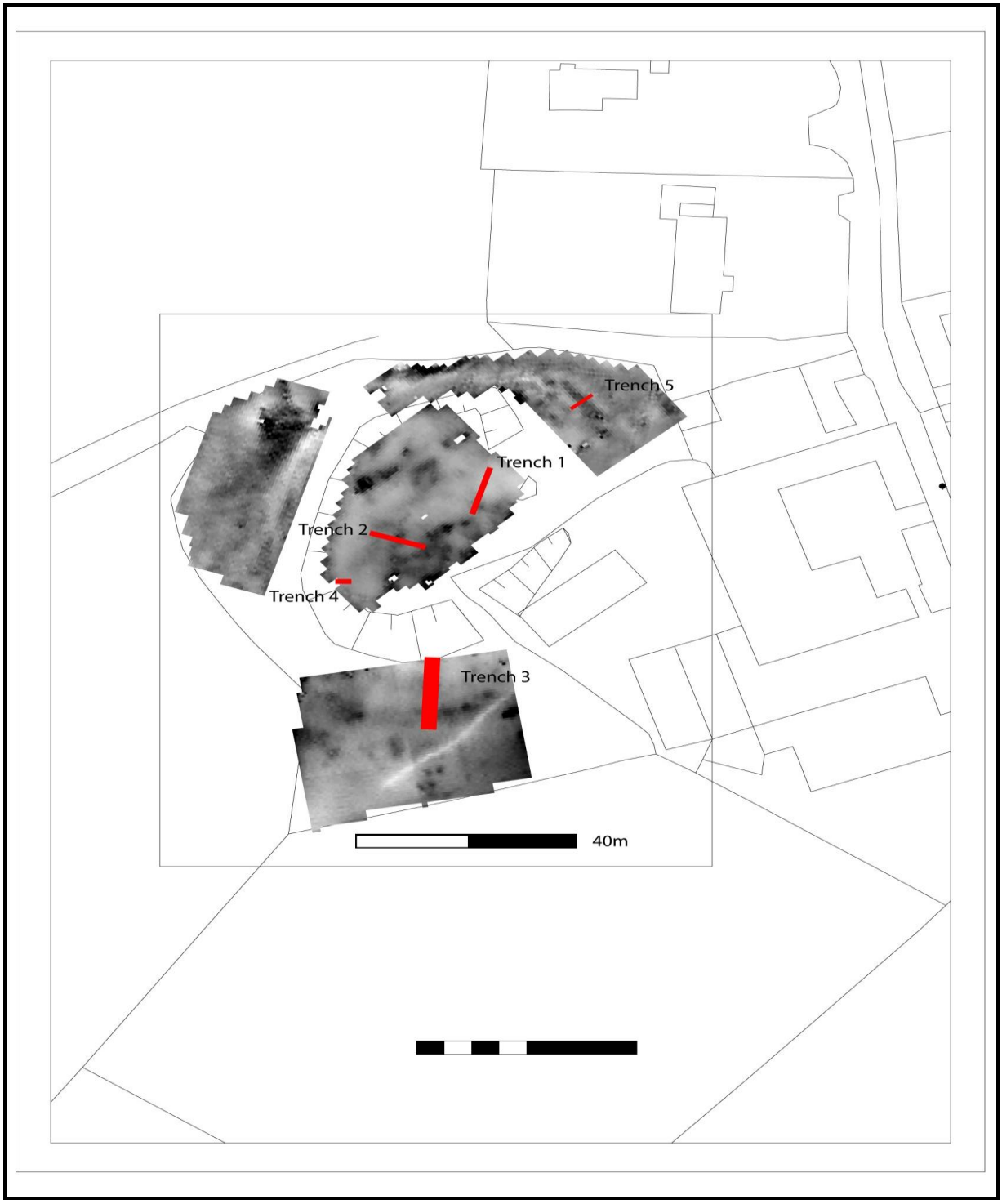

Figure 7: Proposed trench regime for archaeological excavations at Elagh Castle, designed to investigate the anomalies identified during the geophysical survey. It is proposed that Trench 1 and Trench 2 be undertaken in March 2013 as the evaluationphase of the programme, with Trenches 3, 4, and 5 to be opened during the more substantive phase of investigation to be undertaken in August 2013

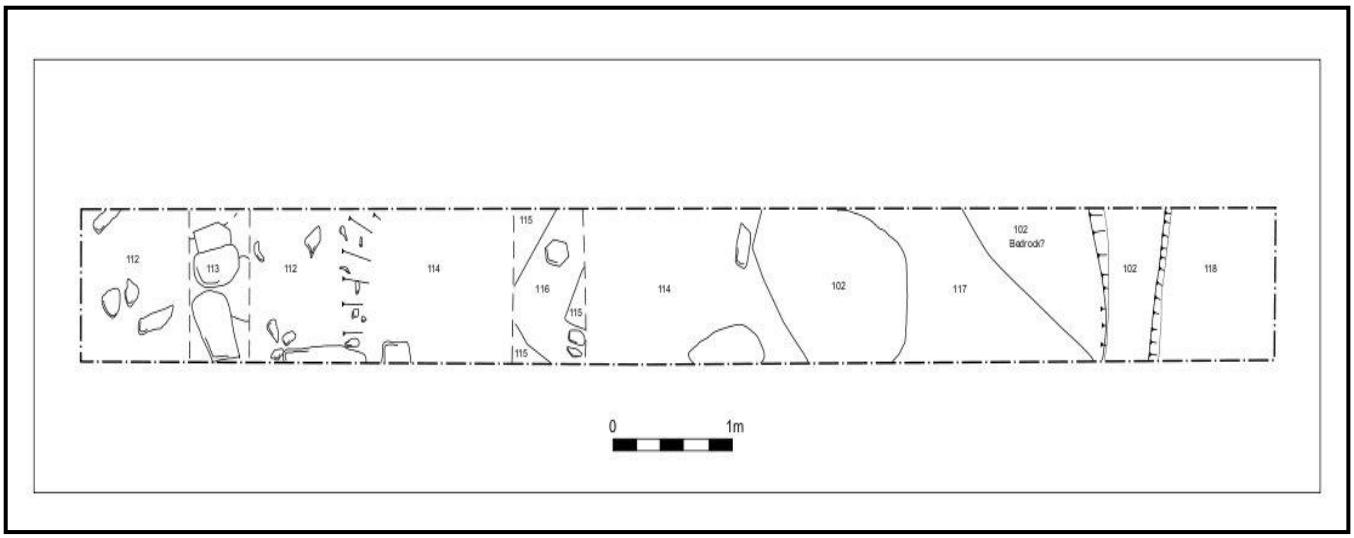

Figure 8: Plan of Trench 1 at the end of the excavation showing the bedrock and bedrock derived boulder (102), the possible occupation layers (112) and (117), the mortar rich layers (114) and (118), the stone setting (113) and the natural clay (115).

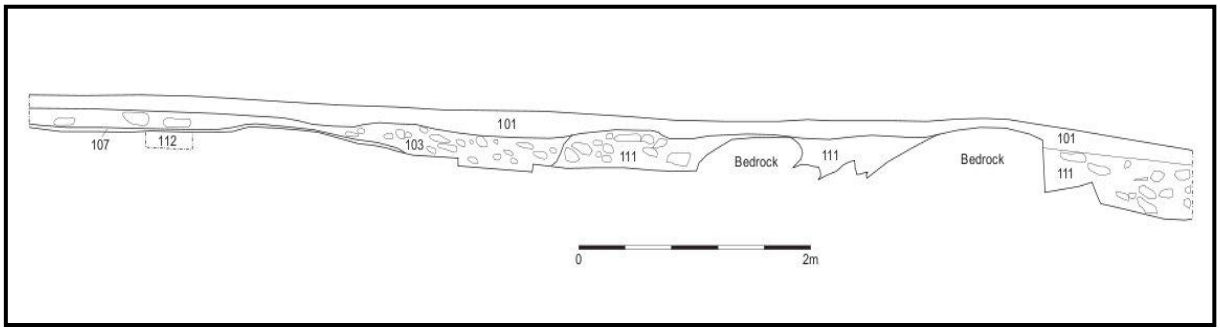

Figure 9: West facing cross section of Trench 1, showing the topsoil (101), the shale rich loam (103), shale levelling layer (111) and the possible occupation layers (107) and (112). Note because excavation paused at the level at which lower features were revealed they are not visible in section.

