Binevenagh Coast and Lowlands Defence Heritage Audit

(for proposed Landscape Partnership Scheme)

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*Cover image: Limavady Airfield Air Training Dome (courtesy of Causeway Coast and Glens Borough Council).*
1. Background to the report

The Causeway Coast and Glens Heritage Trust (CCGHT) promotes and develops the Causeway Coast and Glens area’s ‘scenic landscapes, important wildlife resources and... rich cultural heritage’. CCGHT encourages management of physical landscapes and their historical accretions with a view to sustainability and long-term benefit to local communities.1

CCGHT is responsible for managing the Antrim Coast and Glens Area of Outstanding Natural Beauty (AONB), Causeway Coast AONB and Binevenagh AONB. The Trust has delivered a successful Landscape Partnership Scheme in Antrim Coast and Glens AONB and is now developing a similar initiative in Binevenagh AONB. Landscape Partnership Schemes involve local, regional and national organisations working together to make a long-term difference to landscapes and the communities that live and work within them. They do this through habitat conservation, promoting joined-up management, reviving long-lost traditional skills and in other ways increasing engagement, learning and participation in caring for our landscapes.

In 2015 CCGHT published Defending the Causeway Coast Area of Outstanding Natural Beauty. Pointing to the significance of this ‘strategically important stretch of Europe’s North Atlantic coastline’, the publication explains its role in defence in the 20th century and highlights how this was shaped by the physical topography, as well as pointing to its ongoing legacy.2 Binevenagh AONB too has a prolonged and rich history of defence, involving both the natural landscape and built enhancements and additions. Through periods of conflict and political unrest from the Napoleonic era to the present, the Binevenagh Coast and Lowlands landscape has played a key part in the defence of the North Atlantic, European and Arctic regions. Though several significant defence heritage features survive, many have fallen into disrepair, been obscured by new development, or simply disappeared from public consciousness. Binevenagh Coastal and Lowlands Landscape Partnership Scheme (LPS) aims to secure Heritage Lottery Fund (HLF) support to develop defence heritage as a resource for both local communities and visitors. In preparation for future grant applications the Partnership has commissioned an audit of defence heritage features in the Binevenagh area. It will prioritise protecting them and promoting their value, encouraging local people and visitors to experience, learn from and appreciate them.

25 years ago an audit of defence heritage in the Binevenagh area most likely would have been a perfunctory exercise encompassing only the Martello Tower on Magilligan Point and the Ordnance Survey Baseline. However, since the mid-1990s interest in 20th-century defence heritage has burgeoned. Modern defence heritage features gained

recognition as a valuable cultural and archaeological resource in Northern Ireland when the then Environment and Heritage Service (now Department for Communities: Historic Environment Division) embarked upon the Defence Heritage Project in 1997. To date the Defence Heritage Record includes 738 features across the province, and has highlighted the need to develop strategies to value these sites, record them and preserve their fabric and memory for current and future generations. Therefore the proposed Binevenagh Coastal and Lowlands Landscape Partnership Scheme is a timely and worthwhile intervention, which we hope will deliver sustainable outcomes in relation to documenting, preserving, and engaging with defence heritage.
2. Research methodologies

**Desktop survey**
Desktop surveys of key databases prepared the ground for fieldwork, assessment and project development.

The main repository for information on extant defence heritage sites in Northern Ireland is the Department of Communities: Historic Environment Division (HED). The Defence Heritage Project (DHP) created a database of over 300 sites relating to World War I (1914-18), World War II (1939-45), the Cold War (1949-89) and the Troubles period (1969-98). A search for data related to the proposed Landscape Partnership area produced a list of 91 sites. The hard copy files held by HED were examined to assess changes in condition and access since first recorded.

28 of the 91 identified sites had been allocated DHP numbers. The rest were labelled 0, though most were individual features within a larger site already assigned a DHP number. Ten DHP sites also have Site and Monument Record (SMR) numbers.

Research revealed inconsistencies in the approach to numbering features within larger sites, some duplicate entries and two locations on the SMR that failed to correlate with the location recorded in the DHP.

In addition to site data available in the DHP database, this study included Magilligan Martello Tower (LDY 1:1), a state care monument recorded in the SMR, and Magilligan Camp, an operational training facility for the British Army.

**Field Survey**
All sites within the proposed Binevenagh LPS boundary with extant remains were visited to verify the nature and condition of the defence heritage resource. The condition of individual elements within the sites was recorded photographically and the overall condition of the site was rated:

1. Substantial remains
2. Some remains
3. Traces only
4. No visible remains

Threats to the material survival or setting of each site were recorded. In addition to the condition reports, the sites were rated on accessibility in relation to transport and walking routes. Accessibility was gauged on a four-point scale as follows:
A. Visible from road and accessible by car or short journey on foot
B. Away from road requiring some walking over rough or obstructed terrain, but less than one mile from starting point
C. More energetic walking over rough ground, in an awkward or hazardous position over one mile away from starting point
D. Very remote, in boggy uplands, away from tracks or pathways, significant effort required to reach site

The results of both condition and access reports were combined to provide a site assessment indicator, e.g. 1A would represent a site with substantial remains within sight and/or easy access to a road.

Limitations of field survey
The data available in the HED Defence Heritage Record is not based on a systematic survey of defence heritage archaeology in Northern Ireland. Consequently, the record is not complete and in places inaccurate. Given the size of the airfields at Ballykelly and Limavady, and the parameters of this audit, it was not possible to examine the entire area. It is highly probable that unrecorded defence heritage features remain within the boundaries of these sites. In addition, many of the DHP sites are on private property requiring permission to access; as fieldwork was carried out during normal working hours, sometimes permission could not be obtained. Further, it was not possible within the time frame of the audit to get permission to publish photographs of some sites within the operational area of the Ministry of Defence estate at Magilligan.

Stakeholder consultation
Consultations with a wide range of public, community and voluntary stakeholders informed the research from an early stage. A list of key individuals and organisations drawn from existing networks and partnerships was provided by CCGHT. A small number of additional contacts were added to this list through recommendations from interviewees. Face-to-face meetings or phone interviews were arranged with each contact, according to availability and/or the limitations of the research period. Information gathered during these consultations enabled an assessment of local appetite for improving public access, learning about, and engagement with, defence heritage. Also it helped to identify potential partnerships through which future projects of benefit to the community or visitors could be developed.

During the course of the research the following organisations and individuals were consulted:
- Ministry of Defence (MoD)
- Department of Communities: Historic Environment Division
- Causeway Coast and Glens Borough Council Countryside and Coast Manager
- Causeway Coast and Glens Borough Council Museum Services Development Manager
- Forest Management Recreation Officer, Forest Service
- Development Officer, Loughs Agency
- Nature Conservation and Access Warden, National Trust, Londonderry Office
- Centre for Archaeological Fieldwork, Queen’s University Belfast
- Living Legacies Project, Queen’s University Belfast
- Aghanloo Community Association
- Castlerock Community Association
- Magilligan Community Association
- Roe Valley Ancestral Research Group
- Ulster Gliding Club
- Norman Thorpe, Shackleton Aviation Museum
- Johnny McNee (local enthusiast)
- Andrew Glenfield (local enthusiast)

Only one identified stakeholder, the Ulster Aviation Society, did not complete an interview, due to the ill health of the key contact, Ernie Cromie. An email response was requested instead, but has not been received to date.

As the list of stakeholders provided related to CCGHT’s existing networks and partnerships, natural heritage and landscape management interests predominated. Through interviewee recommendations and the research team’s own networks, a list of additional potential stakeholders has been compiled. This list includes people working in built heritage, cultural heritage, heritage interpretation and education, as well as people with a strong personal interest in defence heritage and local landowners (see Appendix C). The additional stakeholders will be able to make valuable contributions in the development phase of the project.
3. What is the defence heritage of the Binevenagh area?

Defence heritage is a relatively new term in archaeology. During the 1990s it became clear that there was a pressing need to develop strategies for the preservation and management of modern material culture (primarily 20th-century), a neglected resource that was starting to fade from view. The most tangible defence heritage remains were the buildings and structures erected during times of conflict, but the resource also includes monuments, cemeteries, vehicles/vessels/aircraft, artefacts, oral histories, historical records and artistic expression.

Defence heritage was an unknown concept in archaeological circles in Northern Ireland until the Environment and Heritage Service (now Department for Communities: Historic Environment Division) embarked on the Defence Heritage Project in 1997. As mentioned, the Defence Heritage record now registers 738 features of interest throughout Northern Ireland. Recognition of defence heritage as heritage means that strategies to value record and protect these sites for current and future generations must be developed. The growth in professional understanding and acceptance of military sites as a valuable cultural and archaeological resource has been matched by increasing public awareness and interest in the history and material culture of modern warfare.

3.1 Historical overview

The unique geography of the Foyle estuary and the surrounding landscape has given the area a central role in tumultuous periods in Irish history. Throughout the 16th and 17th centuries, military activity was focused on the haven provided by the Foyle and the protective narrows at Magilligan. An English landing on the Foyle was a key turning point of the Nine Years War (1593-1603), and the siege of Derry in 1589 was pivotal to the Williamite Wars (1689-1691). The region has continued to play a role in military events to the present day.

When the threat of invasion from Napoleonic France menaced the shores of Britain and Ireland, a network of stone Martello towers was built to protect vulnerable sections of the coast, one of which (and the only one in present-day Northern Ireland) was constructed at Magilligan Point. Completed in 1817 (two years after Napoleon was finally defeated), the position was armed with a 24-pounder smoothbore cannon that swivelled around a central pivot. The tower complemented a similar fortification on the County Donegal shore of Lough Foyle, opposite.

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More peaceful times followed in the 19th century, and the Board of Ordnance was tasked with mapping the whole of Ireland. This was the first large-scale mapping of an entire country. All measurements were founded on the Lough Foyle Baseline, a near-eight-mile line running from Mountsandy in the north to Ballykelly in the south exploiting the unusually flat terrain of the lough shore. The Ordnance Survey used specialist instruments to achieve a remarkable degree of accuracy; when the line was electronically surveyed in 1960 the measurements differed by only one inch.

A rifle range was established first at Magilligan Point in 1898, and in 1909 the army set up a tented camp (later removed to Ballykinler, Co. Down). In 1912 the army built two further ranges. Magilligan Camp provided training facilities before troops were dispatched to overseas battlefields during World War I. Consequently, practice trenches were located there. They provide a tangible physical link between Binevenagh and the horrors of trench warfare, which made such an indelible mark on the consciousness of local communities.

The momentous events of World War II saw the region thrust into the centre of global conflict as never before. With access to the treaty ports in the Irish Free State cut off and supply convoys from the USA routed north of Ireland, the naval facilities on the Foyle and the airfields around it became vital. They were instrumental in winning the Battle of the Atlantic by neutralising the threat of German U-boats in the area. Moreover, the northwest was the only part of Northern Ireland where an amphibious invasion was thought likely to occur. The protected anchorage on the Foyle and the flat landscape of the lowlands made the area ideal for naval operations and the construction of airbases for maritime patrols and training of flight crews.

The World War II military infrastructure of the Binevenagh LPS area covers a broad spectrum of activities, ranging from training, coastal and anti-aircraft defence to early warning and flight operations. RAF Limavady was the first of four new airfields to be constructed along the north coast during World War II. It opened late in 1940 and was assigned to Coastal Command. Initially, long-range anti-submarine patrols were flown out of Limavady, continuing until early 1942, when it became an operational training unit. RAF Ballykelly opened at the start of June 1941 when Coastal Command Development Unit was established there. Throughout the war, Coastal Command flew anti-submarine patrols and air-sea rescue flights.

With the fall of France in 1940 steps were taken to fortify commercial ports and secure vulnerable beaches against the threat of German landings. A 12-pounder QF gun was installed at Ebrington Barracks during June 1940, but this was insufficient to engage any but the lightest craft or submarines. Therefore a new emergency battery was established on Magilligan Point during July. Two 6-inch BL Mk VII guns were sited on either side of the Martello Tower, which was fitted with a concrete observation post. The 12-pounder was moved to supplement the two guns at Magilligan in August 1940.
After the fall of France, the invasion of the United Kingdom became a distinct possibility. Though the weight of the German attack was expected to land on the southeast of England, preparations were made to resist landings along the coast of Northern Ireland. From June 1940 the government instituted a programme to extend fixed defences into a national system, which included Northern Ireland. The northwest’s long sandy beaches, beloved of holiday makers, meant the area was particularly vulnerable to amphibious landings. Moreover, the concentration of naval facilities and aerodromes engaged in the Battle of the Atlantic and supporting radar sites made the area an important hub for Allied activity in the region. Consequently, a ‘coastal crust’ of defences consisting of concrete pillboxes (both along the beaches and holding the beach exits), barbed wire and roadblocks were erected to defend those expansive beaches.

The Londonderry Gun Defended Area was one of four established in Northern Ireland and initially consisted of two heavy anti-aircraft batteries. Further defences were installed as the strategic importance of Derry increased, and five more heavy anti-aircraft sites were established, one of which was LO7 (Magilligan). LO7 battery was positioned to protect ships coming through the narrows. As the Allies gained the upper hand in the war, the threat of German attack receded. Gun defences around the city were reduced, and the battery at Magilligan was finally closed in February 1944.

The area sat at the western extremities of an electronic barrier that circumscribed the United Kingdom. Binevenagh played an active part in the first electronic war, as radars guided allied ships and aircraft while searching for enemy targets. A Chain Home Radar site monitored the airspace above Castlerock from November 1940 and a Chain Home Low Radar site at Downhill closed the gaps in the system by scanning for low-level aircraft and the tracking the movements of coastal shipping.

The demand for troops during saw further expansion of Magilligan Camp. By 1942 there was the ‘Old Camp’ (on which are sited most of the modern camp’s facilities) and the ‘Musketry Camp’. A prisoner of war camp was created in 1942 using the huts of the Musketry Camp, which was later incorporated into Magilligan Prison in 1972. The Royal Navy established a target range in Ballymaclary townland, which was transferred to the Army in 1959.

