

ÀRAINNEACHD EACHDRAIDHEIL ALBA

Property in Care (PIC) I	D: PIC028
Designations:	Scheduled Monument (SM90166)
Taken into State care:	1924 (Guardianship)
Last reviewed:	2011

STATEMENT OF SIGNIFICANCE

INCHCOLM ABBEY



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HISTORIC ENVIRONMENT SCOTLAND STATEMENT OF SIGNIFICANCE

NAME OF PROPERTY

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1 Summary

1.1 Introduction

Inchcolm island is one of several small islands located in the Firth of Forth. It lies close to the coast of Fife - just over half a mile from the nearest headland. The island itself consists of two distinct halves: a rugged and rocky eastern section where the modern landing site is located, and a grassy western part. The two halves of the island are joined together by a narrow central isthmus, on the west side of which stands Inchcolm Abbey, a well-preserved medieval monastery.

While the whole island is leased by Historic Environment Scotland, the Property in Care comprises Inchcolm Abbey, a medieval monastic complex, and its immediate environs. The Abbey, as the Property in Care, is the primary focus of HES interest, but the whole island is a significant cultural resource, particularly for the remains of 20th century and earlier fortifications.

Inchcolm is within easy reach of Edinburgh, accessed by boat from the harbour at Crammond or from the Hawes Pier at South Queensferry. The Abbey is staffed and generally open April to October, attracting around 24,000 visitors (2017).

1.2 Statement of significance

The primary significance of the Property in Care at Inchcolm is the ruined abbey which is arguably the most complete medieval monastic complex surviving in Scotland. Most of the key buildings remain structurally complete and weathertight, and although the abbey church is more fragmentary, a number of very significant architectural details survive. The wider significance of the Abbey is best understood within the context of its island setting and in a series of key associations and linkages up to the present day, including:

- the extent of survival of the Augustinian monastic buildings from 12th to 16th centuries, and particularly: the best preserved cloister range in Scotland; rare survival of "rood" and "pulpitum" screens and fragments of wall painting; well preserved chapter-house and (potentially) the earliest complete spiral stair in Scotland.
- the development of the priory/abbey church including significant remains from its first iteration in the 12th century, and the building of the "second" church. This evidences changes in the status of the church and religious practice over this period; the survival of the screens is an important factor in this. The relationship of the abbey to its near neighbours e.g. at Aberdour and to Dunkeld Cathedral is likewise an important aspect of its significance.

- intangible associations which evidence the importance of medieval Inchcolm as a seat of culture and learning, and of its dedication to the cult of St Columba. Key aspects are the residence here of Abbot Walter Bower as he compiled the *Scotichronicon* and the survival of fragments from the *Inchcolm Antiphoner*, a rare collection of early plainchant.
- early (pre-Augustinian) history of the island, especially as a place of religious importance. This is as yet imperfectly understood but is indicated by the foundation story and "hermit's cell"; the surviving and recorded sculptured stones, textual references and place-name evidence. There is potential for archaeological study to increase understanding of this aspect.
- in spite of the upheaval of 20th century defence installations, there remains high potential for below ground archaeological remains around the Abbey and throughout the island. This could improve understanding of the monastic landscape/garden and the layers of defences and other structures which populated the island over time.

In regard to the wider island site, there are many features of interest outwith the immediate PIC boundary, primarily these relate to the island's role as a strategic base within the Firth of Forth. This role is evidenced in physical remains and many documentary sources and link Inchcolm to other islands in the Firth and to strategic sites on the coast. Key aspects include:

- within the abbey itself, aspects of the design and planning of e.g. the cloister range, are unusual, which may stem from the need for some degree of fortification and Bower's account evidences attacks upon the island by English forces. These factors provide a link between the early, primarily religious, history of the island and its later, primarily military role.
- traces of Tudor and Napoleonic defences do survive on the island, but have been built over by later defences. However, there is excellent documentary evidence which can illuminate this period of history.
- the 20th-century defences particularly should be seen in the wider context of Britain's strategic Defence of the Forth. While structures were removed as part of the restoration of the island under Ministry of Works care, a number of impressive structures survive from both 1st and 2nd World Wars including WWII Defence Electric Light stations, gun emplacements, tramways and the tunnel. Individually, several sites preserve unique features, and together they certainly form a notable part of the visitor experience and aesthetic of the island.
- for the visitor, the sea crossing with spectacular views of the Bridges and islands is probably a key part of the experience. Similarly, a walk around the island offers expansive views, a feeling of excitement and

appreciation of nature, including seabirds and seals. A visit to Inchcolm remains a special and out-of-the-ordinary experience.