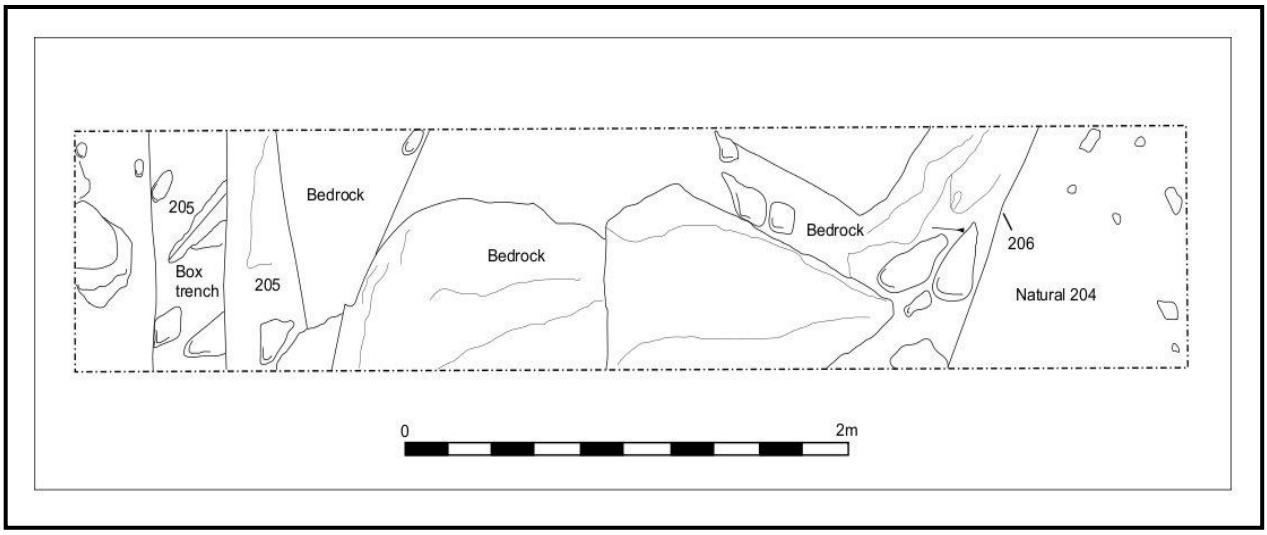

Figure 10: Plan of Trench 2 showing bedrock and subsoil (204) and (205). The cut into subsoil and the bedrock (206) caused by quarrying of a piece of bedrock is also shown

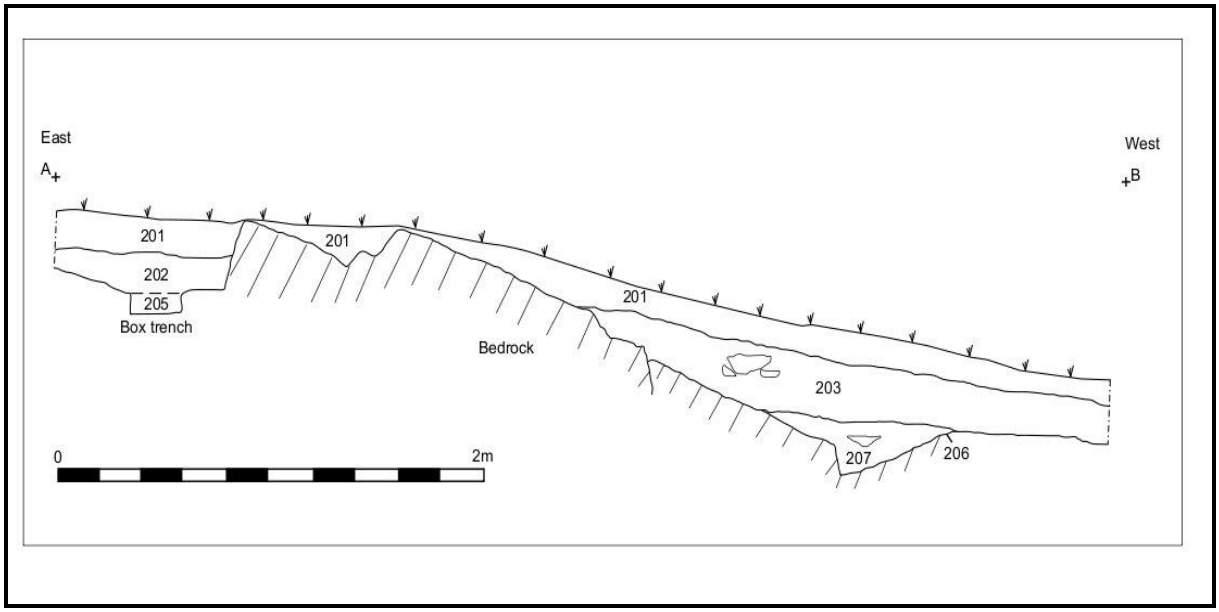

Figure 11: Cross section of Trench 2 showing the topsoil and sod layers (201), (202) and (203) andthe subsoil (205). The quarrying pit (206) and its fill (207) are also shown

Photo 1: View of the upstanding fabric of Elagh Castle

Photo 2: View of Trench 1 from north

Photo 3: View of Trench 1 from South

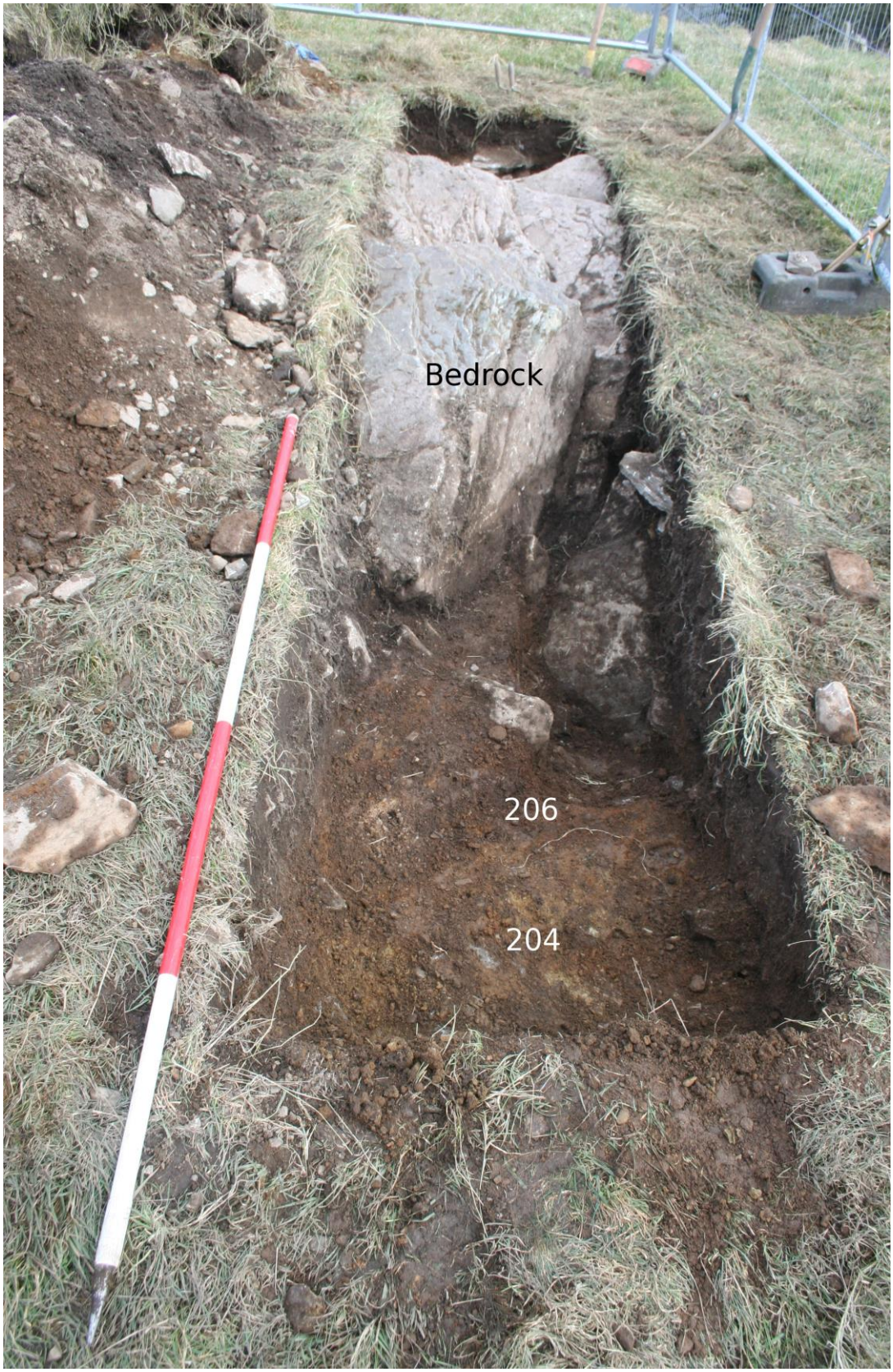

Photo 4: View of Trench 2 from west

Photo 5: View of Trench 2 from east

Photo 6: Trench 2 after backfilling

Bibliography

Davies, O., and Swan, H.P., 1939: "The Castles of Inishowen", *Ulster Journal of Archaeology* 2, 178-208.