World War II ended, only to be replaced by the Cold War. Once again the landscape was changed and modified to find its role on what was a potentially global battlefield, in a war threatening the very survival of humanity. Traces of Cold War heritage can be found in the runways of Ballykelly Airfield, the radar at Castlerock and the observation bunker at Kilcranny just north of Coleraine. The radar station at Castlerock remained operational when it was briefly used as a readiness Chain Home Station as part of the Rotor Radar Programme to renew radar coverage in the UK in response to the threat from the Soviet Union. At RAF Ballykelly, crews trained to counter Soviet
submarines, and provide fallback facilities to four Avro Vulcans from the RAF V-bomber force, while small Royal Observer Corps bunkers sat prepared for the recording and reporting of the impact of Soviet nuclear warheads.

During the Troubles period in Northern Ireland (1969-98), Ballykelly came under the auspices of the Army and was renamed Shackleton Barracks. However, the base closed in 2008. Magilligan Camp continued to train troops at its ranges, but specialist facilities were developed, such as the Foyle Patrol Base and the Patrol Village, which were used to prepare troops for anti-riot and crowd control duties. The camp is still an active training unit for the British Army and frequently conducts live firing training.

Every conflict has left its mark to a greater or lesser extent. As the geography helped shape the history, the history made its corresponding mark on the landscape and memories of those who lived there.

3.2 Audit of defence heritage features

The audit identified 33 defence heritage (DH) sites with extant features within the proposed Binevenagh LPS area.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-aircraft battery</td>
<td>1</td>
</tr>
<tr>
<td>Airfield</td>
<td>2</td>
</tr>
<tr>
<td>Airfield dispersed living/communal sites</td>
<td>7</td>
</tr>
<tr>
<td>Coastal gun batteries</td>
<td>2</td>
</tr>
<tr>
<td>Observation post</td>
<td>1</td>
</tr>
<tr>
<td>Ordnance Survey features</td>
<td>5</td>
</tr>
<tr>
<td>Pillboxes</td>
<td>5</td>
</tr>
<tr>
<td>Radar sites</td>
<td>3</td>
</tr>
<tr>
<td>Training sites</td>
<td>7</td>
</tr>
</tbody>
</table>

By time period these could be broken into:

- Napoleonic/ 19th-century: 6
- World War I: 2
- World War II: 22
- Cold War: 1
  
  (elements within 2 other sites)
- Troubles period: 2

**Land ownership**

Ten sites are located on public land, while the majority (23) are located on privately owned land. The sites in public ownership are:

- Ballykelly OS base tower
- Bennarees pillbox
- Grange Beg pillbox
- Lower Doaghs Pillbox
- Magilligan Camp barracks (WWI)
- Magilligan Camp barracks (WWII)
- Magilligan Martello Tower
- Magilligan coastal battery
- Magilligan Strand (Ballymaclary) pillbox
- Magilligan Camp patrol base
- Magilligan Camp public order training facility.

Access
Given that most of the DH sites had to be built where they could be easily accessed by staff it is unsurprising that most are relatively easy to reach. Most sites could be driven to or were a short walk from main roads.

Access A: 28
Access B: 3
Access C: 0
Access D: 2

However most sites are on private property. The majority of those in public ownership, Magilligan Strand Pillbox, Magilligan Camp barracks (WWI and WW II), Magilligan HAA Battery, Patrol Base and Public Order Training Facility are all located on Ministry of Defence land and subject to access only under supervision by authorised military personnel.

Condition
Most sites were graded 1 or 2 for condition. None of the sites graded 4 (no visible remains) are noted on this list.

Condition 1: 22
Condition 2: 6
Condition 3: 5

Magilligan Martello Tower is in excellent condition and is probably one of the best-preserved examples of its type anywhere in the U.K. The OS base towers are well-preserved as are the OS trig points.

The military structures from World Wars I and II within Magilligan Camp (and HMP Magilligan) are in good condition. Due to their continuing use as a military training facility, the buildings have been modified, re-clad and refurbished with modern heating and windows. The World War I practice trenches are visible in some sections while other parts can only be seen as cropmarks on aerial photographs. However, this does not preclude the survival of sub-surface archaeological remains.

The two airfields within the proposed LPS area are well preserved with many contemporary structures still extant on both sites. The runways, control tower and
hangars at Ballykelly tell the story of the sites role in both World War II and the Cold War. The long cantilevered hangar has B+ listed status. However the real jewel is the airfield at Limavady. The technical sites contain the best-preserved group of airfield structures anywhere in Northern Ireland. The condition of the technical site and the preserved context in which they sit is unique to Northern Ireland. Moreover, the range of buildings, control tower, hangars, workshops and defence structures help to create a true sense of place absent in most other airfield sites. Two defensive clusters and the gunnery training dome are scheduled under the HMAOO 1995. Limavady Airfield is easily accessible but all the property is in private ownership. Moreover some small business and light industry operate out of the site and it also contains one private residence.

The heavy anti-aircraft battery LO7 from the Londonderry Gun Defended Area (GDA) on Magilligan Point is in excellent condition. It retains all its most significant features that define its use. Moreover, its importance to the defence heritage in the region is increased due to its survival as part of a group of HAA batteries in the Londonderry Gun Defended Area. LO3 (Sherriff's Mountain) and LO5 (Culmore) remain in similarly good condition and are also scheduled under HMAOO 1995. In comparison to the HAA batteries surviving of the Belfast and Larne GDA, LO 3, 5 and 7 represent the best surviving group in Northern Ireland.

All the pillboxes noted are in good condition and retain their settings and sightlines. The pillbox at Grange Beg is scheduled under the HMAOO 1995. The pillbox on Magilligan Strand is possibly the best preserved of all but currently is buried under sand.

The dispersed living sites vary in quality with some retaining structures in excellent state of preservation, such as the gas decontamination site at Communal no. 1. However others are dilapidated and five (sites 4, 6, 9, 9 and 10) have no visible remains.

The radar sites at Castlerock and Downhill are in relatively good condition. Downhill Chain Home Low Radar site retains its key structure, the Transmitting/Receiving Block. While Castlerock has three structures and some outlying aerial bases, this still represents a loss of almost 60 per cent of the site's main buildings.

The Troubles training structures in Magilligan are in good condition but they are constructed from lightweight materials (scaffolds, steel frames and steel cladding), which could jeopardise their long- or even medium-term survival.

3.3 Threats to preservation

While it is essential to get some idea of the extent of the Defence Heritage resource within the proposed Binevenagh LPS area, it is also pertinent to highlight issues that affect the condition and future survival of the sites.
One of the most pressing issues and perhaps the least apparent is the absence of the defence heritage on planning hazard maps. Prior the issuing of planning permission and subsequent development, council planning departments must check maps showing issues of concern that may affect their decision to grant planning permission. During this process planners consult with relevant departments to find out if development has the potential to affect, alter, damage or destroy built heritage. However, though sites recorded as listed buildings or appearing on the HED Sites and Monuments Record are identified, sites recorded solely by a Defence Heritage number are not. Consequently DH sites have no protection under planning policy and are unlikely to be recognised as sites of heritage/archaeological potential or value. This situation could easily result in DH sites being damaged or demolished.

![Figure 1: It is likely the developer and planner have no idea this part of Castlerock Chain Home Radar site has any heritage value.](image)

The apparent sturdiness of DH sites, often built with steel and reinforced concrete, does not prevent them from disappearing during redevelopment. Therefore, addressing the failure of planning to account for features recorded on the DH record within HED should be a matter of urgency.

At Limavady Airfield there has been a gradual erosion of the site, caused by demolition, removal of structures for redevelopment, vandalism and decay due to neglect and the effects of weather. Most significant was the loss of the Operations Block in 2006, when it was demolished by the owner. Before this, it was the best-preserved operations block in Northern Ireland with extant flight operation boards and air filtration plant. The structure would have been ideal as a flagship restoration and reuse project but sadly this is now a moot point.
Figure 2: (Left) Limavady Airfield Operations Block in 2004, when it was the best-preserved operations block in Northern Ireland. (Right) The operations block in 2006 after demolition by the owner.

The Photographic Block/Lecture Room and Link Trainers noted during a preliminary survey by HED staff in 2004 since have been removed and replaced with a metalled and fenced storage area.

Figure 3: At Limavady Airfield, the Photographic Block/Lecture Room and Link Trainers have been replaced with a metalled and fenced storage area.

The Watch Office (control tower) appears to be vandalised regularly and in recent years was gutted by fire, though the masonry of the building seems sound. In the years since 2004 the roof of the Parachute Store has been lost, likely due to weather damage. Without remedial work this structure will continue to deteriorate.
Figure 4: Evidence of significant deterioration of DH features at Limavady Airfield. (Top left) The Watch Office in 2004 and (top right) in 2017. (Bottom left) The Parachute Store in 2004 and (bottom right) in 2017, the roof having collapsed.

The Dome Trainer, while given statutory protection, remains unsecured and appeared at the time of this field visit to be used as a makeshift stable. Though there was no evidence of recent activity, locals attest to youths building fires within the structure.

Lack of maintenance and gradual erosion of the fabric of the airfield structure can also be seen at the most easterly and unused Bellman Hangar. Without ongoing repairs, damaged cladding further exposes the structure to decay.

Figure 5: Limavady Airfield Bellman Hangar showing missing cladding.
4. Why is the defence heritage of the Binevenagh area important?

Though the proposed Binevenagh LPS area may seem geographically remote, historically it has been one of the most militarised landscapes in Northern Ireland, and Ireland as a whole. The defence heritage found within the Binevenagh LPS area includes traces of every major conflict of the last two hundred years. The survival of such a variety of sites makes the resource all the more exceptional within a small geographical area.

- Each individual feature may not represent the best-preserved example of that type, yet in totality the broad range of sites and high level of preservation makes the Binevenagh LPS area of **national importance**.

- The ground-breaking project to map Ireland by the Ordnance Survey was a world first and represents a milestone in the history of world cartography, giving the sites associated with it **international importance**.

- Magilligan Martello Tower is of **national significance**, being the only Napoleonic battery in Northern Ireland and the best preserved example on the island of Ireland.
• RAF Limavady at Aghanloo represents the best-preserved airfield technical site in Northern Ireland and retains a sense of place that cannot be found on similar sites anywhere else in the province. The limited redevelopment, retention of iconic structures and preserved setting makes this undeniably a site of **national significance**.

• The air training dome at Limavady Airfield is of **national significance**, being one of only six remaining in the UK.

![Figure 8: Limavady Airfield Air Training Dome and Watchtower (courtesy of Causeway Coast and Glens Borough Council).](image)

• The level of preservation at the LO7 Heavy Anti-Aircraft Battery at Magilligan warrants protection in its own right. But it is also one of three surviving batteries of the Londonderry Gun Defended Area, along with an even rarer Light Anti-Aircraft Position at Lissahally, which together are of **national significance**.

• The World War I practice trenches at Magilligan Camp, discovered through this research, are of **regional significance**, as it was believed previously that the only surviving practice trenches in Northern Ireland were at Abercorn Barracks in Ballykinler (County Down).
• While the radar sites at Downhill and Castlerock are in poor general condition, their value as monuments marking the advent of electronic warfare is of **regional significance**.

• Given the rarity of World War II emergency coastal batteries, the remains at Magilligan Point are of **regional significance**.

• As fragmentary evidence for the coastal crust defences in Northern Ireland during World War II, the pillboxes within the proposed LPS area are of **regional significance**.

• The retention of the Foyle Patrol Base and Public Order Training Facility at Magilligan Camp provides a physical link to the history and legacy of the Troubles, which is of **regional significance**. Though modern Troubles-period defensive architecture once was so common as to be unremarkable, the advent of the peace process and normalisation of streets and police stations in Northern Ireland has led to the almost total disappearance of architecture and structures associated with this conflict.

• Though the condition of the dispersed accommodation sites around Limavady airfield ranges from good to fragmentary (and some being absent altogether), the remains have **local significance** as representing a link to the community, pushing the military narrative beyond high-tech machine-based warfare to places where real people lived and worked.
5. How do people access, learn about and participate in Binevenagh’s defence heritage now?

Although the defence heritage of the Binevenagh area is well documented (see Appendix C) and relatively well understood, particularly in relation to World War II, there are limited opportunities for the public to engage with and learn about it. Few of the DH sites are accessible to the public at present, so the majority of those opportunities are in the form of exhibitions, learning resources or heritage trails.

Magilligan Point is already popular for tourism and recreation activities, which focus on the beach, the Point Bar and the ferry crossing to Inishowen in County Donegal. As well as being an Area of Special Scientific Interest and Special Area of Conservation, Magilligan Point has a diverse range of sites related to defence heritage. Magilligan Martello Tower makes a striking visual impression on the headland and is the best-known defence heritage site, but it is open to visitors currently only once a year, on the European Heritage Open Days weekend each September. Educational and group tours can be arranged through the local warden, though few local organisations seem aware of this. Interpretation of the site is provided through an outdoor panel and information online; there are no interpretive displays inside the building.

![Figure 9: Interpretive panel at Magilligan Martello Tower.](image1)

![Figure 10: Interpretive panel at entrance to Magilligan Beach.](image2)
The remains of Magilligan Point Battery are within property owned by Causeway Coast and Glens Borough Council and currently let for grazing. Public access is permitted, but no interpretive resources have been installed. An interpretive panel erected by the council at the pedestrian entrance to the beach makes virtually no mention of the defence heritage of the area.

Shackleton Aviation and Space Museum (shackletonaviationandspacemuseum.homestead.com), a voluntary organisation that promotes local aviation history, was based for a short time in Magilligan Ferry Terminal. Visitors could view a small interpretive display that presented the history of Ballykelly Airfield during World War II, the Cold War and the Troubles, placed in the context of the history of the five other World War II airfields in County Londonderry. The group also encouraged engagement from local schools. But the museum has been forced to vacate that property and now hopes to secure use of a former airfield building at Ballykelly.

Downhill House was occupied by American Forces during World War II, a story that is highlighted briefly in an interpretive panel at the building’s entrance. The property is owned and managed by the National Trust, which has seen an increase in annual visitor numbers from 8,000 to 50,000 in the last nine years. There are currently no tour-guiding or educational programmes at Downhill, but its World War II heritage is incorporated in an annual guided walk as part of Walk Fest, organised and delivered by Castlerock Community Association in partnership with the National Trust (walkni.com/festivals/castlerock-walkfest).