The above bullet points set out the most important aspects of the site's significance. A fuller assessment of the wider range of heritage values that the site offers, together with background information and a comprehensive timeline is given in the following sections and appendices.

2 Assessment of values

2.1 Background

The island of Inchcolm lies in the Firth of Forth, close to the coast of Fife - just over half a mile from the nearest headland. A mile and a half away lies Aberdour, a harbour town which acted as the mainland focus of the monastery's estates in the Middle Ages.

Inchcolm's documented history begins in the first half of the twelfth century, when a monastic community belonging to the Augustinian Order was established here. However, the existence of carved stones of mid 10th century date point to an earlier Christian presence on the island. Tradition links the island with both Viking invaders and St Columba, the latter also in association with Dunkeld, as Inchcolm came under the jurisdiction of the Bishop of Dunkeld. The pre-Augustinian history and associations of Inchcolm are discussed at 2.3.

An episode involving Alexander I sheltering on the island during a storm in 1123 traditionally led to the foundation of the monastery by Alexander's brother David I in 1140. The small structure known as the Hermits Cell is traditionally taken as Alexander's sheltering place and probably represents Inchcolm's oldest surviving structure, though is much rebuilt.

The abbey church, which began as a simple 2-cell structure in the mid 12th century, developed over a period of several hundred years. The original church was extended eastwards during the 13th century, including the building of the tower; much of this structure survives. Then, during the later 14th/early 15th century a major building project saw the construction of an entirely new cruciform abbey church (now mostly reduced to footings) extending ever eastwards. The cloisters, by contrast, are very well preserved. The architectural history of the abbey is summarised at 2.4 and more fully discussed in Appendix 2.

The abbey fell out of use after the Reformation, the buildings were adapted to serve various purposes, initially serving as a home for the abbots family – the lands were converted into a secular lordship in 1611. Ownership lay with the Earls of Moray; by the later 17th century the site was largely abandoned and the buildings partly demolished.

Because of its position within the Firth of Forth, Inchcolm also has a long history of fortification. It suffered incursions from the English in the 14th

century and was an important military base from the 16th century Rough Wooing through to the first and second world wars. Although the last guns were removed in the 1950s, a number of gun positions and associated structures remain in the undergrowth. Well-preserved searchlight houses are particularly prominent on the approach to the island's ferry pier. The military remains are summarised at Appendix 3.

After WWI, responsibility for the Abbey passed to the Ministry of Works, and the period of conscious conservation began. The terms of the lease also included the re-instatement of a more natural landscape over the island, which had been developed to house substantial military encampments and defence posts. The outbreak of WWII saw a rebuilding of defences with very substantial encampments laid out around the abbey; most of these have been subsequently removed, though several of the island's key infrastructure buildings: the pier, shop and service buildings are repurposed 20th century military structures.

Away from the immediate environs of the abbey, the island today has the appearance of an unspoilt wilderness, with thick undergrowth, nesting seabirds on the cliffs and basking seals on the headlands. This reflects a programme of deliberate restoration in the period of state care, including the removal of an extensive layout of military fortifications constructed in the first half of the twentieth century. Today, the surviving military remains are acknowledged as being of some cultural significance and there are no plans for further removal.

2.2 Evidential values

The evidential value of Inchcolm has three main aspects:

- The physical evidence of the site itself including artefacts recovered by excavation
- The documentary evidence and traditions pertaining to the site which shed light on its long history
- The potential for further archaeological discoveries across the whole island, and particularly around the Abbey

Inchcolm Abbey is an important evidential resource for Scottish monastic houses from the 12th century onwards because of its state of completeness, particularly the early church and claustral ranges. The survival of fragmentary wall painting, tombs and recovered excavated material (e.g. floor tiles) adds to this aspect.