Donnelly, C., 1997: *Living Places: Archaeology, Continuity and Change at Historic Monuments in Northern Ireland*, Institute of Irish Studies, Queen's University Belfast.

Gillespie, F., 1995: "Gaelic Families of County Donegal", in W. Nolan, L. Ronayne and M. Dunlevy, *Donegal: History and Society*, Geography Publications, 759-838.

Hill, G., 1877: *An Historical Account of the Plantation of Ulster*, McCaw, Stevenson & Orr, Belfast.

Hore, H.F., 1857: "Lough Foyle in 1601", *Ulster Journal of Archaeology* (1st Series) 5, 139-143.

Jope, E.M., Jope, H.M., and Johnson, E.A., 1950: "Harry Avery's Castle, Newtownstewart, County Tyrone: Excavations in 1950", *Ulster Journal of Archaeology* 13, 81-92.

Kelly, W., 2003: *Docwra's Derry: A Narration of Events in North-West Ulster, 1600-1604*, Ulster Historical Foundation, Belfast.

Lacey, B., 2001: "The Grianán of Aileach: A Note on its Identification*", Journal of the Royal Society of Antiquarians of Ireland* 131, 145-149.

Ni Loingsigh, M., 1994: “An assessment of Castles and Landownership in Late Medieval North Donegal”, *Ulster Journal of Archaeology* 57, 145-158.

Marks, P., 1999: *A physical and literary assessment of the site of Elagh Castle, County Londonderry*, unpublished undergraduate dissertation, Department of Archaeology, Queen’s University Belfast.

McNeill, T.E., 2001: “The Archaeology of Gaelic Lordship East and West of the Foyle”, in P.J. Duffy, D. Edwards and E. FitzPatrick (editors), *Gaelic Ireland: Land, Lordship and Settlement, 1250-1650*, Four Courts Press, Dublin, 346-356.

McSparron, C., and Williams, B., 2011: “’… and they won land among the Picts by friendly treaty or the sword’: How a re-examination of early historical sources and an analysis of early medieval settlement in north County Antrim confirms the validity of traditional accounts of Dál Riatic migration to Scotland from Ulster”, *Proceedings of the Society of Antiquaries of Scotland* 141, 145-158.

Moore, F., McMahon, P., and Moore, D., 2010: *The Grianán of Aileach, Co. Donegal: Archaeology Ireland Heritage Guide No. 48*, Wordwell Ltd., Dublin.

Simington, R.C., 1937: *The Civil Survey, AD 1654-1656: Counties of Donegal, Londonderry and Tyrone, Volume 3*, Irish Manuscripts Commission, The Stationery office, Dublin.

Tierney, A., 2003: “A note on the identification of Aileach”, *Journal of the Royal Society of Antiquaries of Ireland* 133, 182-186.

EVALUATION No.5

THE SEVENTEENTH-CENTURY MILITARY LANDSCAPE AT BOOM HALL

Philip Macdonald and Grace McAlister

Introduction

Boom Hall, Co. Londonderry stands within the townland of Ballynashallog, near the northwestern bank of the River Foyle, on land that formed part of the grant to The Honourable, The Irish Society during the Ulster Plantation. The site takes its name from the house's close proximity to the boom constructed across the Foyle by the Jacobite army during the siege of Derry in 1689. The Boom Hall landscape consists of an area of ground bordered to the northwest by the Culmore Road and to the southeast by the River Foyle. Most of this land is relatively flat, only sloping gently towards the Foyle, however, the strip of land about 35 metres wide, immediately adjacent to the water's edge forms a much steeper bank. This interim report forms a summary account of the evaluative archaeological investigations carried out at Boom Hall in 2013. The specific aim of the evaluation was to assess the suitability of the immediate environs of Boom Hall as a site for a community-based archaeological project that could form an event associated with Londonderry's status as the UK Capital of Culture in 2013. The fieldwork reported upon here forms part of a wider assessment of the archaeological potential of the former demesne associated with Boom Hall requested by the Northern Ireland Environment Agency: Built Heritage Directorate (Macdonald *forthcoming*).

The Boom Hall Landscapes

A series of diverse phases of activity have been superimposed upon the Boom Hall landscape. In the first half of the 1980s the demesne was bisected by the construction of the Foyle Bridge and Madam's Bank Road. During the Second World War the house was requisitioned by either the United States Navy or the Royal Navy and occupied by the Women's Royal Naval Service (WRNS) who erected several American Quonsett huts around at least two sides of Boom Hall, the concrete bases of which remain (for an anecdotal and colourful account of Boom Hall during the Second World War cf. Johnson 1997). The present Boom Hall (a large, two-storey villa built in the Classical style and now a neglected ruin) was built by the Alexander family in the 1770s. At the same time it appears that much of the demesne was remodelled as a landscape park in the naturalistic style then in vogue. Historical evidence suggests that the Alexander family, who acquired the lease on Boom Hall at some point after the Williamite Wars, had lived in an earlier house on the estate, also called Boom Hall (for

a useful history of Boom Hall cf. Malley 1993). The precise location of this earlier Boom Hall is not known, although a family history prepared in 1863, but not published until 1946, by the Rev. Robert Alexander (1795-1872), who had lived at Boom Hall as a child, indicates that it was located to the north of the present Boom Hall, possibly somewhere in the vicinity of the walled garden cf. Alexander 1946, 4. The survival of a curvilinear Ha-Ha wall, presumably dating to the eighteenth century, to the southwest, south and southeast of this position is consistent with this suggestion. This earlier Boom Hall would also have been associated with a garden landscape, but one probably laid out in the more formal style typical of the period before 1740. A number of garden features, datable to both periods of parkland design, can still be identified either on the ground or from cartographic or aerial photographic evidence.

The Seventeenth-Century Military Landscape

The most archaeologically interesting phase of activity within the Boom Hall landscape is, however, the military activity associated with the two sieges of Derry in the seventeenth century. Unfortunately, no visible remains of this landscape are readily identifiable on the ground, probably as a result of landscaping associated with the eighteenth-century parks and destruction associated with both the occupation of the site by the WRNS and the construction of the Foyle Bridge. In archaeological terms the seventeenth-century military features should be considered part of a wider landscape that extended from the city of Derry up the entire length of the Narrows on both sides of the Foyle as far north as Culmore Fort. Within the immediate vicinity of Boom Hall the military features include Charles Fort built by Royalist forces in 1649 during the first siege of Derry. Charles Fort was attacked twice, without success, by 'parliamentary' ships before the siege was lifted. Charles Fort was reoccupied during the second siege of Derry in 1688-89 by Jacobite forces intent on maintaining a blockade of the city. In order to prevent ships delivering supplies to the city, the Jacobite army built a boom across the Foyle. The boom's western end was located somewhere within what would subsequently become the Boom Hall demesne. In addition to the reoccupied Charles Fort, the western end of the boom was also protected by the creation of a bastion (sometimes known as the New Fort) and several adjacent entrenchments.