Outside the proposed landscape partnership area, though still in the local vicinity, interpretive displays at Green Lane Museum in Roe Valley Country Park highlight the defensive role of the area during World War II. Included in the displays are the remains of a World War II aircraft, salvaged from Lough Foyle, and a runway light from Ballykelly Airfield. The museum is open from April to September each year and hosts temporary exhibitions and family events related to current project programmes. The museum is managed by Causeway Coast and Glens Borough Council (CCGBC), which has developed and delivered a number of projects relating to defence heritage.
In 2003 a touring exhibition marking the 100th anniversary of the first flight included the history of Ballykelly and Aghanloo airfields. In 2005, to mark the 60th anniversary of the end of World War II, Causeway Museum Service (CMS) carried out an oral history programme and produced an educational resource for schools and community groups on the legacy of the war in the local area called ‘Our Lives’. In 2008, the museum service published a series of heritage trails for Limavady Borough Council highlighting Magilligan Martello Tower, the story of the Ordnance Survey of Ireland, and the role of the area during World War II. The booklet series is currently out of print and links to downloadable digital copies online have been removed since local government re-organisation. More recently, On the Brink: The Politics of Conflict 1914-1916 explored the impact and legacy of World War I and the Easter Rising in the local area through two touring exhibitions and a programme of guided tours and educational workshops. Causeway Museum Service is highly regarded for its work on engaging people with contested heritage, including the Troubles, and is currently planning a programme of learning and participation projects through Peace IV funding.

Causeway Coast and Glens Borough Council was responsible also for the recent development of public walks along the Ballykelly and Ballymacran Banks on the east shore of Lough Foyle. The walk provides good views of Ballykelly Airfield towards Binevenagh Mountain as well as the remains of a World War II aircraft partly submerged in the mudflats. These sites and their history are highlighted on the WalkNI website, though not on interpretive signage, which focuses on the wildfowl of the wetlands.

Figure 12: Pages from Limavady Heritage Trail series produced by Causeway Coast and Glens Borough Council Museum Service.
Supported by the Heritage Lottery Fund and local councils, the GI Trail Northern Ireland was launched earlier this year (gitrailni.com). Three distinct trails map the sites occupied by the American armed forces during World War II, tell the stories of the men stationed here and explore their legacy. An interactive online resource enables digital exploration of the trails and acts as an information hub for genealogists and local voluntary groups promoting World War II heritage. It also offers guided tours by local experts and promotes relevant events.

Magilligan Field Centre runs educational programmes for primary and secondary schools, as well as teacher training programmes, predominantly related to the geography and science curriculum. A recent geology teacher-training course was delivered in partnership with CCGHT. As part of Key Stage 2 ‘World Around Us’ programmes, groups visit Magilligan Martello Tower and Downhill House, but heritage features are not usually included in programmes for secondary schools due to a lack of interest from history teachers. The field centre caters for a number of secondary schools from Donegal, though primary schools have largely ceased visiting since the ferry service has become less reliable.
6. What opportunities and barriers exist to improving access, learning and participation?

6.1 Public access

**Magilligan Point**

This small area contains a cluster of defence heritage features relating to the entire historical span of this study. Almost all are well preserved and are in public ownership, making the potential for public engagement significant.

The Martello Tower is the most significant of all the defence features within the study area, being the only one of its type in Northern Ireland and one of the best-preserved examples in Ireland. It is owned and managed by HED, which has been identified as a key potential project partner. With an appropriate partnership management agreement in place, similar to arrangements at Carrickfergus Castle, it would be possible for CCGHT to manage visitor opening times at the tower on a seasonal basis. HED may also be willing to consider improving interpretation in the longer term.

The remains of Magilligan Coastal Battery lie predominantly on land owned by CCGBC, within easy access of the car park and principle pedestrian walks. It appears that the remaining features have been obscured only partially by sand and grass.
cover, though further investigation would be necessary to discover if any remains lie underground. Detailed survey and possibly excavation of this site would prove a valuable addition to developing understanding of the defence heritage resource.

The unusually constructed Lower Doaghs Pillbox is also easily accessible from the road, and would require minimal restoration work to enable access to the interior. The Ordnance Survey benchmark in front of the Point Bar provides opportunities to tell the internationally significant story of the Lough Foyle Baseline.

Approximately 1.5km back along the Point Road lie the remains of Magilligan Heavy Anti-Aircraft Battery. Parts of the site are already protected as a scheduled monument and the remains are in excellent condition for the most part. The battery is on land currently owned by MoD, which has indicated a willingness to facilitate survey, learning and engagement activities, or even to transfer ownership to another appropriate public, private or community organisation.

At Magilligan Training Facility, the remains of possible World War I practice trenches have been identified, which lie outside the perimeter of the main camp buildings. Inside the main camp, the Foyle Patrol Base and Patrol Village training facilities represent valuable and unique learning opportunities relating to the history and legacy of the Troubles. With permission from MoD, and suitable security arrangements, access could be arranged for a range of learning and community engagement activities.

This cluster of defence heritage features all lie within an area already popular for tourism and recreation, easily accessible by road, and with seasonal ferry links to the Republic of Ireland. At the ferry terminal, which is owned and managed by CCGBC, the former customs building currently lies vacant and could offer suitable facilities for learning and participation activities. In addition, the nearby Point Bar is able to offer catering and there is ample self-catering accommodation in the vicinity if required.

**Limavady Airfield**
Aghanloo represents one of the best-preserved examples of a World War II airfield in Northern Ireland, focused on the technical site. Though overgrown and poorly preserved in places, few historic airfields can match its sense of place; it is not difficult to visualise and understand what it meant to work at a World War II airfield here, making it an ideal candidate for place-based education.

However, there are major challenges to be addressed. First, the technical site is owned by various private individuals, who would be required to agree and cooperate to any proposals for development (property has changed hands several times in recent years so information on the current ownership status of each portion
of the site should be sought from Land and Property Services). The airfield is also a place of work and therefore any development would need to accommodate existing businesses. One of the World War II buildings is occupied currently as a private dwelling.

There are also significant health and safety issues. Many of the structures are in a state of continuing decay with broken glass and window frames and collapsing roofs. Most of the roofs are constructed with asbestos sheeting, which is also stored in significant quantities within a number of the buildings. Some of the buildings have suffered regular attacks from vandals, including arson, and at least one feature has been demolished by the landowner to avoid statutory protection. The Dome Trainer, while given statutory protection, remains unsecured, has previously suffered arson attacks, and appear to be used as a makeshift stable.

Bearing these challenges in mind, there remains significant potential to conserve, restore and enable public access and engagement with elements of this site. Some of the significant features are already under statutory protection and HED will support measures to improve preservation of these and other features. There are also indications that at least some of the landowners and business owners would be keen to explore regeneration proposals. Exemplar projects elsewhere provide successful models for governance, fundraising, community buy-in and sustainable management (see Appendix A).

**Ballykelly Airfield**

In comparison to Limavady Airfield, few features relating to flight operations at Ballykelly during World War II survive and the majority of those remaining are already scheduled for demolition or commercial reuse.

The western half of the airfield, including the Technical Site and Operations Block, is owned by Northern Ireland Water, which plans to demolish all structures to allow for the establishment of reed beds for wastewater treatment. Most of the upper airfield is scheduled for demolition by the MJM Group; the majority of buildings are heavily contaminated with asbestos. It is intended that one uncontaminated building be set aside for use as a community hall. MJM Group is planning to redevelop the airfield Operations Site, including restoring the Control Tower, to accommodate corporate/private jet aircraft. There are no plans to remove the hangars.

Ballykelly village has lost access to significant community resources as a result of the closure of the military barracks and transfer of ownership to a private commercial enterprise. This impact was foreseen and allowed for in the conditions of sale; the current owner has committed to consulting on the needs of the local community and donating a proportion of the existing buildings, fully furnished and ready for occupation for community use. Unfortunately relations between the MJM
Group and the local community have all but completely broken down as a result of poor communication.

This current environment does not make Ballykelly airfield suitable for public access development as part of the Landscape Partnership Scheme, but CCGHT should consider joining CCGBC, the Rural Development Network, and others, to put pressure on the Executive Office to hold MJM Group to their community commitments. The history of the site and its impact in the local community may still be made accessible through educational and community engagement activities.

**Grange Beg Pillbox**
This scheduled monument is located within the Barmouth Wildlife Reserve, owned and managed by the National Trust. Although the entrance is heavily overgrown and one of the observation ports to the rear has been blocked with concrete, it remains in good condition. It sits beside a large bird hide installed by the National Trust, both easily accessible from a pathway suitable for pedestrians and wheelchairs.

The pillbox is much smaller than the existing bird hide and would not be accessible for large groups or groups including people with disabilities, but it could provide another attractive vantage point for viewing wildlife. Restoration and re-use of the pillbox in this manner would not require major resources and could be achieved within the parameters of scheduled monument consent. The National Trust are keen to identify opportunities to increase public awareness and visitor numbers, and therefore are likely to be amenable to such a proposal.

**Other sites**
There are a number of other historically significant and/or well-preserved defence heritage sites within the study area, in particular, Castlerock Chain Home Radar, Downhill Chain Home Low Radar, the Ordnance Survey Base Towers at Ballykelly, Magilligan and Minearney, dispersed living sites at Aghanloo, Carrowreagh Quadrant Tower and pillboxes at Downhill and Tircreevan. However, most of these sites are in isolated locations and situated on private land. It may be possible to improve public access and install appropriate interpretation at some sites, but it is recommended that these interventions form part of proposals for outdoor recreation currently in development, based on their accessibility to any proposed public walks or visitor infrastructure. Any interventions at these sites should be planned in partnership with HED, CCGBC and relevant landowners.

6.2 Community engagement

It clear from the study that defence heritage has made a major impact on the landscape, economy and social history of the Binevenagh area. Many local families have personal memories and experiences relating to the sites. A diaspora of ex-
servicemen (particularly those from the United States and Great Britain) and their families also retain a sense of connection to the sites. However, it became clear during the consultation that, due to the fact that DH sites were closed off physically to the public during operation, and have remained largely inaccessible in disuse, many people simply are unaware of their history or significance. In some cases, particularly at Ballykelly and Magilligan, there are very negative associations with these sites in relation to the impact and legacy of the Troubles. Therefore, there are significant physical, intellectual, social and political barriers to overcome in order to engage the local community with this heritage. That is not to undermine the regional, national and international significance of the sites, but to emphasise that a significant commitment to education, public access and community engagement will be required to successfully deliver a sustainable Landscape Partnership Scheme.

The consultation did identify a small number of groups and individuals keen to participate in research activities or in developing learning and interpretation resources, such as exhibitions, events and guided tours. Within such a small geographical area, these groups and individuals will act as an important catalyst for increasing and diversifying public participation.

The committee of Aghanloo Community Association include several local residents with family connections to Limavady Airfield (some are farmers with surviving defence heritage features on their land) and a collective enthusiasm for documenting, conserving and increasing public engagement with the site. Around 15 to 20 years ago, the group organised a programme of events and activities, in partnership with historian John Quinn and local enthusiast Johnny McNee, with a view to securing financial support for preserving elements of the airfield. They were unsuccessful at that time and the experience has left the group disheartened. But with the renewed impetus that the proposed Landscape Partnership Scheme could provide, this group would prove committed and knowledgeable supporters, able to act as project champions and make a voluntary contribution to research, learning and engagement activities. In addition, Aghanloo Community Centre (which formerly functioned as the airfield’s Officers’ Mess and is due to receive funding to extend and improve its facilities) would provide a useful location for interpretive resources and learning activities and a starting point for guided tours.

Roe Valley Ancestral Research Group is a recently established heritage society based at Ceres Europe, Ballykelly. Their membership includes a number of ex-military personnel with a keen interest in and knowledge of local defence heritage as well as a trained storyteller and tour guide. They have already identified and recorded military graves in each of the local graveyards and are currently planning a range of initiatives, including researching the stories of World War I and World War II nurses from the area and developing a series of themed heritage trails. Again, this group would prove enthusiastic and committed project champions and volunteers, who
with a small amount of financial support could make a valuable contribution to the development of interpretive resources and learning activities.

There are a number of individual enthusiasts in the area with a good knowledge of the history of the major defence heritage sites. In some cases these enthusiasts hold collections of photographs, documents and artefacts that would make a valuable contribution to the development of learning resources and exhibitions, particularly Norman Thorpe of the Shackleton Aviation Museum. Others are contactable through the local community associations and historical societies.

6.3 Education

The proposed Binevenagh Coastal and Lowlands Landscape Partnership will deal with landscape and built heritage and their physical and cultural significance. This positions the partnership to offer learning opportunities for both history and geography, and even for interdisciplinary collaboration between subject teachers. Further, the siting of the landscapes in question offer an opportunity for schools from Northern Ireland and the Republic of Ireland to work together on exploring their history and geography.

In Northern Ireland, the Primary Curriculum (Key Stage 1 and 2) allows teachers to develop their pupils’ learning skills and personal capabilities in history and geography through topics of their own choice. World War II is a familiar topic area in the Key Stage 2 curriculum and continues to be taught by many schools, with a focus on the Home Front. With access to high quality learning resources, there is significant potential to enhance and extend Key Stage 1 and 2 engagement with local heritage, encouraging teachers to develop new history, geography and environmental education programmes based on an exploration of change over time in their local landscape. There are six primary schools within the proposed Landscape Partnership area with the potential to engage with several more in the nearby urban areas of Limavady and Coleraine.