Inchcolm has several areas where archaeological investigation may produce significant results. Perhaps the most obvious is the so-called "hermit's cell", a modest vaulted structure which stands to the west of the abbey buildings. This has been traditionally identified as the old chapel in which King Alexander I took shelter in the 1120s, and although it has undergone at least one extensive restoration in the 1860s, scholarly literature has generally

accepted that it embodies an early religious building predating the monastery. An overview of its architecture is given in 2.4 and Appendix 2 below, but a standing building survey would help to fully understand its architecture and archaeological context. As late as c. 1700, an early antiquarian description indicates the existence of multiple "cells" in this part of the site, raising the possibility that other similar buildings may have remained visible until that date (in keeping with comparable Irish and Hebridean religious sites), and that archaeological evidence may still survive.

The survival of the hog-back stone, and the discovery of an early carved stone cross-shaft with interlace decoration, certainly point to a Christian presence on the island in the later first millennium AD. There is some evidence from early accounts to suggest that these formed part of a wider complex of early Christian sculptural monuments on Inchcolm, but excavation in the 1990s in the area on the west of the island where the hog-back stone was formerly located failed to discover archaeological traces of these additional monuments.

The excavators did discover "four pits filled with human bones", and it was concluded that the early archaeology here may have been affected by twentieth-century activity (either during the construction of the fortifications or the landscaping when they were demolished), but in the absence of a detailed excavation report, the strength of this hypothesis is not entirely clear; the origin of the internments represents a puzzle which can be best addressed by further archaeological investigation, but it should be noted that several early written sources contain references to extensive and unusual graveyard archaeology in this part of the island, although the explanations they offer appear to be speculative and unreliable.

Two sixteenth-century writers refer to burials as well as sculptural monuments on the island, all of which they associate with Viking warriors slain in battle in the eleventh century. One of these sources explicitly mentions the hog-back stone and a widely distributed pattern of burials "In sundry parts, in so great quantity / Over all the isle", although a grammatically ambiguous phrase may indicate that the monument itself was located within the more orderly space of the medieval monastic graveyard. In 1822, a visiting antiquary identified the area just to the east of the hog-back stone as the "burial ground", but also noted "the surprising quantity of human bones which are to be found all over the island, heaped together with the utmost confusion", which he attempted to explain as the remains of foreign sailors stricken by an epidemic in the 1790s. A tourist in the 1840s, in contrast, associated remains found on the island with quarantined ships from the reign of James VI. Although the sixteenth-century story of a Viking army is probably a legend, the early date at which it is attested nonetheless calls the later explanations into question.

It should also be added that the detailed fifteenth-century source material from the island does *not* include any reference to these burials (although it *does* include an early version of the same Viking-invasion tale, which does not mention Inchcolm at all, and dates the campaign in question to a more

distant past, perhaps around 800 AD). Moreover, other early writers, from the sixteenth century onwards, focus on the presence of large numbers of rabbits on the eastern part of Inchcolm, whose warrens may have led to substantial archaeological disturbance, potentially accounting for these reports of disorganised and widely distributed remains. More archaeological research would therefore be necessary to discover the true date and context of the burials. The island's well, located a little to the south, is another site with archaeological potential relating to the early period, as it was presumably in use from an early date.

The Augustinian canons possessed the whole of Inchcolm, and archaeological remains of their presence are possible anywhere across the island. The later military activity may have disturbed much of the monastic evidence. However, the archaeological potential is likely to be best in the lowlying area in and around the abbey.