These military features are best represented in a siege map titled '*A New Map Of The City of Londonderry with its Confines; As it was besieged by the Irish Army in the year 1689 . Exactly Survey'd by Capt. Francis Nevill*' which was produced as an engraving in three parts *c.*1694 (Black 1990, 89-90, no.82; Ferguson 2005, 24, no.67). Captain

Francis Nevill had been present in the city at the very beginning of the siege, but was taken prisoner by the Jacobites. Young suggested that he remained in the Jacobite camp during the course of the siege (1932, 115), although it would perhaps be more accurate to say that he subsequently derived his information on the disposition of the Jacobite troops from protestants who had continued to live in the area outside the city under the protection of the Jacobites (Ferguson 2005, 24). The relevant section of Nevill's map is reproduced here as Figures One and Two. The better quality Figure One shows (from left to right) along the riverfront: Charles Fort, a series of entrenchments placed at various angles, an L-shaped entrenchment (labelled 17), a stream crossed by a bridge, a series of three entrenchments aligned in parallel with the river, a bastion on the water's edge (labelled 18) and a long, zig-zagging entrenchment. The western end of the boom can be seen immediately to the south of the bridge. The boom and the bastion on the water's edge have been awarded sites and monument record numbers (i.e. LDY 014:068 and LDY 014:069 respectively), however, the other individual military features depicted by Nevill have not. Behind the entrenchments depicted on Nevill's map, and presumably located on the relatively flat ground above the sloping bank, are a series of military camps (labelled Colonel Butler). A key to Nevill's map exists; it records within '*A Description of the Enemy's Camp*' that (17 and 18) are two of '*three Batteryes made to defend the Bome each having three Gunns apiece built with in high water marke. It was between the Number 17. & 18. that Captaine Brownings Shipp after breaking the Bome fell fowle with the Shoare, but the Tyde comeing in, and fireing her Chase Guns, she got off safe to the great Griefe of the Enemy who thought they had nothing more secure*'. Nevill's key also states that '*wherever you see the letter a, that Ditch was lined with small shott*'.

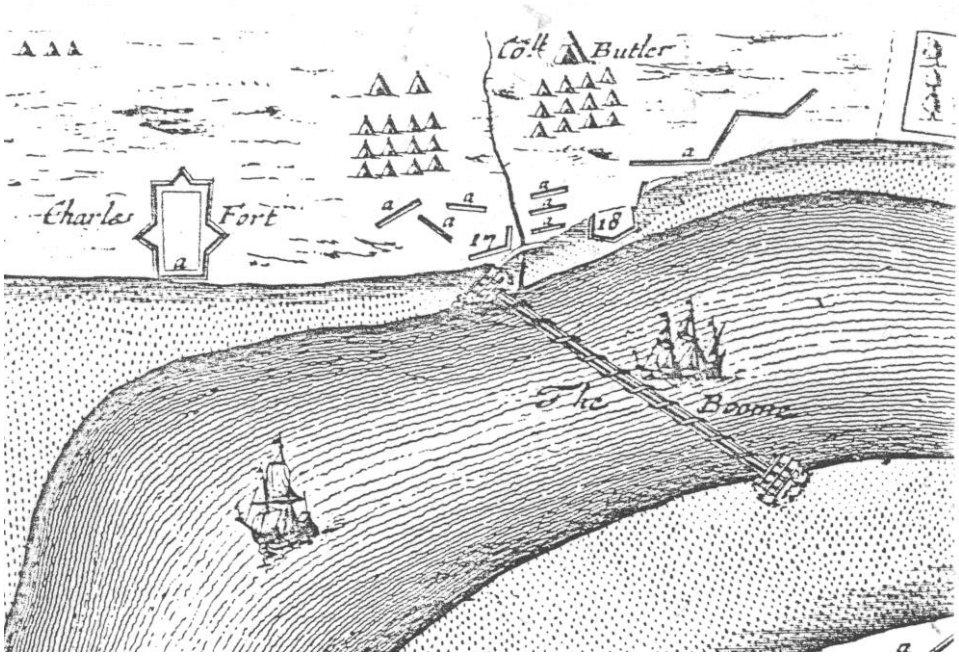

Figure One: Detail from '*A New Map Of The City of Londonderry with its Confines; As it was besieged by the Irish Army in the year 1689 . Exactly Survey'd by Capt. Francis Nevill*' which was produced as an engraving in three parts *c.*1694.

The poorer-quality reproduction of Nevill's siege map (Figure Two) shows towards the top of the image (in reality towards the northwest), directly above the stream crossed by a bridge, a curvilinear enclosure with a house located upon its southeastern edge. This is interpreted as representing an Early Christian rath that has been reused as an enclosure by seventeenth-century settlers or tenants occupying the attached house. Two other houses associated with enclosed yards or gardens are shown to the east and southeast of the apparent re-used rath. That the curvilinear feature is depicted on Nevill's map suggests that it was occupied by Jacobite forces during the siege.

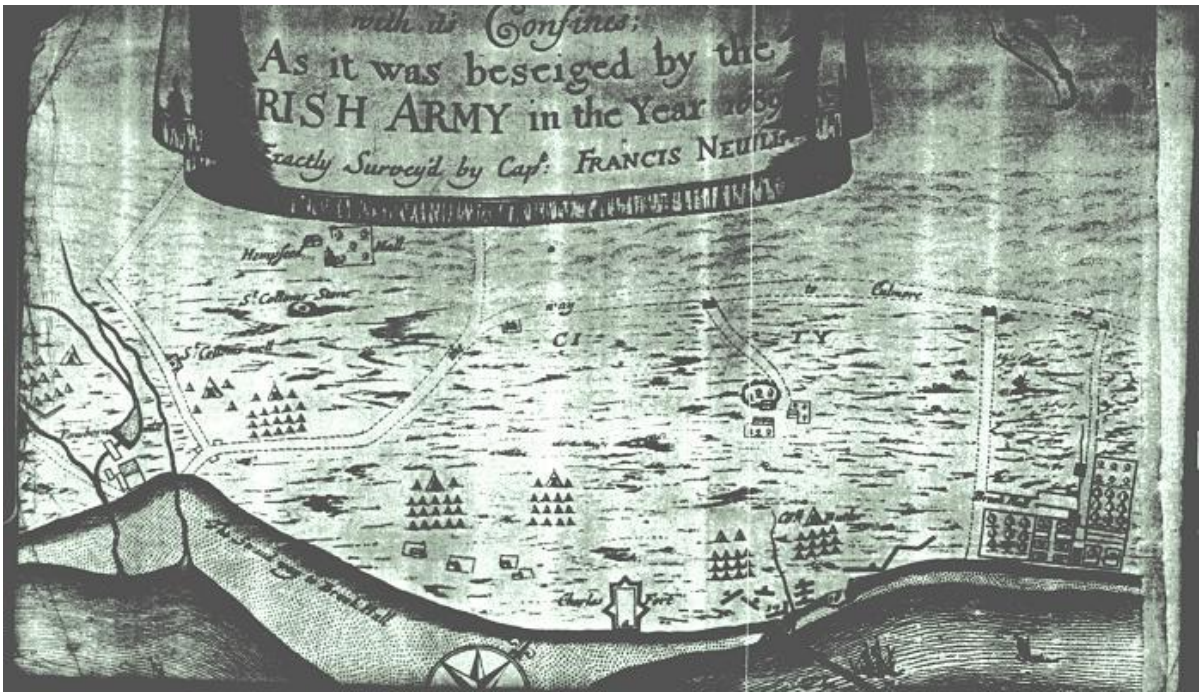

Figure Two: Enlarged detail from '*A New Map Of The City of Londonderry with its Confines; As it was besieged by the Irish Army in the year 1689 . Exactly Survey'd by Capt. Francis Nevill*' which was produced as an engraving in three parts *c.*1694.

Further insight into the arrangement of the Jacobite siegeworks associated with the western end of the boom, and independent confirmation of the accuracy of Nevill's map, is provided by the account of the French engineer, Mons. Pointis, who was responsible for its construction. Writing to Louis the King of France on the 14th June 1689 from 'The Camp before Londonderry' Pointis reports that:

> At last in spite of the dearth of all things in which we are here I have completed the boom which I have had the honour of telling you, my Lord, in my last letter of the 6th of this month that I was about to take in hand. It consists of beams a foot square in thickness which I have had removed from houses and joined to another by mortises of a foot and a half; each beam end being attached to the side of that to which it is joined by two iron cramps passed through the one into the other leaving a little play and freedom to these pieces. I have placed crosswise upon and underneath the mortises one end of a cable (doubled for want of iron chains) well fixed through each beam, and I have run the whole length of the boom a 5 or 6 in. rope which is the thickest I have been able to obtain and which is joined to the said beams by iron cramps in which it runs like a rod in curtain-rings and it has been noticed in stretching out the boom that this rope on the side of the beams which is most in the water was able that way to make the cutting of it difficult. I know well that with the narrow course ships have in a river it is not possible that these different mutually supporting parts making one structure can be broken asunder. To prevent their being cut I got forts built on each bank of the river right at the ends of the boom. It will be necessary to equip these with guns that will strike between wind and water the vessels which cannot be farther distant than pistol shot. The banks of the river being raised with a very steep slope I have had entrenchments dug in the form of an amphitheatre one above the other where our troops which will be stationed there in such numbers as are needed will be safe even from artillery, not only because of the parapet but from the depth in the earth. The whole fore which will be discharged from almost the same point (each entrenchment firing easily over the heads of those who will be in the other, by reason of the steepness of the slope) can enfilade the boom and with that I have difficulty in believing that they will attempt to cut it with hatchet blows, the workers, as I have said, not being farther than pistol shot from our entrenchments, and you know well, my Lord, with what difficulty you work on what is in water for it is always giving way.
>
> (trans. J.Wallis; quoted in Milligan 1946, 16-17).