It is traditionally much more difficult to engage with secondary schools due to the pressures of weekly timetables and examination targets. However, the defence heritage of the proposed LPS area is relevant to a number of curriculum topics at Key Stage 3 and 4, including the impact of the French Revolution, World War I and World War II, partition, heritage conservation and heritage tourism. Where teachers are required to develop pupils’ research and fieldwork skills through enquiry-based, community-based and active learning, there is significant potential to collaborate with local secondary schools in Coleraine and Limavady to develop relevant, high quality learning resources.
In the Republic of Ireland there is a much stronger emphasis across the Primary and Secondary curricula on active exploration and investigation of local heritage and the local environment. Primary pupils will study one local history unit and one national history unit in depth each year and will actively investigate their local and regional landscapes. History topics include 19th-century Ireland and the World Wars. Similarly to schools in Northern Ireland, secondary pupils study the impact of the French Revolution, Napoleonic Europe, and the World Wars. Unlike in Northern Ireland, partition is not included on the secondary curriculum, but pupils do study the history and legacy of the Troubles. Teachers are given a free hand in choosing sites and case studies for geographical fieldwork, including investigating defence activities within a region and their relationship to political, cultural and economic changes in that landscape (see Appendix B for a more detailed analysis of the Northern Ireland and Republic of Ireland curricula).

Successfully engaging with primary and secondary schools can be challenging in the context of increased time pressures and decreasing budgets. Introducing new resources and activities must be justified by their direct relevance and benefit to the curriculum and schools often require support in terms of transport and the costs of teaching cover. In developing learning resources and programmes, it is recommended that CCGHT work in partnership with other organisations with an established record in this field, including Causeway Museum Service and Magilligan Field Centre. It would also be beneficial to develop relationships with Derry City and Strabane District Council Museum and Visitor Service, which has already developed interpretive and learning resources relating to the Ordnance Survey, World Wars I and II and the Troubles, and is currently developing a major new maritime museum at Ebrington. A collaborative approach including Inishowen Maritime Museum could engage with a wider range of school groups in investigating the defence heritage of the entire Lough Foyle area.
7. Project proposals

The following project proposals have been developed from the results of research, field survey and consultation, identifying priority initiatives to improve public access, learning and engagement with defence heritage, according to the accessibility and ownership of key features. Proposals are identified within both the Development and Delivery Phases of the proposed Landscape Partnership Scheme, with the former providing the required knowledge base to deliver the latter.

7.1 Development phase

7.1.1 Mapping and survey

Defence heritage features in the Binevenagh area have not been systematically surveyed in any detail and though the Defence Heritage Record has been recently digitised through Queen’s University, it has not yet been integrated within the Sites and Monuments Record. It is therefore recommended that the project commissions a programme of photographic survey and GIS mapping of all defensive heritage features within the proposed LPS area and works in partnership with HED to update and improve government records and carry out a review of current protection measures.

Aims
- to generate knowledge and significantly enhance understanding of the defence heritage resource
- to improve the archaeological record and enhance protection measures for the resource
- to enable better planning for conservation, access, learning and engagement initiatives as the project moves into the delivery phase

Estimated costs

<table>
<thead>
<tr>
<th>Cost heading:</th>
<th>Detail:</th>
<th>Cost:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop research</td>
<td>Aerial photograph analysis, historical research</td>
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</tr>
<tr>
<td></td>
<td>Research expenses</td>
<td>£500</td>
</tr>
<tr>
<td>Fieldwork</td>
<td>Record known sites and locating and recording features uncovered during research phase</td>
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</tr>
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<td></td>
<td>Travel expenses</td>
<td>£1,500</td>
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<tr>
<td>Reporting</td>
<td>Report identifying DH features and cataloguing data.</td>
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</tr>
<tr>
<td></td>
<td>Liaison and site reporting to HED</td>
<td>£1,000</td>
</tr>
</tbody>
</table>
7.1.2 Oral history research

Though defence heritage structures have made a significant impact on the local landscape and community, public awareness and appreciation of their history and significance is low. Therefore it is recommended that the project commissions a programme of oral history research with the specific aim of documenting relationships with and perceptions of defensive military installations in the local community.

It is recommended that the programme be delivered in partnership with Causeway Museum Service, which can advise on procurement of quality services and act as the repository for the oral history recordings and any other relevant material the research produces. CCGHT should also seek the advice of relevant professional bodies such as the Oral History Society, Oral History Network Northern Ireland and the British Library (see Appendix C).

Aims

- to generate new knowledge about the impact and legacy of defensive military installations in the local community
- to raise awareness and appreciation of the defence heritage resource in the local community
- to generate a body of knowledge and material culture that will inform the development of interpretive and learning resources as the project moves into the delivery phase

Estimated Costs

<table>
<thead>
<tr>
<th>Cost Heading</th>
<th>Detail</th>
<th>Cost:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral history research</td>
<td>Preparation, planning, recruitment and delivery of up to 20 interviews, including partial transcribing of recordings</td>
<td>£6,000</td>
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<td>Creating digital database of audio recordings and associated visual material identified through the research, including liaison with CCGBC on transfer of material to CMS</td>
<td>£1,000</td>
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<tr>
<td></td>
<td>Report identifying key interpretive themes and content</td>
<td>£750</td>
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<td></td>
<td>Travel expenses</td>
<td>£500</td>
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<td><strong>Total:</strong></td>
<td></td>
<td><strong>£8,250</strong></td>
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</table>
7.1.3 Conservation management planning

The audit has identified four defence heritage sites where there is significant potential for conservation, restoration and reuse.

**Limavady Airfield, Aghanloo**

![Figure 15: The Control Tower at Limavady Airfield.](image)

This site represents one of the best-preserved examples of a World War II airfield in Northern Ireland with unique opportunities for place-based learning and engagement.

Field research and consultation both identified the Air Training Dome as the most significant surviving feature. The Dome, the Watch Tower and the technical buildings between these two features, particularly the SI workshop, provide the opportunity to develop a unique interpretative and educational resource while also accommodating commercial uses that support the economic and social regeneration of the area. Refer to Appendix A for examples of similar successful developments elsewhere.

**Magilligan Heavy Anti-Aircraft Battery**

The importance of this site is already recognised through Scheduled Monument protection and it is in excellent condition, retaining all the features that defined its use. Moreover, MoD has expressed a willingness to transfer ownership to another appropriate public, private or community organisation to facilitate public access and interpretation.
Figure 16: Gun Pit with ammunition lockers, Magilligan LO7 HAA battery.

Grange Beg Pill Box

Figure 17: Grange Beg Pillbox at Barmouth Nature Reserve.

A scheduled monument situated within a nature reserve owned and managed by the National Trust, this site provides valuable opportunities to enhance visitor facilities and experiences. By offering additional sheltered accommodation for nature lovers, the building could also incorporate interpretive resources that increase public awareness and understanding of the defence heritage resource.

Lower Doaghs Pillbox

An unusual example of a rock-armoured sea defence pillbox, which could be made accessible to the public through replacing the roof hatch and access ladder and draining flood-water in the interior.

The proposed Landscape Partnership may provide the appropriate impetus to embark upon building preservation projects. But, as
CCGHT does not currently have the capacity or remit to take responsibility for such sites, it is also vital that alternative governance approaches are identified and cultivated. A series of Conservation Management Plans should be commissioned, which will make realistic and achievable recommendations for the conservation, restoration and sustainable reuse of each identified site.

Conservation management planning should follow international best-practice standards, as set out in the Burra Charter published by Australia ICOMOS in 2013 (australia.icomos.org/publications/charters/), and should be developed in partnership with landowners, CCGBC, HED, and other relevant bodies (see Appendix C).

Aims
- to develop understanding of the environmental, archaeological, ownership and management issues affecting each site
- to make a detailed assessment the conservation needs of each site
- to develop a comprehensive conservation policy that includes recommendations for appropriate restoration and reuse
- to identify appropriate and sustainable governance and management solutions
- to develop interpretive policies for each site

Estimated costs
The conservation management needs of each site will vary greatly in complexity and scope. Based on the current commercial market, it is estimated that the cost of each plan will vary as follows, though it may be possible to identify a consultant team with the capacity to address all four sites and thereby make a proportional saving on overall cost:

- Limavady Airfield, Aghanloo £25,000
- Magilligan Heavy Anti-Aircraft Battery £15,000
- Grange Beg Pillbox £7,000
- Lower Doaghs Pill Box £7,000
7.2 Delivery phase

7.2.1 Tour guide training

The development and delivery of a bespoke tour guiding training programme, providing up to 12 participants with Level 2 and Level 3 Open College Network accredited qualifications

Training will be offered for free to participants, in the understanding that they will voluntarily facilitate a limited programme of pilot tours for schools and community groups.

It is recommended that the programme be delivered in partnership with Causeway Coast and Glens Borough Council Museum Service, which has a high-quality track record in supporting volunteer tour guides to develop inclusive narratives relating to contested heritage.

Aims
- to develop heritage skills and capacity in the local community
- to create local ambassadors for defence heritage
- to increase public engagement and learning opportunities relating to defence heritage
- to support the development of a sustainable community, economically, socialy and culturally
- to promote the achievements of the project in developing knowledge, understanding and access to the defence heritage resource

Estimated Costs
The following costs are based on similar programmes delivered in the Heart of the Glens, Sperrins Gateway and Lough Neagh Landscape Partnerships. Room hire, catering and transport are not included in training costs.

<table>
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<tr>
<th>Cost Heading:</th>
<th>Delivery:</th>
<th>Detail:</th>
<th>Cost:</th>
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<tbody>
<tr>
<td>Tour guide training</td>
<td>Year 1</td>
<td>Level 2 OCN accreditation, 5-day programme, up to 12 participants</td>
<td>£5,960</td>
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<tr>
<td></td>
<td>Year 2</td>
<td>Level 3 OCN accreditation, 10-day programme, up to 12 participants</td>
<td>£10,240</td>
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<tr>
<td>Schools/community tour programme</td>
<td>Years 3-5</td>
<td>Transport hire, up to 6 tours annually</td>
<td>£2,700</td>
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<td><strong>Total:</strong></td>
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<td><strong>£18,900</strong></td>
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Voluntary Contribution

<table>
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<th>Training</th>
<th>Level 2 - 12 participants, 5 days' training, 15 days' research and script development</th>
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<td>Level 3 – 12 participants, 10 days' training, 10 days' research and script development</td>
<td>£12,000</td>
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<tr>
<td>Tours</td>
<td>Volunteer tour guides, up to 6 tours over 3 years</td>
<td>£1,350</td>
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</tbody>
</table>

**Total:** £25,350

7.2.2 Online learning resource

*An interactive map resource with associated information and learning materials targeted at local residents, educational groups and visitors to the area*

The online learning resource should be developed according to universal design principles in order to be accessible to as diverse an audience as possible. The design should utilise freely accessible software with custom functionality in order to allow project staff to update and enhance the information presented as the project develops new knowledge of the defence heritage resource and new learning resources or activity programmes (see Appendix A for exemplar case studies).

Aims
- to interpret and make accessible new knowledge of the defence heritage resource produced as a result of the project
- to promote the distinct defence heritage of the Binevenagh area to international audiences
- to increase opportunities for local residents, community groups and schools to learn and participate in the defence heritage resource
- to connect the project with other defence heritage initiatives and activities across the UK and Ireland
- to leave a lasting legacy of the outcomes of the project for future learning and engagement activities

Estimated Costs:
Design, construction and creation of online learning resource £15,000

Voluntary contribution

| Advisory working group, up to 5 stakeholders, up to 5 sessions during development of learning resource | £1,875 |
| Advisory working group, up to 3 local teachers, 3 ½ day sessions during development of learning resources | £675 |
7.2.3 Touring exhibition

An interpretive exhibition of up to 10 panels with associated objects and archival material, suitable for display in small, public or community venues

The exhibition should be developed through Causeway Museum Service using archaeological and oral history research produced as a result of the project and in partnership with local historians and enthusiasts. CMS has access to highly skilled and experienced curatorial staff as well as a range of museum display equipment available for touring exhibitions.

Aims
- to interpret and make accessible new knowledge and understanding of the defence heritage resource produced as a result of the project
- to promote the distinct defence heritage of the Binevenagh area to local residents and visitors
- to increase opportunities for local residents, community groups and schools to learn and participate in the defence heritage resource
- to support complementary events and activities developed through the project

Estimated Costs

<table>
<thead>
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<th>Cost heading</th>
<th>Detail</th>
<th>Cost:</th>
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</thead>
<tbody>
<tr>
<td>Curatorial Services</td>
<td>Interpretive content development, liaison with designers, exhibition planning</td>
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<tr>
<td>Graphic design services</td>
<td>Design of up to 10 exhibition panels and associated promotional material</td>
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<td>Printing exhibition panels and promotional material</td>
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<tr>
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<td>Copyright and reproduction permissions</td>
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<tr>
<td>Exhibition tour</td>
<td>Transport, up to 6 venues over a 3-year programme</td>
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<tr>
<td></td>
<td>Insurance</td>
<td>£500</td>
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<tr>
<td><strong>Total:</strong></td>
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<td><strong>£10,000</strong></td>
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</table>
Transport and insurance costs may be offered as a contribution in kind under the terms of a partnership agreement with CCGBC.

Voluntary Contribution:

<table>
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<tr>
<th>Description</th>
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<tr>
<td>Exhibition development</td>
<td>3 local historians supporting research and content development</td>
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<td><strong>Total</strong></td>
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</table>

7.2.4 Community Archaeology

*Excavation of three sites identified through the audit as beneficial for both developing knowledge and understanding of the defence heritage resource and increasing community engagement with that resource*

**Limavady Airfield Battle Headquarters**
This is one of the most significant surviving features of the airfield, and as such has been protected as a scheduled monument, but it does not appear on the MoD plans of 1942 and its form is unusual, perhaps unique, for a structure of its type. It forms a large mound, covered in topsoil and grass, situated on private farmland visible from the main area of the former technical site and with access from Aghanloo Road.

**Magilligan Coastal Battery**
Three guns were installed here during World War II, supported by a complex of magazines, a battery command post, two coastal searchlights, crew shelters, accommodation and ancillary administrative offices. The dynamic nature of the sand dunes makes it difficult to assess where features survive or have been removed. At the No. 3 gun position there are the remains of two holdfasts where the MoD plan shows only one. The site occupies land owned by CCGBC, HED and MoD, all of which would be willing to grant permissions for survey, excavation and public engagement activities.

**Magilligan Training Facility Practice Trenches**
This feature is similar in nature to practice trenches recently excavated at Ballykinler by Queen’s University and HED and are as worthy of investigation. Also similarly, it is situated on land owned by MoD but outside the perimeter of the main Magilligan Camp.