The abbey itself was subject to extensive architectural survey and archaeologically investigation during the Ministry of Works' clearance and restoration works in the 1920s (Wilson Paterson (1924-5), pp. 227-253). Among the discoveries made at this time were many floor tiles, and the foundations of several demolished ranges of buildings. The most significant discovery was the painted mural tomb on the south side of the choir, believed to be that of John de Leicester, bishop of Dunkeld (d. 1214, but reburied in this position in 1265). The extent of this early investigation means that the potential for modern archaeology is reduced - for example, the cloister courtyard was excavated down to twelfth-century levels. Nonetheless, some potential for new discoveries clearly remains. Excavation in advance of constructing a drain showed that the north wall of the chapter house belonged to an earlier building, and that there were additional earlier buildings to the south of the chapter house (Wordsworth (1984), p, 7). The complex architectural history of the buildings is covered below in in **Section 2.4**

In the medieval grounds around the abbey, the ground will have been disturbed by the construction of a military camp in 1914, and subsequent landscaping to remove its traces, but the surface here was artificially levelled up by retaining walls in the medieval period, creating the potential for a deep stratigraphy of redeposited material on top of undisturbed medieval ground levels, and this area may also be susceptible to techniques such as pollen analysis to better understand the original planting of the landscaped gardens. It is also possible that there may be underwater archaeology associated with an earlier harbour(s), and a number of shipwrecks lie off the island's shores.

The military activity between 1914 and 1945 is the aspect of the island's archaeology which is easiest to investigate, as it is extensively documented by plans and photographic evidence, but the thorough source material means that there is little potential for important new discoveries relating to this period, and many of the military structures were deliberately demolished in order to restore a natural appearance to the island. A thorough report has recently been prepared. The military site with the most obvious archaeological

potential is the main fortification on the top of the island's eastern promontory, which invites clearance for purposes of interpretative display, and excavation to ascertain how much remains of the earlier (and much less thoroughly-documented) Napoleonic and Tudor fortifications.

Notwithstanding the disruption caused by military activity, the island has a significant natural heritage potential, as its self-contained nature and distinctive flora and fauna drew the attention of early naturalists and botanists, beginning in the seventeenth century with Sir Robert Sibbald. The result is a very detailed record of the early landscape before modern interventions, which can be compared with the results of the restoration efforts, and offers the potential for more accurate reinstatement of the natural heritage.

2.3 Historical values

Inchcolm Abbey and Inchcolm Island exhibits great historical significance in a number of areas, principally through:

- origin stories and early historical perceptions of the site, linked to its long history as a site of religious importance
- the establishment of the Augustinian priory, then abbey
- intangible associations, particularly with Walter Bower and the Inchcolm Antiphoner which indicate the importance of the site as a place of culture and learning
- the continued fortification and refortification of the island from at least late medieval times onwards

Early history, place-name evidence and links to Columba

Today, Inchcolm's early history is widely regarded as enigmatic. The most obvious evidence that it was a site of some importance in the early medieval period is provided by fragments of at least two early sculptural monuments - a high-status grave-marker and a free-standing stone cross - which indicate that it was a Christian religious focus in the period around the tenth century AD. Traditionally the island was the site of a hermitage prior to the foundation of the Augustinian monastery.

The origin of the place-name Inchcolm seems to have at least two possible derivations¹.

- 1. The distinctive geography of the island its appearance as two main parts linked by the narrow isthmus might be reflected in the island's alternative Latin name *Emonia*, derived from an ancient Celtic word meaning "twin"
- 2. The place name is also associated with St Columba of Iona (d595): Innis Colm in Gaelic easily translating as Columba's isle. Past antiquarian sources have attempted to link the name with a St Colm, as a separate entity from St Columba of Iona. However, there seems

¹ <u>http://fife-placenames.glasgow.ac.uk/placename/?id=42</u>

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no foundation behind this and modern scholars accept "Colm" as simply a vernacular version of Columba.

In the Middle Ages perceptions of the island were defined by its identification with Columba and by its relationship to Dunkeld; the latter became a major cult centre of Columba in the 9th century. Inchcolm stood at the centre of an enclave of territory around the Forth which came under Dunkeld's jurisdiction, located at a natural focal point where the crossing between its main components around Aberdour and Cramond intersects with the sea route along the Forth connecting its outlying parishes. As this enclave is thought to have derived from an area of territory with an early religious affiliation to lona, Inchcolm's central position within it may indicate that it was already a place of significance within the spiritual territory of lona and Dunkeld at an earlier date, and some scholars accept a genuine sixth-century connection.