Mons. Pointis continues his letter explaining how the position of the boom and the arrangement of ‘forts’ and ‘entrenchments’ was expected to function:

> I shall not be quite happy until the English are foolish enough presently to attempt this enterprise [i.e. of trying to break the boom] when I shall have

> the pleasure of worsting them. Because as they must come with the wind entirely behind or at least nearly so, once they are at the boom, return being impossible, they must perish under the fire; for they cannot be strong enough to land.
>
> (trans. J.Wallis; quoted in Milligan 1946, 17).

Pointis description of 'entrenchments dug in the form of an amphitheatre one above the other' located on the 'very steep slope' of the river bank is consistent with the depiction upon Nevill's map of the series of three entrenchments aligned in parallel with the river located between, on one side the L-shaped entrenchment (labelled 17) and stream crossed by a bridge, and on the other side by the bastion built on the water's edge (labelled 18) (Figure One).

Evaluation Methodology

Following discussion with the Northern Ireland Environment Agency's Inspectorate, the research objective set for the evaluative fieldwork undertaken at Boom Hall was to identify various points represented upon Nevill's map. The geophysical survey was undertaken with a view to establishing whether the curvilinear crop mark represented on an aerial photograph on the border of the Boom Hall and Brook Hall demesnes (SMR No. LDY 014:041; see Figure Three) was the apparent rath represented on Nevill's map as being reoccupied by Jacobite forces. Similarly, the evaluative excavation was intended to verify the location of the 'amphitheatre' of entrenchments depicted by Nevill and described by Pointis. The description supplied by Pointis that the entrenchments were 'dug' and that the soldiers using them would be safe because of their 'depth in the earth' suggests that an archaeological trace of the entrenchments as a series of negative features should survive, even if the banks associated with the siegeworks were slighted following the lifting of the siege and any surviving topographic expression of the features was destroyed as a result of eighteenth-century landscaping.

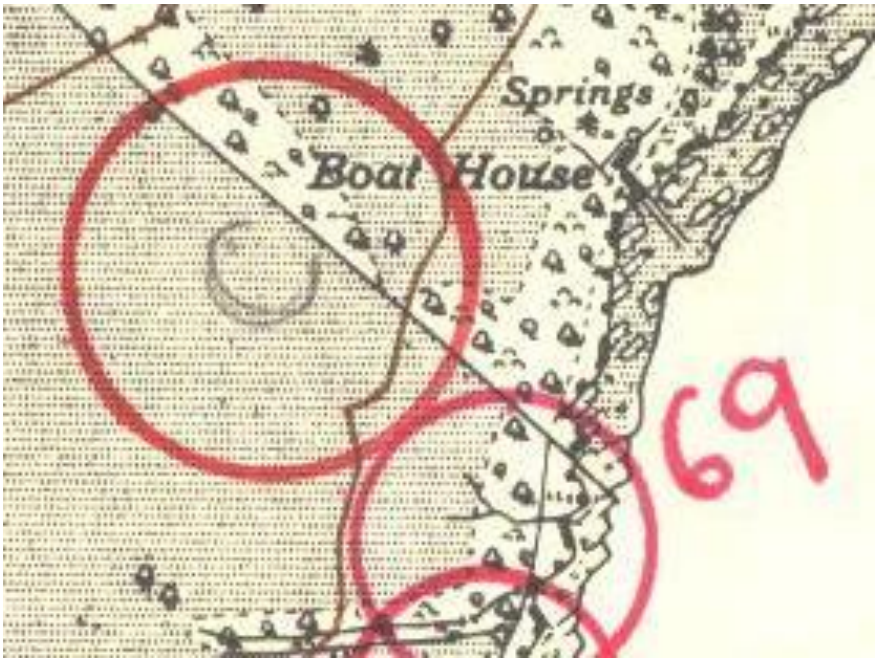

Figure Three: Detail from the Sites and Monuments Record Base Map (annotated on to the 1963 revised Ordnance Survey 6" map, showing the position of the curvilinear crop mark (SMR No. LDY 014:041).

Geophysics

A magnetic gradiometry geophysical survey was conducted over that part of the Boom Hall demesne owned by Derry City Council that coincided with the position of the curvilinear crop mark recorded in the Sites and Monuments Record (SMR No. LDY 014:041). The survey was undertaken by Ronan McHugh, Sapphire Mussen and Grace McAlister of the Centre for Archaeological Fieldwork, Queen's University Belfast in early March 2013.

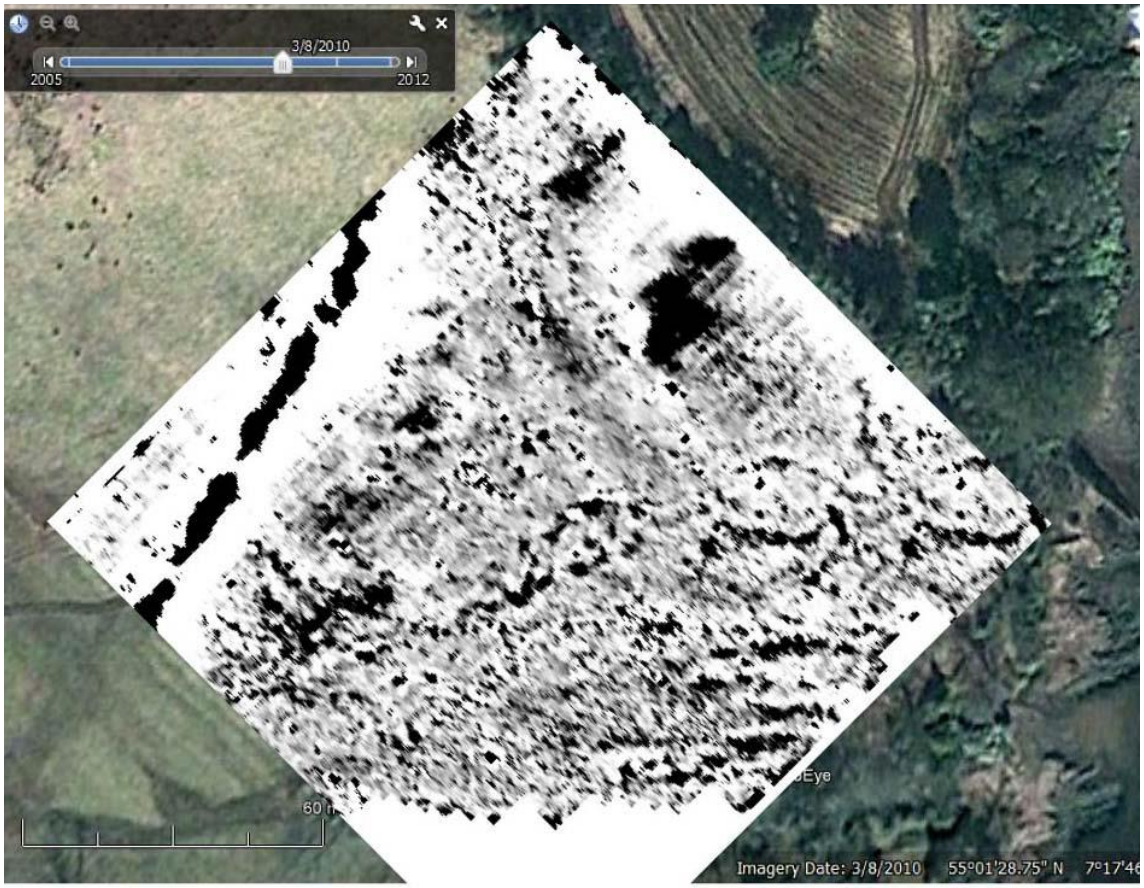

Figure Four: Results of magnetic gradiometry geophysical survey conducted in the Boom Hall demesne March 2013.