Following detailed survey during the development phase (see Section 9.1), it is proposed that these sites are excavated by a team of professional archaeologists experienced in facilitating participative activities for volunteers, community groups and schools. It is proposed that each site is excavated over a three successive annual seasons, with community archaeology programmes at
Magilligan being incorporated into a larger programme of public events and educational activities across the peninsula (see Section 9.2.5 below)

Aims
- to generate knowledge and improve understanding of the defence heritage resource
- to improve the archaeological record and enhance protection measures
- to increase opportunities for people to learn about and participate in defence heritage
- to develop heritage skills in the local community
- to create local ambassadors for defence heritage

Estimated Costs
Costs are detailed per site and have been estimated according to current commercial value, allowing for additional staff resources to support learning and participation activities.

<table>
<thead>
<tr>
<th>Cost heading:</th>
<th>Detail:</th>
<th>Cost:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning and preparation</td>
<td>Background research, preparation of research design and licence application</td>
<td>£1,500</td>
</tr>
<tr>
<td>Excavation</td>
<td>Plant hire, site infrastructure</td>
<td>£1,500</td>
</tr>
<tr>
<td></td>
<td>Excavation crew, volunteer management and facilitating educational programme</td>
<td>£13,000</td>
</tr>
<tr>
<td></td>
<td>Mileage and expenses</td>
<td>£2,000</td>
</tr>
<tr>
<td>Post-excavation</td>
<td>Specialist advice on finds, report writing</td>
<td>£4,500</td>
</tr>
</tbody>
</table>

Total per site: £22,500

Overall Total: £67,500

Voluntary Contribution:

<table>
<thead>
<tr>
<th>Location</th>
<th>Details</th>
<th>Amount:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limavady Airfield</td>
<td>Up to 5 volunteers per day over a 3-week period</td>
<td>£3,750</td>
</tr>
<tr>
<td>Magilligan Coastal Battery</td>
<td></td>
<td>£3,750</td>
</tr>
<tr>
<td>Magilligan Practice Trenches</td>
<td></td>
<td>£3,750</td>
</tr>
</tbody>
</table>

Total: £11,250
7.2.5 Magilligan Point Festival

An annual programme designed to increase access and engagement with the cluster of defence heritage sites across the peninsula, including talks, tours, workshops, and community archaeology activities

By delivering the programme before and into the Easter holidays, activities for school groups, community groups as well as visitors to the area can be accommodated.

The programme should be delivered in partnership with CCGBC, HED and MoD, whose permission will be required for public access to the relevant sites. Ideally, the former customs office at Magilligan Ferry Terminal should act as the base for all activities, which also requires agreement from CCBGC. Involving the Point Bar may provide opportunities to enhance the visitor offer.

Aims
- to promote the achievements of the project in developing knowledge, understanding and access to the defence heritage resource
- to increase opportunities for learning and participation in defence heritage
- to demonstrate the potential to increase visitor numbers to defence heritage sites through improved access and interpretation
- to support tourism providers in the area

Estimated Costs

<table>
<thead>
<tr>
<th>Cost heading</th>
<th>Detail</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotional materials</td>
<td>Event branding, marketing activities and literature</td>
<td>£1,000</td>
</tr>
<tr>
<td>Talks programme</td>
<td>speaker’s fee (x4), room hire and catering</td>
<td>£1,000</td>
</tr>
<tr>
<td>Family days</td>
<td>Activity planning, 3 weekend sessions, facilitator’s fee (x5), materials and travel expenses</td>
<td>£5,000</td>
</tr>
<tr>
<td>Guided tours</td>
<td>script development, delivery fees, expenses, up to 3 distinct tours, 3 weekend sessions</td>
<td>£2,000</td>
</tr>
<tr>
<td>Re-enactment displays</td>
<td>Actors, vehicles and equipment, 3 weekend sessions</td>
<td>£6,000</td>
</tr>
</tbody>
</table>

Annual total: £15,000

Total over 4 years: £60,000

* Guided tours and group visits to the archaeological excavations happening in parallel with the wider event programme are already accounted for in Section 7.2.4 above.
7.2.6 Educational Field Studies

Cross-curricular half- or full-day site visits for both primary and secondary schools relating to three key themes

a. Understanding the landscape
   (Ordnance Survey/environmental change)

b. The impact of war and conflict in the landscape
   (Napoleonic Wars/partition/World War II/Cold War/Troubles)

c. Landscape management
   (heritage conservation/habitat conservation/sustainable tourism/economic development)

Site visits should be delivered as a ‘train the trainers’ programme, demonstrating to local teachers how to make best use of local landscape and heritage resources to enhance their teaching programmes. The programme should be delivered in partnership with Magilligan Field Centre and relevant landowners, particularly MoD where access is required to the army camp and associated firing range. Cross-border participation should be supported through partnerships with other relevant stakeholders, such as Derry City & Strabane District Council Museums Service and Inishowen Maritime Museum.

Aims
- to promote the achievements of the project in developing knowledge, understanding and access to the defence heritage resource
- to increase opportunities for learning and participation in defence heritage
- to encourage local teachers to utilise the local landscape and heritage resource
- to leave an educational legacy for the project

Estimated Costs

<table>
<thead>
<tr>
<th>Cost heading:</th>
<th>Detail:</th>
<th>Cost:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource development</td>
<td>Development of 3 distinct field studies programmes and associated materials for primary and secondary curricula</td>
<td>5,000</td>
</tr>
<tr>
<td>Facilitation</td>
<td>Delivery of up to 5 primary and 3 secondary site visits annually for 4 years, including travel and expenses</td>
<td>6,000</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>£11,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

Facilitation costs may be reduced if the skills and capacity of the project team and partners can be developed to deliver these field studies directly.
Voluntary contribution:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot site visits with 3 primary schools, 25 pupils and 3 staff members per class</td>
<td>£1,700</td>
</tr>
<tr>
<td>Pilot site visits with 3 secondary schools, 25 pupils and 2 staff members per class</td>
<td>£1,550</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>£3,250</strong></td>
</tr>
</tbody>
</table>

7.2.7  Built Heritage Conservation

*Conservation and/or restoration of a limited number of defence heritage features already identified as suitable for re-use, pending the results of the conservation management planning process during the development phase of the project*

These projects should be undertaken under the guidance and permission of HED, as well as in partnership with other stakeholders, such as Ulster Architectural Heritage Society, Airfields of Britain Conservation Trust and Foyle Civic Trust. Additional financial support may be available through the Architectural Heritage Fund.

**Aims**
- to secure the future survival of significant defence heritage features through sustainable re-use
- to enhance public access and interpretation at significant defence heritage sites and features
- to support the development of a sustainable local economy
- to leave a heritage conservation legacy from the project

**Estimated Costs**

Costs are based on exemplar project case studies where relevant examples were identified (see Appendix A). Exact costs will only be determined upon completion of the conservation management planning process during the development phase of the project.

**Limavady Airfield**
- Training Dome £800,000
- Watchtower £400,000
- SI Workshop £200,000

**Magilligan Heavy Anti-Aircraft Battery** £300,000
**Grange Beg Pillbox** £25,000
**Lower Doaghs Pillbox** £15,000
Appendices

Appendix A: case studies

Langham Dome

Images (left) © Evelyn Simak (www.geograph.org.uk accessed 03.04.2017) (right) © Ugly Studios Ltd.

Langham Dome is one of the surviving features of RAF Langham, which was purchased by Bernard Matthews in the 1960s. In the 1980s it was designated a scheduled monument but over subsequent years its condition increasingly deteriorated. Bernard Matthews agreed to donate the dome to the North Norfolk Historic Buildings Trust, which worked with English Heritage and the local council to secure its preservation and open it to the public. The Friends of Langham Dome was established to demonstrate to HLF that the project had significant community support. The project successfully secured £446k from HLF and £199k from English Heritage, which with some other small grants made the total project budget around £750k. The building remains the property of North Norfolk Historic Buildings Trust and is managed by the Friends of Langham; a part time administrator supervises a core group of about 20 volunteers. The project has received a number of awards for its approach to conservation and interpretation and exceeded its projected visitor figures in the first year.

Patrick Allen
Chair, Friends of Langham Dome
T:  01328 830169
E:  admin@langhamdome.org
W:  langhamdome.org

Historic building structural engineers: Morton Partnership
themortonpartnership.co.uk

Conservation works: Martech Technical Services Ltd.
martech.uk.com

Interpretive design: Ugly Studios Ltd.
uglystudios.com
Within Croome Park, a National Trust property, a cluster of technical buildings of the former RAF Stefford have been conserved and converted for use as visitor and interpretive facilities. The buildings are similar to many of those at Limavady Airfield, being of temporary single brick construction, with external pinions to support a roof of asbestos concrete sheeting. All have been restored to modern standards of conservation, health and safety, disability access and energy conservation.

The National Trust completed restoration of the medical ward block in 2006 to accommodate a visitor reception area, toilets and a canteen. The medical inspection block was restored two years later as a staff office and kitchen. In 2011 the Defford Airfield Heritage Group (DAHG) was formed, largely consisting of members of the former Defford Reunion Association. In 2013 DAHG, in partnership with the National Trust, secured grants of £87,500 from the Landfill Communities Fund and £82,900 from HLF to conserve and fit out the former airfield Decontamination Annexe as a museum, which has subsequently been extended to include the former Ambulance Garage, through a private donation. DAHG have now applied to HLF for around £400,000 to restore the Ablutions and Latrines block and Orderlies Court, for public toilets and a learning centre.

Since RAF Defford Museum opened, Croome Park has almost doubled its visitor figures, making it the most visited museum in the county. It is managed and run entirely by DAHG volunteers, though the National Trust is responsible for overhead costs and manages school visits as part of the existing education and outreach programme at Croome. Entrance to the museum is included in the standard price for visitors to Croome Park.

Dennis Nightingale  
Chair, Defford Airfield Heritage Group  
T: 01886 830295  E: DennisJWilliams@aol.com  
https://deffordairfieldheritagegroup.wordpress.com
This status of this former World War II airfield is similar to that of Limavady Airfield at Aghanloo, where surviving historic buildings are now owned by a number of private individuals and the surrounding land has returned to agricultural use. It also serves as example of the dangers of restoring historic buildings without a sustainable plan for re-use.

The airfield was closed in 1946 and in 1961 the Air Ministry land was sold to Norfolk County Council, and soon returned to agriculture. The southern part of the flying field was for many years used by crop-spraying aircraft and the remaining section of the E/W runway currently serves as a private airstrip. The remains of the perimeter track are used by farmers to access their fields. RAF Ludham had two Watch Offices (control towers), which are both Grade 2 listed and stand within a fenced-in compound that also contains the remains of a Nissen hut. The compound was adjoined by the Technical Site, but is now surrounded by fields.

Norfolk County Council restored both Watch Offices in 2000/1 with the intention of opening an airfield museum; the plans never came to fruition and the buildings remained empty. In 2012 it was reported that the Council had sold them to a private owner who submitted planning permission to convert the larger control tower for use as a holiday home. To date the site remains derelict.

Information on the site was taken from:
http://www.geograph.org.uk/article/RAF-Ludham---HMS-Flycatcher
(Accessed 03.04.2017)
The Eighth in the East

The Eighth in the East (EITE) was a three-year project managed by the New Heritage Solutions Community Interest Company, in partnership with University of East Anglia, East Anglian Film Archive, Norfolk Record Officer, Norfolk County Council, 2nd Air Division Memorial Library, Eastern Angles Theatre Company, Norfolk Museums and University of Hertfordshire Heritage Hub. The Heritage Lottery Fund supported it with a grant of £589,500.

EITE aimed to research, interpret, celebrate, promote and preserve the physical and social impact of the arrival of the 8th US Army Air Force in the East of England during World War II. The project developed airfield museums; empowered local people to support the preservation of this history via oral history and community archaeology programmes; and presented the history in as many different formats as possible, including education programmes, theatre, exhibitions, a website, a festival and family days.

The project overcame significant logistical, attitudinal and managerial challenges to make an extremely positive contribution to this history and to the people in the East of England (and beyond) through training and education, participation and engagement. The lessons learnt will prove extremely valuable to future projects with similar aims and objectives. The project legacy resources are available online and include an interactive heritage trail promoting local military museums and heritage sites; teaching plans and guidelines with image, video and archival resources; an oral history archive; and advice on planning and delivering heritage walks and community archaeology activities.

Kilkeel Development Association was awarded £68,000 by Heritage Lottery Fund to create a heritage trail of sites across Northern Ireland relating to the ‘friendly invasion’ of US troops during World War II. Support in kind and additional grant aid from local councils and other funders brought the total project budget to around £90,000.

The project was delivered by one full-time project officer, with the support and advice of local voluntary organisations and heritage enthusiasts. Three distinct heritage trails have been published, in hard copy and online, covering Counties Antrim and Londonderry, Armagh and Down, and Fermanagh and Tyrone. The project website also acts as an information hub for World War II events, genealogical information on US forces stationed in Northern Ireland and links to various voluntary organisations with an interest in military heritage. During the two-year programme, the project has also delivered an annual GI Jive Festival in Kilkeel, which attracted over 5,000 visitors in its first year, as well as talks and workshops with schools across the province. The project attracted major interest from the US consulate and veteran groups and its successes secured additional financial support from HLF and local councils, including Causeway Coast and Glens Borough Council.

Project Officer:
Lauren Newell
E: gitrail.ni@gmail.com
T: 028 417 62525
Historic Royal Palaces (HRP) wished to give existing and potential audiences a chance to get ‘hands on’ and up close to the heritage of Hillsborough Castle and Gardens and to enjoy conservation in action. Funding from the Heritage Lottery Fund enabled a programme of development activities during spring and summer 2016 designed to increase and diversify audiences and reduce potential barriers to participation. One of these activities was a public archaeology project delivered by Northern Archaeological Consultancy Ltd (NAC)

The project centred on an excavation in the ‘Small Park’, chosen to allow visitors to explore some of the oldest and most unexpected history of Hillsborough while at the same time allowing HRP to investigate an archaeologically sensitive area close to where new visitor facilities for the Walled Garden were planned. Under Archaeological Licence granted by HED, five trenches were opened between the 27th July and 6th August 2016. Professional archaeologists led the excavation with the majority of the excavation work being carried out by local volunteers.