In the twelfth and thirteenth centuries, the monastery on Inchcolm functioned as something like an alternative cathedral for the bishops of Dunkeld, several Bishops being buried on the island. An authentic spiritual continuity (even if mediated via Dunked at a later date) is also supported by musicologists, who have identified distinctive "Celtic" features in the liturgical music of the medieval abbey, and suggested that these may have been inherited from the early practice of Iona.

By the sixteenth century, the early sculpted monuments on the island were interpreted as the graves of Viking chieftains. They were believed to have been interred here after a defeat by Scottish forces c. 1040, an event which may be entirely legendary, but which found its way into Shakespeare's "Scottish play".

The Augustinian Monastery

The documented history of the island begins in the reign of Alexander I (1107-1124), who was driven ashore here by a storm while crossing the Forth, and given hospitality by the hermit who guarded the island's chapel. King Alexander made a vow to establish a religious community here, which was subsequently fulfilled by his younger brother David I (1124-1153).

David I founded a monastery of Augustinian canons - an order of religious men somewhat similar to monks and friars, who adopted the cloistered lifestyle and choral prayers of a monastic convent, but detached individual members of the community to perform pastoral duties as parish clergy, for instance at St Bridget's, Dalgety, and St Fillan's, Aberdour. The canons who remained in the abbey offered up a ceaseless round of prayer and supplication, wherein the Mass was central.

The structured life of the Augustinian community provided the rhythm of the island's history in the medieval period, punctuated by the annoyance of English raids, and by an occasional requirement to act as a place of relatively comfortable confinement for high-profile political prisoners.

As an Augustinian foundation, the brethren had close contact with other Augustinian institutions, particularly St Andrews Cathedral and Scone Abbey, from whence the founding community were brought.

Intangible associations

Apart from the traditions associated with the early history of the Island (given above) Inchcolm has at least two further important documented historic associations:

- Walter Bower (1385 1449)
- The Inchcolm Antiphoner

Walter Bower

The most prominent member of the medieval religious community on Inchcolm was the fifteenth-century Abbot Walter Bower (1385 – 1449). Bower is principally known for his *Scotichronicon* one of the most important works of scholarship and literature from medieval Scotland. It tells the history of Scotland from its legendary foundation by Scota, Pharoh's daughter up to the death of James I. The earlier part of the work builds upon and expands the work of John of Fordun; the later part is Bower's original work chronicling near-contemporary events.

Bower was abbot of Inchcolm from 1418 til his death. He oversaw major building works at Inchcolm; it is probably to him that we owe the vaulted cloister, and his commitment to honouring the history of his abbey is also what ensures that its past is so well-documented. It is likely that in the Abbots lodging, carved out of the upper nave level of the first church, we have Bower's own lodging and study. It is particularly notable that the original authorial manuscript of *Scotichronicon* written on the island survives, enlivened by Bower's own illustrations. This combination presents a highly significant connection between place, creator and artefact all at a level of national importance. The *Scotichron* is important for Scotland's understanding of itself as a nation and also gives us firsthand accounts of incidents at the abbey, including English raids.

Inchcolm Antiphoner

The *Inchcolm Antiphoner* is one of the most important and earliest surviving manuscripts in the history of plainchant. It was probably produced in the abbey c. 1340². Some musicologists propose that some elements may be of much earlier origin and thus represent survivals of the sacred music of the early Celtic church. It reminds us of the importance of sacred music in Scotland's monasteries and of continuing and imported traditions in the

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https://images.is.ed.ac.uk/luna/servlet/detail/UoEwmm~1~1~34071~101678:Inchcolm-
Antiphoner,-circa-1340,-f-
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²University of Edinburgh collections, catalogue notes: a collection of 36 manuscript fragments, mainly rescued from bindings in which they were used as waste. They were collected by Laing over the course of many years. This particular group is 4 leaves from an Antiphoner written in Scotland around 1340, most likely for the Augustinian Priory of Inchcolm, which was sacked by the English in 1335.

development of Scottish religious music. It also underlines the importance of the veneration of Columba for Inchcolm: one text pleads "...father Columba preserve this choir from the incursions of the English...", indicating also the effects of English raids on the island in the 14th century.

History of Fortifications on the island

The island was subject to many attacks over time, from the semi-legendary Viking raids to the 20th century. The first recorded attack by the English was in 1315 and there are indications that during the 15th century Abbot Bower was conscious of the need to fortify the abbey structures.