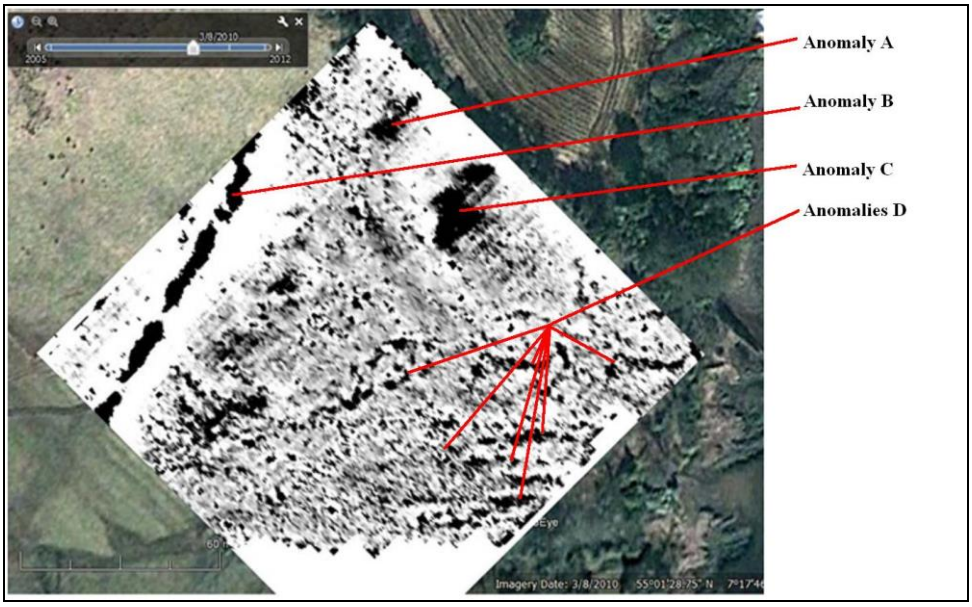

Figure Five: Key to account of magnetic gradiometry anomalies.

A number of anomalies were recorded in the magnetic gradiometry geophysical survey (Figure Five). In the northern corner of the surveyed area part of an apparently intermittent curvilinear anomaly was detected (Figure Five 'A'). This is interpreted as probably representing the southern part of the curvilinear crop mark (SMR No. LDY 014:041)

recorded in the sites and monuments record. It is not possible to assess from the geophysical results alone whether this anomaly/crop mark is a reflection of the rath apparently represented in Nevill's siege map (Figure Two), however, the results are certainly consistent with such an interpretation. The most significant anomaly (Figure Five 'B') is a slightly curvilinear feature which follows the contour line across the sloping ground. This represents a modern sewer drain that was laid through the Boom Hall landscape in the 1970s and which damaged much of the historic fabric relating to the eighteenth-century parkland demesnes. The interpretation of the third anomaly (Figure Five 'C') is not obvious, however, it may represent the remains of the house depicted on Nevill's siege map to the southeast of the apparent rath (Figure Two). Finally, a number of east-west aligned linear anomalies were recorded by the survey (Figure Five 'D'). These follow the natural direction of drainage across the site and are likely to reflect variations in the underlying geology that, in turn, have dictated the drainage pattern.

Excavation *(Licence No. AE/13/51)*

The apparent position of the 'amphitheatre' of entrenchments can be identified in the modern landscape with a reasonable degree of confidence, if not absolute certainty. There is only one significant stream located on the western bank of the river between Madam's Bank and Brook Hall - it discharges into the Foyle at Irish Grid Reference C45261980 and is represented on Nevill's map as being crossed by a bridge close to the Foyle's edge. This bridge was presumably built by the Jacobite army in order to facilitate movement between their headquarters at Brook Hall and Charles Fort. The footings and part of the span of a bridge still survive towards the base of the stream (Irish Grid Reference C45241978; Figure Six). Although it is possible that this bridge was newly built in the eighteenth-century as part of a tree-lined drive that formed part of a circuit around the park at Boom Hall, it is just as likely that it is the bridge depicted on Nevill's map as being located immediately adjacent to the western end of the boom (and which was subsequently incorporated into the eighteenth-century drive) (Figure Seven). If this is the case then the 'amphitheatre' of entrenchments must have

Figure Six: The footings and part of the span of the bridge that crosses the stream close to where it discharges into the Foyle (Irish Grid Reference C45241978). It is possible that this bridge is that depicted upon Nevill's map of the Siege of 1689 and which was probably built by the Jacobite army.

been located immediately to the north of the stream upon the steep slope of the bank running down to the Foyle. It is within this area (centred upon Irish Grid Reference C45261982), now overgrown and therefore not suitable for geophysical survey (R.McHugh pers.comm.), that it was decided to excavate two trenches in order to attempt to verify the position of the 'entrenchments' and assess their archaeological potential.

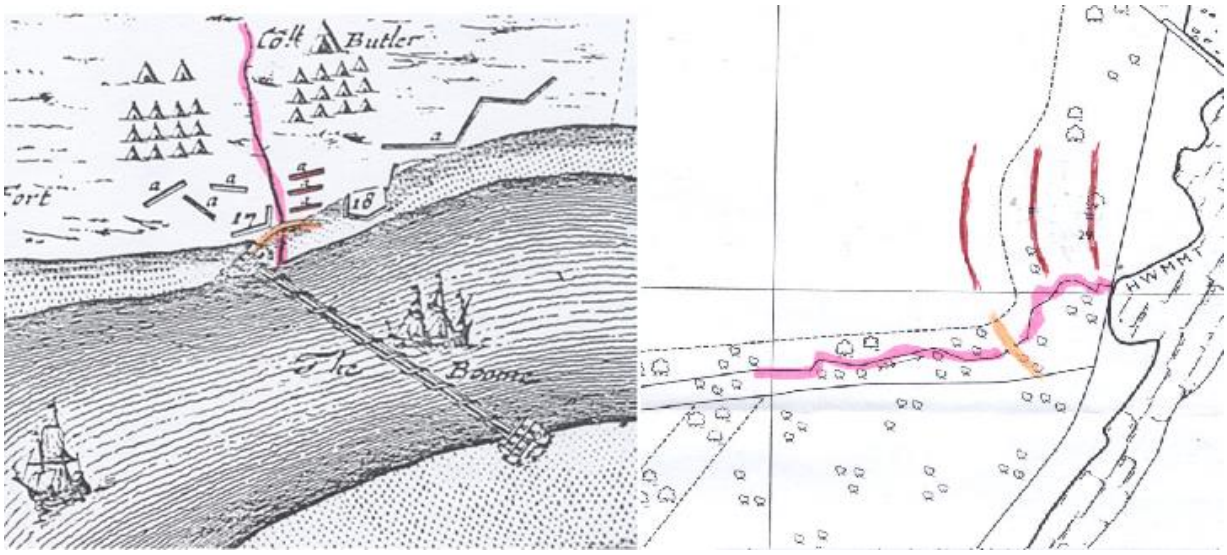

Figure Seven: Details of Nevill's Siege Map (left) and the modern Ordnance Survey 1:1250 showing how the position of the stream (highlighted in pink) and the bridge (highlighted in orange) depicted on

Nevill's map can be identified in the modern landscape. The estimated position of the 'amphitheatre' of entrenchments on Nevill's map (highlighted in red) is sketched in red on to the modern map.

Methodology

Over the course of three days in late March 2013, an attempt was made to locate the presence of the Jacobite siegeworks, and evaluate their archaeological potential, by excavating two trenches, 0.8 metres wide and 10.6 metres (Trench One) and 15.0 metres long (Trench Two), down the length of the slope to the River Foyle in the area immediately north of the stream identified as that marked on Nevill's siege map (Figures Seven and Eight). This area is located towards the northern edge of the Boom Hall demesne, close to its border with Brook Hall. The area is largely overgrown and dotted with mature trees which largely determined the precise position of the two trenches.