Johnathan Barkley
Northern Archaeological Consultancy Ltd.
T: 028 9031 4875
E: info@northarc.co.uk

Jackie McDowell
Historic Environment Division, Heritage Advice and Regulation Branch
T: 028 9082 3223
E: Jacqueline.McDowell@communities-ni.gov.uk
Appendix B: summary of subject links in Northern Ireland and Republic of Ireland curricula

Northern Ireland curriculum
In Key Stages 1 and 2, children of between six and 11 learn about Place and Change Over Time. They look at how humans depend on, make use of and adapt to their environment, identify some key natural and built features of their local landscape, and see how these have changed. They explore local distinctiveness and the interdependence of places. Positive and negative human influences on the environment are discussed. Concepts such as heritage and heritage preservation are introduced.5

In Key Stage 3, between the ages of 12 and 14, children study Environment and Society, which includes history and geography. In history they develop understanding of cause and effect and continuity and change. Topic work in history includes historical preservation and heritage tourism in the local landscape, explored through site visits and research. War is another significant topic, and the curriculum covers evaluation of its environmental impact and the impact of World Wars I and II, and the long- and short-term consequences of the partition of Ireland. In geography children develop enquiry and fieldwork skills and a sense of place through the study of local and national contexts and environments. The purpose of this study is to understand the dynamic nature of human and physical landscapes, and their interrelationships; a key element is exploring how people have adapted to threats and opportunities posed by their environments.6

In Key Stage 4, children of 15 and 16 should be enabled to ‘connect, transfer and apply their learning from one subject or context to another’, and experience enquiry-based, community-based and active learning. Schools are expected to work collaboratively with organisations in other sectors. In GCSE History, options include Peace, War and Neutrality: Britain, Northern Ireland and Ireland 1932-1949 (covering Northern Ireland’s industrial, agricultural, military and strategic contributions to World War II). In GCSE Geography, units include People and Where They Live (covering types of sites and locations of settlement and interpretation of aerial photographs and maps) and Living in Our World (in which students are asked to assess the impact of one sustainable tourism project on the local community and the environment).7

At GCE or A-level stage, there are two relevant options in History. First, Ireland 1778-1803, which covers the impact of the French Revolution in Ireland, security measures in

5 ccea.org.uk/curriculum/key_stage_1_2/areas_learning/world_around_us, accessed 23.02.17
the 1790s and the role of Wolfe Tone in securing a military alliance for the United Irishmen with France. Second, Partition of Ireland 1900-1925, which covers the political impact of World War I on Ireland, the military tactics deployed by the British authorities during the 1919-1921 conflict and the Treaty negotiations. Similarly, there are two relevant options in GCE Geography. First, Human Geography, which covers how the countryside is managed for conservation, recreation and tourism through a local or regional case study. Second, Human Interactions and Global Issues, in which students use primary data collection techniques to investigate aspects of tourism and its management through a regional case study.8

Republic of Ireland curriculum

Throughout school education, Social, Environmental and Scientific Education (SESE): History, Geography and Science deals with natural and human environments. Children are involved in ‘active exploration and investigation of all these environments’, and further, during primary school, ‘the environments of the child, particularly those of a local nature, provide ideal contexts and a compelling impetus for the integration of learning’ across history, geography and science.9

In the Primary Curriculum, in History, there is a strong emphasis on the study of local history, leading to national and international history. Children begin to understand change, continuity and conservation, and develop ‘balanced appreciation’ of heritage in local and national contexts. They learn how people, cultures, events and issues have shaped local communities and environments and look at identity through studying heritage in local and wider contexts. They acquire a sense of responsibility for conservation and begin to see how to contribute. In First and Second Classes, children are expected to learn about change and continuity locally through talking to older people and site visits. From Third Class to Sixth Class, children will actively explore and investigate local environments; study a historical period within their townland, parish or county; become familiar with significant events in local history within a national context; look at historical periods and peoples including Stone Age, Bronze Age, Celts, Early Christian Ireland, Vikings, 18th- and 19th-century Ireland and World War II. In relation to World War I, children should ‘become familiar with local evidence of changes and conflicts and their long-term effects’. In each year, one unit in local and one in national history should be studied in depth over more time.

In the Primary Curriculum, in Geography, children should ‘develop an understanding of the world through direct experience and activity’, basing this ‘firmly in the local environment’ and then widening to include other environments. Further, children should learn about and appreciate identity in local, regional and national contexts, and

8 Ibid.
9 from http://www.curriculumonline.ie, accessed 23.02.17, 01.03.17 and 02.03.17
then on a European and global basis. Fundamental geographical research skills arise from asking

- how have humans changed this place and why?
- why should a [fort, for example] be located in this place?

Children will learn about some of the natural, social or economic processes that ‘create, sustain or change’ environments and how to read, use and make maps. In First and Second Classes, children are expected to become familiar with places where people live and how people have adapted to them. From Third Class to Sixth Class, children look at people living and working in their local environment, and in a contrasting part of Ireland, and at the natural landscape and its relationship to people locally and in a contrasting part of Ireland. They study changes to natural environments and their causes, and explore local and national environmental issues such as conservation.

In the Junior Cycle, in History, children of between 12 and 15 learn to carry out historical research through looking at material sources including artefacts, buildings and settlements. Syllabus topics include revolutionary movements in Ireland and France in the late 18\(^{th}\) and early 19\(^{th}\) centuries, and their consequences, and peace and war in Europe, 1920-1945.

In the Junior Cycle, in Geography, children of between 12 and 15 carry out fieldwork and learn to use small scale and Ordnance Survey maps and aerial and satellite photographs, as well as making their own maps. Syllabus topics include settlement patterns and changes in them (including people’s need for defence and a case study of a nucleated defence settlement in an Irish river basin).

In the Senior Cycle, in History, children of between 16 and 18 study Early Modern and Late Modern periods in Irish and international history. Relevant topics in Irish history include the impact of the French Revolution and the wartime boom of 1793-1815; Napoleonic Europe and the impact of war; the impact of the First World War and the Second World War, North and South; politics and society in Northern Ireland, 1949-1993; and the technology of warfare, 1920-1945.

In the Senior Cycle, in Geography, children of between 16 and 18 study the ‘changing interrelationships between the physical and human worlds’ using local and regional examples ‘where available and appropriate’, with teachers given a free hand in choosing sites and case studies. Fieldwork is central and topics include socio-economic regions; physical and economic processes in two contrasting Irish regions and primary activities in them, including defence; changes in political boundaries and their impact on cultural groups; locational characteristics for pre-historic and historic settlements; and conflicts between political structures and cultural groups.
Appendix C: potential stakeholder contacts

Relevant advisory bodies

<table>
<thead>
<tr>
<th>Name:</th>
<th>Details:</th>
<th>Website:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airfield Research Group</td>
<td>Researches and maintains records of military and civilian airfields and related infrastructure, across the world</td>
<td><a href="https://www.airfieldresearchgroup.org.uk">https://www.airfieldresearchgroup.org.uk</a></td>
</tr>
<tr>
<td>Ulster Architectural Heritage Society</td>
<td>Encourages the conservation, restoration and re-use of Ulster's built heritage to regenerate and sustain our communities</td>
<td><a href="http://www.uahs.org.uk">www.uahs.org.uk</a></td>
</tr>
<tr>
<td>Co-operative Alternatives</td>
<td>Develops successful co-operatives and community benefit societies in NI through tailored training and support on legal, financial, business and democratic governance (already supporting community groups in Ballykelly)</td>
<td><a href="http://www.coopalternatives.coop">http://www.coopalternatives.coop</a></td>
</tr>
<tr>
<td>Oral History Network Ireland</td>
<td>Brings together oral history practitioners for the support and promotion of the discipline of oral history in Ireland</td>
<td><a href="http://www.oralhistorynetworkireland.ie/">http://www.oralhistorynetworkireland.ie/</a></td>
</tr>
<tr>
<td>Oral History Society</td>
<td>Promotes the collection, preservation and use of recorded memories as well as developing the use of oral history, across Britain and Northern Ireland</td>
<td><a href="http://www.ohs.org.uk">http://www.ohs.org.uk</a></td>
</tr>
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</table>

Potential project partners

<table>
<thead>
<tr>
<th>Name:</th>
<th>Details:</th>
<th>Website:</th>
</tr>
</thead>
</table>
| Airfields of Britain Conservation Trust | Increases public understanding and appreciation of the history of UK airfields by  
• establishment and support of museums and interpretation centres  
• preservation of the historical details and records of airfields  
• erection of memorials at sites of National and historical importance  
• promoting research for the benefit of the public | http://www.abct.org.uk |
<p>| Foyle Civic Trust                    | Promotes high standards of planning and architecture; educates in geography, history, natural history and architecture; secures the preservation, protection, development and improvement of features of historic or public interest, across the Limavady, Derry, Strabane, and Inishowen area | <a href="http://foylecivictrust.org">http://foylecivictrust.org</a>                   |</p>
<table>
<thead>
<tr>
<th>Name</th>
<th>Details of interest</th>
<th>Tel</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lisa McCahon, National Trust</td>
<td>Community Learning and Interpretation Officer at Hezlett House</td>
<td><a href="https://www.nationaltrust.org.uk/downhill-demesne-and-hezlett-house">https://www.nationaltrust.org.uk/downhill-demesne-and-hezlett-house</a></td>
<td></td>
</tr>
<tr>
<td>Helen Perry, Causeway Coast and Glens Borough Council</td>
<td>Museum Development Officer, with staff team experienced in archive and exhibition development, oral history research, working with volunteers and engaging people with contested heritage</td>
<td><a href="https://www.causewaycoastandglen.org.uk">https://www.causewaycoastandglen.org.uk</a></td>
<td></td>
</tr>
<tr>
<td>Andrew Glenfield</td>
<td>Owns and moderates a World War II heritage website in Northern Ireland</td>
<td><a href="http://www.ww2ni.com/">http://www.ww2ni.com/</a></td>
<td></td>
</tr>
<tr>
<td>Paul Sayer, North Coast Explorer</td>
<td>Experienced tour guide already guiding groups in Binevenagh, Downhill and Castlerock area</td>
<td><a href="http://www.northcoastexplorer.com">http://www.northcoastexplorer.com</a></td>
<td></td>
</tr>
</tbody>
</table>

Potential oral history interviewees

<table>
<thead>
<tr>
<th>Name</th>
<th>Details of interest</th>
<th>Tel</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jay Nethercott</td>
<td>Previously CO at Ballykelly (oversaw sale of land) and Magilligan</td>
<td>07989 293556</td>
<td><a href="mailto:wjaynet@aol.com">wjaynet@aol.com</a></td>
</tr>
<tr>
<td>Alice Conn</td>
<td>Magilligan resident, family farm backs onto MoD ground, husband remembers American soldiers during Cold War</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robin McCarron</td>
<td>Family worked at Downhill House and lived at Bishop’s Gate</td>
<td>07747 633284</td>
<td></td>
</tr>
<tr>
<td>Elizabeth Scott</td>
<td>Chair of Aghanloo Community Association, has contact details of other committee members, several of whom have features on their land or family stories relating to the airfield</td>
<td>07856 496601</td>
<td><a href="mailto:aca31@outlook.com">aca31@outlook.com</a></td>
</tr>
<tr>
<td>John Thompson</td>
<td>Committee member of Aghanloo Community Association, family farm includes airfield features, grandfather responsible for rolling the runway at Aghanloo</td>
<td>07879 417214</td>
<td></td>
</tr>
<tr>
<td>Mark Parker</td>
<td>Grew up in Coleraine, remembers Shackleton Bombers flying up over the Bann to Ballykelly, keen personal interest in and knowledge of local military history</td>
<td></td>
<td><a href="mailto:Mark.Parker@daera-ni.gov.uk">Mark.Parker@daera-ni.gov.uk</a></td>
</tr>
</tbody>
</table>
Jean Caulfield
Runs Castlerock 55+ Club, good contact for other potential interviewees in the village
70848388

Identified Landowners

<table>
<thead>
<tr>
<th>Name</th>
<th>Description of ownership</th>
<th>Tel:</th>
<th>Email:</th>
</tr>
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<tbody>
<tr>
<td>William Stevenson</td>
<td>Part-owner of Aghanloo Dispersed Living Site 1</td>
<td>028 77762203</td>
<td></td>
</tr>
<tr>
<td>Duncan McMonagle</td>
<td>Part-owner of Aghanloo Dispersed Living Site 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marius McCauley</td>
<td>Owner of business in former squash courts, Aghanloo Dispersed Living Site 1</td>
<td></td>
<td><a href="mailto:marius@altec-solar.com">marius@altec-solar.com</a></td>
</tr>
<tr>
<td>Windyhill Farm Supplies</td>
<td>Owns Aghanloo Dispersed Living Site 2</td>
<td></td>
<td><a href="mailto:windyhill.farmsupplies@btconnect.com">windyhill.farmsupplies@btconnect.com</a></td>
</tr>
<tr>
<td>John McMonagle</td>
<td>Owns Aghanloo Dispersed Living Site 3</td>
<td>07746 697102</td>
<td></td>
</tr>
<tr>
<td>Bill Douglas</td>
<td>Owns Aghanloo Dispersed Living Site 5</td>
<td>028 7776 4185</td>
<td></td>
</tr>
<tr>
<td>Airfield Motorcycles</td>
<td>Rents premises on Aghanloo Airfield</td>
<td>07874353193</td>
<td></td>
</tr>
<tr>
<td>Limavady Agri and Building Supplies</td>
<td>Rents premises on Aghanloo Airfield</td>
<td></td>
<td><a href="mailto:info@labsni.co.uk">info@labsni.co.uk</a></td>
</tr>
<tr>
<td>MS Engineering</td>
<td>Rents premises on Aghanloo Airfield</td>
<td></td>
<td><a href="mailto:msegeneering@btconnect.com">msegeneering@btconnect.com</a></td>
</tr>
<tr>
<td>Gerald Millar</td>
<td>Owns buildings on south end of Aghanloo Airfield, including Training Dome</td>
<td></td>
<td><a href="mailto:gerald@milgro.co.uk">gerald@milgro.co.uk</a></td>
</tr>
<tr>
<td>Sam Conley</td>
<td>Rents premises on Aghanloo Airfield</td>
<td></td>
<td><a href="mailto:samconleypt@gmail.com">samconleypt@gmail.com</a></td>
</tr>
<tr>
<td>Stanley McShane</td>
<td>OC Magilligan Training Centre</td>
<td></td>
<td><a href="mailto:stanley.mcshane634@mod.uk">stanley.mcshane634@mod.uk</a></td>
</tr>
<tr>
<td>Malcolm Campbell</td>
<td>MJM Group representative, owns Ballykelly Airfield</td>
<td></td>
<td><a href="mailto:m.campbell@mjm-group.com">m.campbell@mjm-group.com</a></td>
</tr>
<tr>
<td>Richard and Leslie Allison</td>
<td>Own Watchtower on shore below Ballykelly Airfield</td>
<td>07720 077583</td>
<td></td>
</tr>
</tbody>
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Appendix D: gazetteer

Avish (Bishop’s Road) Ground Controlled Intercept Station

| DHP no.: 116 | Grid ref.: C72413344 | Quality: 3D |

Description: The site was initially located using grid references provided in the CBA site gazetteer for Northern Ireland. Site visits revealed only traces of concrete hut bases remained.