There is a good deal of detail now known relating to events during the 1540s (see timeline) which add to the intangible associations of the place. It is now possible to flesh out the Rough Wooing stories with images of the people and ships involved. The late 18th century saw construction of batteries against revolutionary France (see Appendix 1 Timeline entry for 1794).

20th century fortifications

The most comprehensive fortification of the island was during the first and second World Wars; these are described in detail in Appendix 3. Inchcolm was part of a complex interconnected system of defences which developed over time and demonstrated various strategic and tactical responses to threat of attack. From 1914, anti-submarine tactics such as booms, nets and mines were all deployed as barriers across the water. These were guarded by guns such as those on Inchcolm and night time vision was provided by powerful carbon-arc electric searchlights (Defence Electric Lights – DELs).

The men stationed on Inchcolm lived in a 180-bed hutted camp around the Abbey with some of the Abbey buildings used as mess facilities. Separate accommodation was provided for 20 naval personnel and officers. Of the WW1 remains on Inchcolm, the Drying Hut a short distance west of the Abbey is one of the best preserved. It is a reminder that most of those on guard duty were outside in all weathers and space was needed to dry clothes and equipment. The current Visitor Centre was built as the engine room in 1916, principally to power the DELs. During WWII it was converted to a telephone exchange and acted as a hospital.

By 1932 many of the WW1 structures near the Abbey had been demolished to restore the peaceful setting of the Abbey, which by that time had been taken into State Care. However, as war threatened, the Defence of the Forth was re-examined. Nets, mines and barriers were once again strung across the Forth protected by interlocking fields of fire from gun batteries on Inchcolm, Inchmickery and Crammond. Most of the command and administration buildings were placed on the western half of the island. Aerial photographs show the extent of the camp but of the accommodation blocks, only the brick built NAAFI offices/quarters survive. The main gun emplacements were on the eastern lobe along with additional DEL positions, some are built directly on the site of their WWI predecessors. These, together with the tunnel and railway are probably the most striking of the 20th century

remains. Some of the DEL emplacements retain original glass and prisms and other fittings not known to survive elsewhere.

Together these remains are of great interest to military historians, and to a more general pubic interested in wartime history. Many of the structures are dramatically sited, their brutalist concrete and uncompromising lines softened by undergrowth. While not to everyone's taste they add an undoubted atmosphere and contribute to a memorable visit.

2.4 Architectural and artistic values

While a number of medieval monastic complexes survive in Scotland, Inchcolm is the only place where an entire cloister quadrangle remains intact, and the good state of preservation of most of the medieval fabric has meant that modern restoration work has been both more limited and more accurate. In short, this the best-preserved medieval monastery north of the Border, and a site of major architectural significance. However, the island's buildings have a complicated history. A detailed discussion is provided in Appendix 2, and this section is intended simply to describe the structures, highlighting points of interest and summarise the state of knowledge.

In summary, the architectural values of Inchcolm Abbey relate primarily to the extensive survival of the abbey buildings, in particular:

- the early (12th century) church which, though later modified, can still be appreciated as upstanding architecture
- excellent state of preservation of key features such as cloisters and chapter house
- individual surviving features which are rare elsewhere (e.g. screens; wall painting)
- peculiarities of Inchcolm's design (e.g. layout of paired screens; cloister arrangement; development of 2nd church and conversion of 1st church to domestic usage; latrines and drains)

In addition the surviving structures from the two World Wars are of architectural interest, including relatively rare survivals from WW1. These are discussed more fully in Appendix 3.

12th century church – the First Church

The oldest part of the abbey complex (excepting the Hermits Cell) is the much-rebuilt north range, which was originally the nave of the monastic church, and dates to the twelfth century; although extensively modified and now roofless, substantial early masonry survives on the external walls - on the western gable, the damaged and partially blocked processional doorway is visible, and in the northern wall, the upper part retains the original squared ashlar (although the visible windows are much later). Prof. Richard Fawcett has suggested that the rough lower walling on the north side represents a survival from an even earlier building phase in the early twelfth century,

though J. Wilson Paterson, who restored the abbey buildings in the 1920s, believed this was repair work added after the original ashlar facing was robbed out.