It was not anticipated that the stratigraphic sequence would be overly complex. Consequently, the Single Context Planning method of site recording was not considered appropriate for the evaluative excavation. The context record for the site was created using the standard context recording method. Individual features and archaeological horizons were planned (Scale 1:20) and photographed both prior to, and following, excavation. The northeast-facing side of the trenches were drawn as a section at a scale of 1:20. In addition to photography and illustration, the principal site record consisted of a supervisor's diary. A separate register of small finds was also maintained. Members of the NIEA Inspectorate were kept informed of all significant developments during the course of the excavation. All excavation trenches were tied into the Ordnance Survey Grid using an EDM Total Station (Figure Eight). Following the completion of recording, the trenches were manually backfilled.

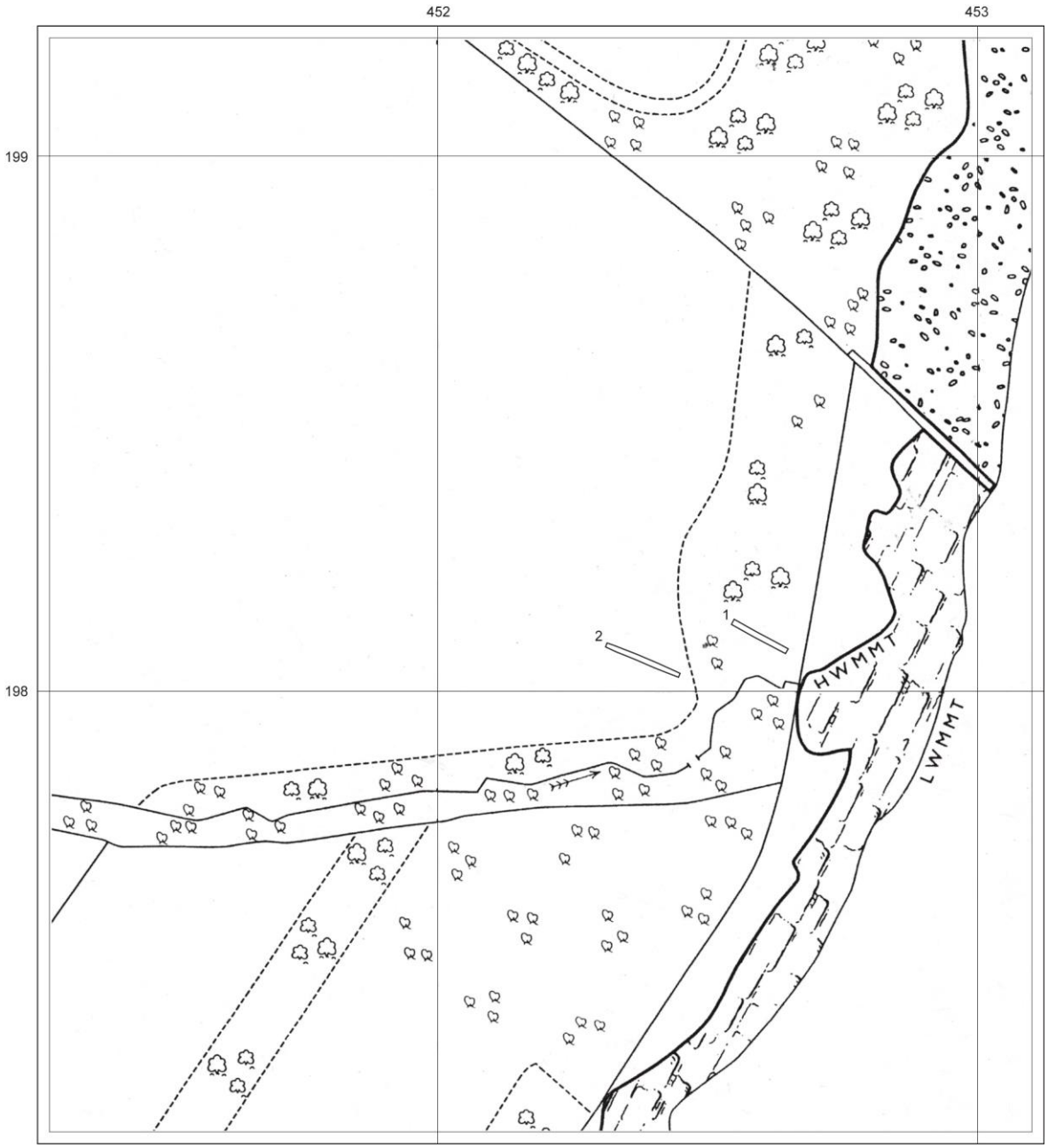

Figure Eight: Map showing the location of Trenches One and Two excavated at Boom Hall in March 2013.

Trench One

Trench 1 was aligned roughly northwest-southeast, with the southeastern end of the trench being located immediately adjacent to the demesne wall bordering the River Foyle. The trench was 10.6 metres long and 0.8 metres wide. The sod and clay loam topsoil were removed as a single stratigraphic unit (Context No. 101). The depth of the topsoil increased slightly towards the southeastern end of the trench, apparently due to a build-up of soil against the demesne wall. Under the topsoil at the southeastern end of the trench was a thin layer of mid-brown grey, friable gravelly sandy loam (Context No. 104; maximum depth 0.04m), which in turn sealed a mid-brown, slightly gravelly clay (Context No. 102; maximum

depth 0.38m) that extended throughout the length of the trench. This latter deposit was interpreted as representing a layer of hillwash that had, perhaps, accumulated during a period when the field above the trench had been cultivated. The gravelly clay (Context No. 102) contained numerous coal inclusions and some blackware pottery suggesting that it had accumulated at some point during the eighteenth to early twentieth century. Slightly undermining the interpretive weight that can be placed upon this inference based upon the date of the recovered artefacts is the observation that the deposit had been heavily disturbed by root activity and animal burrowing. The surface of the gravelly clay hillwash (Context No. 102) had been subjected to one area of localised burning (Context No. 107) that filled a shallow, informal hearth (Context No. 110). This was interpreted as the remains of a bonfire; the recovery of a modern ring-pull from the fill (Context No. 107) indicates that the fire was not of any great age.

Excavation of the hillwash (Context No. 102) revealed that in the northwestern half of the trench it directly overlay the bedrock surface of metamorphosed sandstone at an average depth of 0.38 metres below the modern ground surface. In the central part of the trench, the hillwash overlay a mid-brown sandy clay loam (Context No. 103; maximum depth 0.40 metres), which had a slightly sticky consistency and contained occasional brick fragments, eighteenth-century pottery and bottle glass. How this deposit came to be formed is uncertain, however, it may represent another deposit of hillwash. Towards the base of this sandy clay loam (Context No. 103) deposit an undeformed lead, or lead alloy, musket ball (Small Find No. 1074; diameter 17 millimetres, weight 19.1 grammes), and a gun flint (Small Find No. 1073) were retrieved. These finds are interpreted as relating to the seventeenth-century military activity in the area. For most of its extent this possible hillwash directly overlay the surface of the bedrock, however, its southeastern edge overlay a thin deposit of compacted gritty clay that may represent a natural subsoil (Context No. 108; maximum depth 0.10 metres) that directly overlay the bedrock.

Figure Nine: Trench One following completion of excavation, looking northwest. Note the rock-cut edge (Context No. 109) in the foreground.

At the southeastern end of this trench this apparent natural subsoil (Context No. 108) had been cut (Context No. 109) by a steep edge that also passed through the bedrock for an excavated depth of 0.76 metres. This steep edge did not appear to be natural and is interpreted as a rock-cut feature (Context No. 109). Although only exposed in a 0.80 metre wide trench, this steeply cut edge was observably aligned on a near east-west orientation. Only the northern half of this cutting was exposed in the last 0.60 to 0.25 metres of Trench One. It was filled with a thick deposit of yellowish gravelly sand that contained at least one concentration of shell (Context No.105; maximum depth 0.37 metres) and which probably

represents the deliberate deposition of material derived from the nearby shoreline. Although mostly sterile, this gravelly sand (Context No. 105) contained a fragment of possible roof slate (Small Find No. 1076) and a sherd of blackware pottery (Small Find No. 1075). It overlay a dark brown silty clay (Context No. 106, excavated depth 0.30 metres) that is interpreted as probably representing an *in situ* soil horizon and which contained a large sherd of Buckley blackware dating to the eighteenth or nineteenth century (Small Find No. 1079). It is uncertain what this artificial edge represents. Although it may have been part of one of the Jacobite entrenchments represented on Nevill's siege map, its apparent east-west alignment is not consistent with the northeast-southwest alignment of the entrenchments represented upon the siege map. A more likely explanation is that it represents a low-cliff edge, initially created as a result of natural erosion associated with either the adjacent stream or the River Foyle and then quarried to provide stone for the adjacent demesne wall. The hole created by this quarrying was left open enabling an eighteenth- or nineteenth-century soil to develop (as represented by Context No. 106), before it was deliberately backfilled with material derived from the adjacent shoreline (as represented by Context No. 105). Further excavation will be required to resolve this interpretive uncertainty.