Figure D1: Fragmentary remains of the Avish GCI station.

Ballykelly airfield

| DHP no.: 29 | Grid ref.: C630240 | Quality: 1A |

Description: While Ballykelly remained an operational military base until recently, it has retained relatively few building relating to its flight operations during World War II. The layout of the runway, taxiways, frying pan and spectacle dispersals are intact, but much of the technical site has been cleared. The operations block survives albeit in a much-modified form with modern additions. There is no discernible trace of the

Figure D2: Ballykelly Airfield (left) Operations Block, and (right) Watch Office (control tower).
dispersed living sites which appear to have been removed to make way for the modern barrack buildings, redevelopment for civilian housing or returned to farmland.

The best surviving building is the two-storey Watch Office (control tower), built to a standard design with a prominent Visual Control Room added after World War II. The tower is in good condition apart from some water damage after a break-in left it open to the elements. The fire tender house sits just to the north of the tower.

Six aircraft hangars remain on the airfield, including two T1 hangars and three half-size T2 hangars. The frames are original, but all have been re-clad. The most distinctive hangar is the post-war cantilevered aircraft-servicing shed built to house the station’s Shackleton maritime patrol aircraft. Built in the mid-1960s, the hangar is constructed to an innovative cantilever design and was granted B+ listing status by 2000 (HB02/10/027). There are no visible remains of the blister hangars. The T2 hangars have been repurposed to use as storage, a motor pool and an equestrian facility. Internal dividing walls were erected by the army within the cantilever hangar.

Figure D3: Ballykelly Airfield, (top) cantilever hangar, exterior and interior, (bottom left) T2 hangar, and (bottom right) equestrian facility inside a T2 hangar.

Four Operational Readiness Platforms (ORP) constructed in the 1950s-60s to enable rapid take-off of four stationed Vulcan Bombers in the event of a Cold War attack can be seen still at the northeast end of the main runway.
The southern section of the airfield, also known as the upper airfield, is composed of relatively modern barracks, administration buildings and domestic housing with little of historic interest.

Areas of the site directly associated with the Troubles are the SAS compound to the north-east and an enclosed facility used by RUC Special Branch. Both are of modern construction and mundane design.
Bennarees Pillbox

Description: This pillbox has three staircased embrasures looking east and west along the beach at Downhill. It is distinctive, as it is built of locally-sourced basalt rocks, cemented into place around the pre-cast concrete embrasures and capped with a concrete roof. Access is through a covered concrete porch to the rear of the pillbox, but the site is currently three-quarters filled with sand. Apart from sand and some litter, the interior is relatively clean, with some graffiti. It is not known if basalt rocks were used as an expedient building material or an attempt at camouflage, but either way, the unorthodox construction makes this pillbox unique in Northern Ireland.

Carrowreagh Quadrant Tower

Description: Described as a 'lookout' on the HED DHP mapping, the quadrant tower at Carrowreagh is of a two-storey brick and concrete design. However, unlike other examples in the UK, this tower appears to have been fitted with two curved-roof annexes, possibly similar to Nissen huts. A concrete hut base sits just south of the tower. The tower has lost its roof and internal floors, walls and fittings and part of the northern gable is missing.
Castlerock Chain Home (CH) Radar

DHP no.: 299  Grid ref.: C798345  Quality: 1A/B

Description: The remains at Castlerock are typical for a 'West Coast' Type C transmitter block with standby set house and a substation. Several mast bases and support holdfasts and anchor blocks also remain.

Figure D71: Castlerock CH Radar, (left) the West Coast Type 'C' transmitter block, and (right) transmitter room with ventilators.

The transmitter block is in relatively good condition with all its internal walls intact and some original doors and fittings, including parts of the original air-conditioning plant. The standby set house is currently used to store farm machinery. A large hole has been opened in the east face to allow the access to the central hall. This was present during a field visit by HED in 2007 and there has been an increased level of dumping on the site since, but no additional damage to the structure.

Figure D8: Castlerock CH Radar, (left) standby set house, and (right) farm machinery and stock car stored in main hall.

Two internal walls have been knocked through in the substation/transformer kiosk, allowing access to what were once three separate rooms housing the transformers and
switchgear. The ground around the substation has been prepared for redevelopment with new fencing and re-grading already done. Most of the protective earthworks have been removed from around the structure, exposing the concrete walls. In addition to the three main buildings, mast bases and anchor blocks can be found in the surrounding fields.

Figure D9: Castlerock CH Radar, (top) substation with earthworks removed, (middle) interior of substation, and (bottom) mast base north-east of transmitter block.
Coleraine (Kilcranny townland) Royal Observer Corps (ROC) monitoring post

DHP no.: 121  Grid ref.: C82503378  Quality: 1A

Description: ROC reporting bunkers like this one were typically 5.8m × 2.6m × 2.3m concrete boxes completely buried in the ground and covered with approximately one metre of compacted soil. Entry was via a single access hatch to a 4.5m deep shaft, with the reporting room/living quarters on one side and a rudimentary chemical latrine on the other. A ventilation shaft ran to the surface, as did the ducts instruments used by the observers inside. This post is in good condition with the counterweighted hatch intact. There is slight damage to the side of the access hatch and corrosion to the fittings on the ventilation shaft.

Downhill Chain Home Low (CHL) Radar

DHP no.: 297  Grid ref.: C74133542  Quality: 1A

Description: Six buildings are upstanding, the most prominent of which is the Transmitter/Receiver Block (Tx/Rx). An internal dividing wall has been removed to increase the usable space, and a large hole has been knocked in the northwest end, most likely to facilitate the entry of farm machinery. The concrete buttresses of the radar aerial remain at the southeast end of the block. A brick structure northwest of the Tx/Rx block may be the station’s power/standby set house.
On the opposite side of Bishops Road, there are two grey brick enclosures, a picket post and the remains of a red brick structure (possibly a blast shelter). The grey brick structures may have been shelters for additional antennae or generators relating to the CHL Tx/Rx block.

Figure D11: Downhill CH Radar Transmitter/Receiver Block.

Grange Beg Pillbox

| DHP no.: | 290 | Grid ref.: | C79233554 | Quality: | 1A |

Figure D12: Grange Beg Pillbox.

Description: This concrete and brick pillbox overlooks the River Bann estuary within the National Trust Barmouth Wildlife Reserve. It has three staircased embrasures and two observations ports. The entrance is a covered access to the rear of the pillbox and is
heavily overgrown. One of the observation/defence ports facing to the rear of the pillbox has been blocked with concrete. Inside the concrete uprights remain which used to support concrete tables on which sat light or medium machine guns. Just to the right of the pillbox is a purpose-built wooden hide for observing birds. The site is scheduled for protection under the HMAOO 1995.

**Grange More Small Arms Range**

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**Description:** A possible brick blast shelter, some hut bases and a concrete plinth survive at this site. The range itself may survive to some extent approximately 280m north-west of the brick structure. It is defined by two parallel banks 90m apart. Apart from the hut bases and brick structure, the range is scheduled under the HMAOO 1995 due to the presence of Neolithic archaeology.

*Figure D13: The range at Grange More with range firing area circled.*

**Limavady (Aghanloo) airfield**

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**Description:** The airfield is composed of the runways and taxiways for flight operations, the technical site where day-to-day flight operations and training were carried out and twelve dispersed living sites where the airmen and women stationed at the base lived. The airfield has a typical three-runway layout with linking taxiways, which allowed access to the runways from the four Bellman Hangars, two T2 hangars and eight blister hangars and 50+ ‘frying pan’ dispersals. The technical site had over
100 buildings used for operations, training, stores and base defence. Twelve dispersed living sites were constructed to the east of the main site, providing accommodation, dining, ablution and recreation facilities for officers and enlisted men and women.

Much of the fabric of the runways and taxiways survives, though it is difficult to get an accurate assessment of the full extent of its survival, as a significant percentage is covered with a thin layer of topsoil and moss build-up.

33 buildings remain on the technical site:


Features completely removed since 2004:
X1: Link trainer X2: Photographic block and lecture hall
A retention level of almost 30 per cent of the structures in the technical area is high in comparison to other airfields in Northern Ireland. Moreover they are generally in good condition. Only certain sections of the airfield have been scheduled for protection. These are the Dome Trainer, the defensive cluster north of the watch office and the Battle HQ east of the most easterly hangar.

Three of the Bellman hangars remain in relatively good condition. The most westerly hangar is used as a store by Roads Service, a second is used to process waste by Causeway Coast and Glens Borough Council and the third is unused. Continued use has allowed several building to be maintained in good condition. Sections of the main stores (13) are used by a motorbike mechanic/shop. The instructional building (10) is occupied by light industrial units and a fitness suite. Some efforts have been made at weatherproofing the main workshop (14) and lubricant store (11) for use as storage units. The power house (21) appears to retain much of its generating plant intact. The northern end of the maintenance unit (16a) is a private residence.

Figure D15: Limavady Airfield, (top left) main workshop (14) with sheeting placed on windows, (bottom left) interior of power house (21) with plant in situ, and (right) World War II wall art in the SI workshop (22).
**Limavady Airfield dispersed living sites**

Twelve dispersed living sites provided accommodation, ablutions, recreational and domestic facilities such as shops, dining rooms and gymnasiums. The sites were dispersed to provide some protection from air attack, however each contained concrete and brick air raid shelters.

**Site 1: Communal**

| DHP no.: | 195 | Grid ref.: | C695257 | Quality: | 1B |

**Description:** A communal site for officers, NCO and enlisted airmen. There are nine domestic buildings remaining and four blast shelters, gas decontamination centre, grocery store, power house, officers’ mess, officers’ bathhouse and latrines, officers’ quarters, sergeants’ mess and squash court. Overall the site is in fair condition. The sergeants’ mess has been incorporated into farm buildings. While some buildings are derelict, the officers’ quarters and bathhouse have been re-used for storage and the squash court has been renovated and re-purposed as office space. The gas decontamination centre is in good condition and clearly demonstrates the belief that gas warfare was a feared reality during World War II, though ultimately chemical weapons were not used.

*Figure D16: Limavady Airfield Dispersed Living Site 1 Communal, (top left) repurposed squash court, (top right) gas decontamination centre, and (bottom) officers’ mess.*
Site 2: Sick quarters

| DHP no.: | 202 | Grid ref.: | C68892528 | Quality: | 1B |

**Description:** The sick quarters and annexe are currently occupied by a farm supplies retailer. A small gas decontamination structure adjoins the main building, and the mortuary (repurposed for farm machinery storage) survives to the rear of the site. Recent development has removed a blast shelter.

*Figure D17: Limavady Airfield Dispersed Living Site 2 Sick Quarters, (left) main building, and (right) gas decontamination centre to rear of sick quarters.*

Site 3: Women’s Auxiliary Air Force (WAAF) dispersed barrack site

| DHP no.: | 195 | Grid ref.: | C695257 | Quality: | 1B |

**Description:** The overall survival of airfield building at this site is fair to poor. The institute and dining room survive as byres for cattle and sheep. Some latrines are still extant as are the derelict remains of the WAAF bathhouse and sick quarters.

*Figure D18: WAAF institute building.*
Site 4: Dispersed living site

DHP no.: 0  Grid ref.: C69562648  Quality: 4A

Description: A dispersed living site for officer, NCOs and airmen, no visible remains.

Site 5: Dispersed living site

DHP no.: 171  Grid ref.: C70122677  Quality: 2A

Description: A dispersed living site for officer, NCOs and airmen. The site is neat and well kept and has the remains of hut bases with three latrines and two blast shelters.

Figure D19: Limavady Airfield Dispersed Living Site 5, blast shelter and latrine.

Site 6: Dispersed living site

DHP no.: 0  Grid ref.: C689261  Quality: 4B

Description: Dispersed living site. No visible remains.

Site 7: Dispersed living site

DHP no.: 194  Grid ref.: C701261  Quality: 2B

Description: A dispersed living site providing accommodation for officers, NCOs and airmen. No accommodation blocks survive, though hut bases can be discerned under that grass. Seven structures remain upstanding, namely two blast shelters, four latrines and a picket post.
**Site 8: Dispersed living site**

| DHP no.: | 173 | Grid ref.: | C70522634 | Quality: | 4A |

**Description:** Dispersed living site, providing accommodation for officers, NCOs and airmen. No visible remains.

**Site 9: Dispersed living site**

| DHP no.: | 0 | Grid ref.: | C703255 | Quality: | 4B |

**Description:** Dispersed living site, providing accommodation for officers, NCOs and airmen. No visible remains.

**Site 10: Dispersed living site**

| DHP no.: | 170 | Grid ref.: | C69672540 | Quality: | 4B |

**Description:** Dispersed living site, providing accommodation for officers, NCOs and airmen. No visible remains.

**Site 11: Dispersed living site**

| DHP no.: | 174 | Grid ref.: | C705260 | Quality: | 3A |

**Description:** Dispersed living site, providing accommodation for officers, NCOs and airmen. Only a picket post, blast shelter and hut base remain. Comparison of aerial photos from DHP file from 2004 show that possibly half the site's features have been removed to facilitate redevelopment.
Figure D21: Limavady Airfield Dispersed Living Site 11, (left) aerial photograph taken c. 2004, and (right) a more recent aerial photograph showing redevelopment.