In origin, the church was a compact building, consisting only of the nave and a squarish chancel to the east. The simple plan has prompted speculation that the church was built before the monastic community was founded although an alternative explanation is that the monks worshipped in the nave, as the building did not require space for a parish congregation.

The tower at the north-eastern corner of the quadrangle dates to the twelfth century, and was raised on the footprint of the original chancel, with a new east limb extending out beyond that. This was the first in a series of extensions which enlarged the church towards the east culminating the building of the "second church", see below.

Screens

The tower is remarkably well-preserved. Two colonnaded screens can be seen set into the eastern and western archways which once provided access to the nave and chancel. Although now partially blocked up, these represent a very rare survival of the internal subdivisions which partitioned large medieval churches, unparalleled in Scotland, and even in their blocked state, perhaps the best-preserved examples in the British Isles. These two screens are conventionally described as the "rood screen" and "pulpitum", but this is a Victorian interpretation which has relatively awkward implications for the layout of the church, and must be treated cautiously (see **Appendix 2.1** below). Also important is the spiral staircase in the south-west angle of the tower, which may be the oldest intact stairway in Scotland - this still provides the means of access to the upper floors, where early windows and window-seats remain in varying states of preservation.

Modification to the first church

Probably in the fifteenth century, the original nave and the tower ceased to be used as part of the monastic church - the religious services were moved entirely into the later extensions to the east, and the nave and tower converted into part of the adjacent monastic accommodation. A barrel-vaulted basement was inserted and the arcaded screens were blocked up, while the tower was additionally strengthened with three pointed vaults on the upper floors, and a buttress-like wing on the northern side. These modifications were designed at least in part to counter subsidence - the tower still leans towards the north - though they also made the buildings easier to defend against English raids. The new basement vaults were probably storage cellars, while a suite of rooms was created in the upper part of the range, with a hall in the former nave (the only part of the monastery to retain a timber roof in the late medieval phase), a chamber in the tower, and a study in the buttress wing; the early chamber above the tower chamber also remained in use, while the spiral stair provided private access to the cloister. This suite seems likely to have been the Abbot's lodging, and may thus be where Walter Bower wrote his *Scotichronicon*. At the top of the tower, the uppermost chamber was used as a belfry, with the bell-ropes apparently hanging through holes in the floors of the two rooms below - an unusual inconvenience, but one that would have served to remind the abbot of the monastic nature of his authority. At a later date, probably after the Reformation, these rooms underwent various alterations - the upper chamber of the suite was adapted as a dovecot, the south window in the chamber below was modernised, and two of the upper vaults were removed, but the masonry remains well-preserved, and the original plan can be easily appreciated.

Cloister quadrangle

The south windows of the abbot's lodging looked out across the cloister quadrangle where the canons had their accommodation - the best preserved medieval monastic buildings in Scotland. Broadly speaking, the cloister follows a conventional plan, with a squarish courtyard on the south side of the church, enclosed on the other three sides by U-shaped accommodation buildings. In their current form, the buildings on Inchcolm were shaped by a major rebuilding programme in the late medieval period, and the earlier phases of the cloister layout are known primarily from archaeology, but two visible architectural details illustrate parts of the early layout: the doorway at the base of the tower will have originally led into an arcade on the east side of the guadrangle, while the buttress in the west wall of the courtyard may indicate the north-west corner of an early building south of the church, disguising a stump of masonry which could not be cut back flush without damaging the adjacent wall. Much early masonry may have also been incorporated in the upstanding buildings, but the full extent of such survival can only be resolved by detailed structural analysis.

Chapter house

Apart from the modified church, the only early building which remains clearly identifiable is the octagonal chapter house behind the eastern range of the cloister, dating from the second half of the thirteenth century. This structure was designed for meetings of the assembled monastic community, and remains practically unaltered, probably the most perfectly-preserved part of the monastery - an octagonal building with buttressed corners and an elegant vaulted interior with excellent acoustics; the bench around the wall provided seating for the canons, while the three arched seats opposite the doorway were for the abbot, prior and subprior. There is an upper room above the chapter house, but this is accessed independently, and was substantially modified at a later date, so it will be discussed separately below as part of the sequence of rooms within the cloister.