Trench Two

Trench Two was aligned roughly northwest-southeast with the northwestern end of the trench being located immediately adjacent to a modern field boundary. The trench was 0.8 metres wide, 15.0 metres long and was positioned upslope and to the west of Trench 1 in an area where the ground surface of the natural slope was uneven suggesting the former presence of earthworks.

Figure Ten: The tree throw (Context No. 216) in Trench Two following excavation, looking southwest.

As with Trench One, the sod and topsoil were excavated as a single stratigraphic unit (Context No. 201; maximum depth 0.30 metres). Stratigraphically underlying the topsoil was

a mottled grey brown, gravelly clay deposit (Context Nos. 203/213) that was interpreted as representing a natural subsoil that had been disturbed by root action and animal burrowing. Excavation of a small sondage into this deposit revealed that it only had a maximum depth of 0.06 metres before it became a 'clean' natural bright-orange sandy clay subsoil. At the northwestern end of the trench, the removal of the topsoil (Context No. 210) revealed evidence of two cultivation furrows, approximately 0.25 metres wide and aligned approximately northwest-southeast. The position of these features, which were not excavated, lay just beyond the outer edge of a positive lynchet that had formed across the line of the modern field boundary (cf. Evans 1978, 121-122, fig.50).

The mottled grey brown, gravelly clay deposit of disturbed natural subsoil extended throughout Trench Two except for a complex negative feature (Context No. 216) located in the centre of the trench at the point at which the ground surface was uneven. The northwestern (up-slope) edge of the feature was relatively steep, whilst its southeastern (down-slope) edge was comparatively shallow. Excavation demonstrated that this feature was a tree throw that had been filled with a complex succession of hillwash and silt layers, some of which had supported the growth of vegetation and consequently had a dark, almost peaty, organic character. Undoubtedly, the uneven character of the overlying ground surface, which had dictated the sighting of Trench Two's position, was a direct result of the tree throw. The tree throw had a maximum exposed extent of 3.80 metres and a maximum exposed depth of 0.56 metres. The latest of the fills of the tree throw were localised deposits of light grayish brown gravelly clay (Context No. 202; maximum exposed depth 0.20 metres) and mottled, light grey and yellowish brown sticky, sand clay loam with frequent gravel inclusions (Context No. 204; maximum exposed depth 0.16 metres). These deposits overlay a sequence of a grey brown clay with occasional charcoal flecking (Context No. 209; maximum exposed depth 0.14 metres), a thin deposit of dark black peaty clay with frequent sub-angular stone inclusions (Context No. 214; maximum exposed depth 0.07 metres), and a mottled orange, friable, sandy clay (Context No. 205; maximum exposed depth 0.28 metres). Underlying this last deposit the northwestern part of the tree throw was filled with a mid-yellowish grey-brown sandy clay (Context No. 206; maximum exposed depth 0.26 metres) that in turn overlay an orange, sandy clay with mottled grey clay banding (Context No. 210; maximum exposed depth 0.24 metres); whilst the southeastern part of the tree throw was filled with a dark black clay loam (Context No. 208; maximum exposed depth 0.16 metres), a thin mid-grey, sterile clay with stone inclusions (Context No. 211; maximum exposed depth 0.08 metres) and a light brownish-orange sandy clay loam (Context No. 212; maximum exposed depth 0.26 metres).

Discussion

The evaluative fieldwork undertaken within the Boom Hall demesne has produced positive evidence suggesting that it is possible to identify, on the ground today, features associated with the seventeenth-century military landscape. For example, the geophysical survey (Figures Four and Five) identified a number of anomalies which may represent the apparent re-used rath and adjacent house depicted on Nevill's siege map of *c.*1694 (Figure Two). The results of the excavation are disappointing in so much that no unequivocal evidence for the Jacobite entrenchments represented on Nevill's siege map (Figure One) was uncovered. On reflection, it may be that the trenches were located too close to the stream identified as that being crossed by the bridge in Nevill's map (Figure Seven). That said, the recovery of lead, or lead alloy, shot (Small Find No. 1074) and a gun flint (Small Find No. 1073) from Trench One strongly suggests that the trenches were located close to the sought for area of seventeenth-century military activity. In addition, it is also possible, but not probable, that the rock-cut edge (Context No. 109) identified towards the southeastern end of Trench One represents the back edge of one of the Jacobite entrenchments. Further excavation will be required to interpret this feature with absolute certainty.

Recommendations

Although no elements of the seventeenth-century military landscape within the environs of the Boom Hall demesne were identified, the results of the evaluative investigations reported upon here are positive enough to suggest that the area has the potential to form a suitable site for a community-based archaeological project. Given the central importance of the history of the 1689 siege to the identity of various community groups in Derry City, such an archaeological project is likely to generate much local interest and demand for the opportunity for the public to participate. Any such project based at Boom Hall would have significant potential to contribute towards Government agendas promoting both parity of esteem and respect for the identify and ethos of both main communities and their related traditions in Northern Ireland. Further evaluative excavations at Boom Hall - preferably carried out over a longer time span than those reported upon here - would be required before an excavation involving members of the local community could be meaningfully planned. It is suggested that this additional work is carried out as a priority in 2013.

The following specific recommendations are made:

1. The archaeological potential of the seventeenth-century military landscape in both the specific area of the Boom Hall demesne and the wider landscape extending up

both sides of the River Foyle, from the city of Derry to Culmore Fort is formally recognised by the Northern Ireland Environment Agency. Given the potential future development demands on this fragile landscape, resources should be made available to identify and survey post-medieval military features in this area with a view to informing a future management strategy for their protection.

2. The seventeenth-century military features are just one element in a complex archaeological landscape within the Boom Hall demesne that needs to be understood, if only to aid the identification and interpretation of the military features relating to the two sieges of Derry. Phases of activity that have had a considerable effect on the Boom Hall landscape include: the construction of the Foyle Bridge in the early 1980s; the World War Two occupation of Boom Hall by the Women's Royal Naval Service (WRNS); and the parkland landscapes associated with both the extant Boom Hall built in the 1770s and the earlier, historically attested Boom Hall apparently located somewhere in the vicinity of the current walled garden. It is recommended that the wider assessment of the archaeological potential of the former demesne associated with Boom Hall initially requested by the Northern Ireland Environment Agency (i.e. Macdonald *forthcoming*) is completed. It should be noted that much of the fieldwork for this assessment was conducted simultaneously with the evaluation reported upon here.
3. It is recommended that the seventeenth-century military landscape associated with the Boom Hall demesne forms the subject of a future community-based excavation, although not one necessarily coinciding with the 2013 City of Culture year. It is noted that a further episode of evaluative archaeological fieldwork intended to identify elements of that military landscape will be required before that community-based excavation can be meaningfully planned.

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Bibliography

Alexander, R. 1946. *Account of the Family History of Rev. Robert Alexander (Born 1795) and Other Notes of the Families of Alexander and McClintock*, Londonderry Sentinel, Londonderry.

Black, E. (ed.) 1990. *Kings in Conflict. Ireland in the 1690s*, The Ulster Museum, Belfast.

Evans, J.G. 1978. *An Introduction to Environmental Archaeology*, Paul Elek, London.

Ferguson, W.S. 2005. *Maps & Views of Derry 1600-1914, a Catalogue*, Royal Irish Academy, Dublin.

Johnson, A. 1997. *Do March in Step Girls. A Wren's Story*, A.Morley, Sandford.

Macdonald, P. forthcoming. *Archaeological Assessment of Boom Hall, Co. Londonderry and its Immediate Environs*, Centre for Archaeological Fieldwork, Belfast.

Malley, A. 1993. The history of Boomhall, Londonderry, *Foyle Civic Trust Rev.* 4, 5-7.

Milligan, C.D. 1946. *The Relief of Derry. Browning and the Boom. Its Making and Its Breaking*, Londonderry Sentinel, Londonderry.

Young, W.R. 1932. *Fighters of Derry. Their Deeds and Descendants. Being a Chronicle of Events in Ireland During the Revolutionary Period 1688-1691*, Eyre and Spottiswoode, London.