**Site 12: Dispersed living site**

| DHP no.: | 193 | Grid ref.: | C702260 | Quality: | 3A |

**Description:** Dispersed living site, providing accommodation for officers, NCOs and airmen. Farm buildings now cover most of the site, with two latrine blocks being the only visible remains.

**Lower Doaghs Pillbox**

| DHP no.: | 84 | Grid ref.: | C66003681 | Quality: | 1A |

**Description:** This concrete pillbox is unusual in Northern Ireland as it is a two-storey design with three staircased embrasures on each level. Easily seen from the road, the pillbox constitutes rock-armoured sea defences. Access is via a hatch on the roof. The steel door that once sealed the site is missing and the steel rungs into it have now mostly corroded away. The lower levels are reached though a doorway, but this is now blocked with rubble. The lower bunker is flooded to the level of the embrasures.

Figure D22: Lower Doaghs Pill Box.
**Lower Drummans beach scaffolding**

| DHP no.: | 303 | Grid ref.: | C66283739 | Quality: | 3D |

**Figure D23: Beach scaffolding at Drummans Lower.**

**Description:** Composed of a series of concrete blocks containing truncated steel poles, in a line running north-south along the beach for approximately 40m. Examination of plans showing the construction methods for beach scaffolding suggests that concrete footings were not used to seat the scaffolding. Instead, the poles were driven approximately two feet into the beach. Consequently, this site is unlikely to be the remains of World War II defences.

**Figure D24: Construction of beach scaffolding.**
**Magilligan Coastal Battery**

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**Description:** Much of the site appears to have been cleared after the war. The observation post built on the Martello tower was removed by HED (then Environment Service) during the 1980s. On land owned by CCGBC the site of the battery No. 3 gun (the 12 pounder QF) has two concrete gun platforms with steel holdfasts. Magazines and crew shelter remain in the sand dunes. Oddly there are two holdfast positions where the MoD plan of the site shows only one, suggesting that at some point the 12 pounder QF gun was re-sited after 1943. Hut bases relating to the accommodation of the battery crews and support staff remain 120m north-east of the No. 3 gun position. These are within the perimeter of the Ministry of Defence Magilligan Training Centre.

Both gun platforms at the No. 3 gun site are in good condition, though the rough overgrown nature of the ground makes it difficult to assess if the second of the two magazines at the site has been removed or just obscured by sand and vegetation. This is true for the other positions at the Magilligan Battery where the dynamic nature of the sand dunes makes it difficult to assess if the positions have been completely removed or survive under the sand.

*Figure D25: Magilligan Coastal Battery No. 3 gun site platforms.*
Figure D26: Magilligan Coastal Battery, c. 1943. Locations of extant remains circled in red.

Figure D27: Magilligan Coastal Battery concrete bases of huts associated with the cast battery, now within Magilligan Camp.
Magilligan Heavy Anti-aircraft Battery

DHP no.: 163  Grid ref.: C66533729  Quality: 1A

**Description:** The battery at Magilligan was armed with four static QF (Quick Firing) 3.7 inch anti-aircraft guns mounted on steel holdfasts and enclosed in circular concrete gun pits, which held six ammunition lockers and two crew shelters. The guns are arranged in a semi-circle around the battery command post, which provided fire control instructions to the guns such as identification and visual spotting and height-finding data from the mechanical predictor and gun-laying (GL) radar. The height-finding radar was a MK I or MK II GL radar mounted on the radar plinth 130m north-west of the command post. This was surrounded by a wire mesh GL mat supported on steel posts, which provided a false datum for the height finding radar to work effectively. A concrete ammunition magazine sits 110m southeast of the command post, beyond which are the concrete bases of the accommodation and administration buildings. There are also the remains of a small generator or stand-by set house 50m southwest of the command post.

*Figure D28: Magilligan Heavy Anti-Aircraft Battery, (top left) battery command post, (top right) northernmost gun pit, (bottom left) damage to gun pit walls, and (bottom right) the GL radar plinth.*
The battery as a whole is in generally good condition. The battery command post is structurally complete. The gun pits are mostly complete, though some are damaged, most likely when the site was used during military exercises and where a wall has been removed or a hole forced through a locker wall. The damage was recorded during a site visit by HED staff in 2003 and since then no further deliberate damage has occurred. A smaller structure associated with the magazine has deteriorated since 2003, as the sole gable of the structure has collapsed.

The site is scheduled for protection under Historic Monuments and Archaeological Objects Order (NI) 1995 (HMAOO), though the accommodation hut bases, standby set house and areas containing potential remains of the GL radar mat are not within the scheduled area. The area surrounding the radar plinth is overgrown making it difficult to assess if any physical remains of the GL mat survive.

Figure D29: Magilligan Heavy Anti-Aircraft Battery, (top) ammunition magazine in 2003, and (bottom) structure to rear of magazine now collapsed in 2017.
Description: The tower is large, circular, sandstone fort built with a pronounced batter and a narrow entrance door some three metres above ground level. The battered walls rise from a low plinth of rough stones and access to the doorway is up a two flight metal stairway. The projecting gallery forming the machiolations over the entrance door is supported on five robust stepped and rounded corbels and the walls of the gallery punctuated with gun slits. The fort sits among the dunes at the entrance end of Magilligan Point, guarding the narrow entrance to Lough Foyle opposite Greencastle in County Donegal, and having command of the North Atlantic approach. A complementary tower and battery and the remains of the 14th-century de Burgh castle sit on the County Donegal side of the lough. The Greencastle tower is a little different from the Magilligan fort in that it is elliptical.
Magilligan Strand (Ballymaclary Td) Pillbox

DHP no.: 302  Grid ref.: C70463646  Quality: 4(1)D

*Figure D30: Plotting the pillbox after it was uncovered by a storm in 2003.*

**Description:** The concrete pillbox has three staircased embrasures to mount light or medium machine guns and would have been one of many defending the beach. The local council removed many of the defence structures to improve the amenity of the beach, but it is possible that other pillboxes like this one remain hidden below the sand. At the time of survey in 2003, the pillbox was almost completely enclosed by sand dunes and had only come to light after a severe storm had removed sand covering its face. Sand has since reclaimed the pillbox. The site sits just to the north of the Magilligan Training Area, where live-fire training frequently occurs. Consequently, this section of the beach is off-limits to all but authorised personnel.

Magilligan Training Facility

DHP no.: 0  Grid ref.: C67133721  Quality: 1D

**Description:** The site currently has 10 ranges of varying length. The ‘Old Camp’ buildings are still in use though they have been clad in aluminium siding and fitted with PVC window frames. The Nissen huts of the ‘Musketry Camp’ are still in use as part of HMP Magilligan.

Possible practice trenches relating to the training at the site during World War I can be seen approximately 500m north-west of the main camp buildings, at IG C66793760. Normally found as crenellated firing trenches and saw-tooth communication trenches, these, though shallow, appear to be communication trenches. Examination of aerial photographs of the area suggests there are further sub-surface remains.

During the Troubles period, known to the Army as Operation Banner, a mock-up of a border patrol base was constructed at Magilligan. Called the Foyle Patrol Base, it was used to train troops how to live in and patrol out of a hilltop border post using only the
resources within the post. The site consists of a triangular compound of metal cladding with two observation sangers. Observation posts were a common sight along the border but are now gone. This facility is now one of the few traces of Troubles-period defensive architecture, albeit one used for training.

Riot training was carried out at the Public Order Training Facility, also known as the Patrol Village, which was a mock-up of a village with the central ‘Diamond’, streets and alleyways. The outlines of the buildings and streets are defined by steel cladding, scaffold poles and concrete blocks. The political leanings of the ‘streets’ are defined by suitably painted kerbstones. The streets are named after former and current personnel serving at the Magilligan base.

*Figure D31: Magilligan Training Facility, (top) plan of the camp c.1941, and (bottom) the ‘Musketry Camp’ on the left and ‘Old Camp’ on the right.*
Figure D32: Magilligan Training Facility, (top left) aerial photo showing saw-tooth cropmarks, (top right) trenches running into woods, (bottom left) Foyle Patrol Base, and (bottom right) Public Order Training Facility.

Tircrevan Pillbox

DHP no.: 6  Grid ref.: C70563200  Quality: 1A

Description: This square brick and concrete pillbox protected the main route on to the high ground to the north of Binevenagh. It has unobstructed views toward Magilligan Point. The pillbox is fitted with four staircased embrasures, though the primary firing arc is north along the road towards Magilligan. The site is in excellent condition and retains its original steel door.
The Board of Ordnance Lough Foyle Baseline

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**Description:** Fixed points along the survey baseline were purchased by the government to preserve the line. Four circular base towers were erected. Coastal erosion has claimed the most northerly tower at Mountsandy. However, three remain at Magilligan (C67033431), Minearny (C65943057) and Ballykelly (C63462214). The first two are on privately held land, but the Ballykelly tower sits at the rear of the King’s Lane estate and is readily accessible. Two Board of Ordnance benchmarks can also be found within the proposed LPS area. One is at Magilligan point (C65983872), the other at the highest point of Benbraddagh Mountain (C72221136). Used to establish heights above the ordnance datum line, they are marked with the broad arrow or crow’s foot.

Unlocated sites, and sites with no visible remains:

**Avish/Gortmore radio/radar station**

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<tbody>
<tr>
<td>5</td>
<td>C716342</td>
<td>4A</td>
</tr>
</tbody>
</table>

**Description:** Marked as lying in Avish townland on the HED web mapping, it was recorded as at Gortmore on the defenced heritage record sheet submitted by a Defence Heritage Project volunteer. No visible remains.

**Ballywoolen Pillbox (West Barmouth)**

<table>
<thead>
<tr>
<th>DHP no.</th>
<th>Grid ref.</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>91</td>
<td>C78273638</td>
<td>4B</td>
</tr>
</tbody>
</table>

**Description:** Noted in DHP field report as a pillbox at west pier, Barmouth, Castlerock. A ‘Type 26’ pillbox made of concrete (possibly similar to a nearby pillbox on the east side of the River Bann, DHP 125, Ldy 3:78). Pillbox reported destroyed.

**Castlerock (Dunbeg Townland) Pillbox**

<table>
<thead>
<tr>
<th>DHP no.</th>
<th>Grid ref.</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>108</td>
<td>C77403625</td>
<td>4B</td>
</tr>
</tbody>
</table>

**Description:** Noted in DHP Report as partly buried in sand dunes, on field visit no visible remains could be found.

**Crandle Bombing Decoy (Q site)**

<table>
<thead>
<tr>
<th>DHP no.</th>
<th>Grid ref.</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>C654280</td>
<td>n/a</td>
</tr>
</tbody>
</table>
Description: A night decoy designed to draw away attackers from RAF Limavady consisting of a series of lights mounted on poles replicating the operational lights of an actual airfield. The lights were controlled from a protected control shelter. The site was placed on the DHP record with data drawn from the CBA gazetteer for Northern Ireland. No upstanding remains are known.

Scotchtown Pillbox

| DHP no.: | 0 | Grid ref.: | C64473026 | Quality: | n/a |

Description: Reported as the site of a heavily damaged pillbox on the DHP report for DHP 218. No visible remains.

Other sites of defence heritage interest:

Shipwreck and aircraft crash sites
The dangerous approaches to the airfields in the area, close to the slopes of Binevenagh, led airmen to nickname the mountain ‘Ben-twitch’. Many aircraft crashed, both on and off the airfields and sometimes with fatal consequences. While crashes from RAF Limavady have been itemised no exact locations have been recorded. ¹⁰ Most crash sites were visited by recovery teams who recovered wreckage, ordnance and where needed the remains of the crew who perished in the crash.

Rory McNeary (Department of Agriculture Environment & Rural Affairs: Marine Division) provided further data on offshore aircraft crash sites and shipwrecks. Three aircraft lie off the mouth of the Bann: an Armstrong Whitworth Whitley bomber from 1940; a Fairey Firefly fighter from 1941; and another as yet unidentified craft. HMS Assurance, an Assurance class rescue tug, lies at the entrance of Lough Foyle where it was lost on 18th October 1941. To the south-west of Magilligan Point is a wreck buoyed in 1916, the Uberus armed trawler lost in 1941 and a Grumman American training aircraft which was lost in 1975. Just north of Ballykelly lie the remains of a Vought F4U Corsair that crashed in 1944.

¹⁰ John Quinn, Wings over the Foyle (World War II Irish Wreckology Group, 1995).
Figure 34:3 Map showing offshore wreck and crash sites (courtesy of Rory McNeary, DAERU Marine Division).
Appendix E: references

**Historical and archaeological**


Bardon, Brian (1995), *Northern Ireland in the Second World War*, Ulster Historical Foundation, Belfast


Clarke, Bob (2008), *The archaeology of airfields*, Tempus, Stroud

Clarke, Wallace (2007), *Five years on full alert: WWII A.A. gunner memoirs*, Wallace Clarke Booksales, Belfast


English Heritage (2002), *Military aircraft crash sites: archaeological guidance on their significance and future management*


Francis, Paul (1996), *British military airfield architecture: from airships to the jet age*, Patrick Stephens Ltd, Sparkford


Osborne, Mike (2004), *Defending Britain: twentieth-century military structures in the landscape*, Tempus, Stroud

Quinn, J. (1995), *Wings over the Foyle*, World War II Irish Wreckology Group


**Community development**
Roe Consultancy (2013), *Scoping Study for a Shared Community Facility in Ballykelly*
Lambert Smith Hampton (2015) Sales brochure for *Former Shackleton Barracks, Ballykelly*

**Existing walks and trails**
*Your Guide to Walking in the Causeway Coast and Glens*, booklet, Causeway Coast and Antrim Glens Ltd.

**Education**
http://www.curriculumonline.ie
http://www.ccea.org.uk/
http://www.rewardinglearning.org.uk/