The current layout of the cloister was dated by Wilson Paterson to the fourteenth century, but Fawcett has argued for a later date, and this is supported by a near-contemporary reference by Abbot Bower, who states that the monastery was being "fortified" in the 1420s to provide protection against English raids, and indicates that the process was completed by the 1440s. The plan is unusual both for the employment of strong stone vaulting throughout the buildings, with minimal use of timber - a decision which

partially accounts for the exceptionally well-preserved architecture - and also for giving over the entire ground floor to covered walkways around the cloister, placing the residential accommodation above these on the upper floor.

Walkways around the courtyard, known as "cloister aisles", were a conventional part of monastic design, but they were normally erected as leanto colonnades in front of more substantial buildings. Their architecture is also far simpler and stronger than usual in a cloister, with plain round vaults and round-arched windows in deep embrasures equipped with stone seats, but the powerful and straightforward aesthetic is appropriate for a monastery, and a number of architectural details remain. The north aisle of the cloister was more conventional, consisting of a lightly-built colonnade with a timber lean-to roof above a row of archways looking out into the quadrangle, although only the foundations and roof-scars now survive.

The main monastic accommodation is placed on the upper floor of the cloister, but otherwise follows the conventional layout of a medieval monastery - a dormitory on the east, a dining room (known as the "refectory" or "frater") to the south, and a west range where the community interacted with the outside world. Several features survive which demonstrate monastic life, such as rare fragments of fifteenth-century wall-painting in the warming house, the lavatorium and the pulpit platform in the refectory.

The cloister, particularly its upper levels, underwent alterations in the nineteenth century, when domestic accommodation was inserted, but the relatively insubstantial nature of most of the changes meant that they were easy to reverse (by the Ministry of Works), although the arrangement of windows and doors in the outer walls may not accurately represent the original medieval layout.

Originally, there was no wall separating refectory and kitchen, and the layout was open-plan - there was an additional window in the south wall, a circular oriel window in the west gable, and a large cooking hearth in the centre of the floor in the kitchen area, beneath a circular flue in the centre of the vault above. This was to allow the kitchen hearth to heat the refectory in cold Scottish weather without strictly violating the monastic injunction forbidding fireplaces. The southern windows were modified in the nineteenth century, and restored to their original medieval form in the 1920, using the blocked remains of the westernmost window as a guide.

Extending south from the dormitory, above the entrance archway, is a range leading to the monastic latrine or "rere-dorter", which was built on the southern beach so the drain could be flushed by the tide. This appears to have been built in the late thirteenth century alongside the chapter house (the two buildings were built on a new alignment, in anticipation of changing the orientation of the east range of the cloister), and must have originally been accessed by an open bridge above the entrance passage - at a later date, however, the latrine was enlarged, and a linking room was added above the gateway, possibly a "misericord", a common room placed outside cloister so that the rules which bound the monks within the building - such as near-total silence and no eating of meat - could be relaxed. At an even later date, the linking room was unroofed, and an apartment resembling a small tower-house was built up at the southern end adjacent to the latrine - possibly a suite for one of the abbot's deputies, the prior and subprior.

Extending east from the latrine is a long range containing a basement which seems to have contained a bakehouse and/or brewery, above which a suite of ruinous rooms extends along the first floor. These are often identified as an "infirmary" but appear more likely to be a rather grand set of lodgings, perhaps the original accommodation for the abbot, or a guest house for high-ranking visitors. The range is now much more ruinous than the rest of the monastery, but in origin, was evidently a fine building - eighteenth-century illustrations and nineteenth-century photographs show a much more intact structure, with a vaulted roof and a great deal of elegant architectural detail that has been lost in relatively recent times - possibly even in the early twentieth century.

The "Second Church" 15th century

As noted above, the church was extended eastwards in several phases, but the later phases are now very ruinous. At the start of the thirteenth century, the church comprised the nave, tower and a small eastern limb, the south wall of which survives as the north wall of the dormitory. The church was subsequently extended slightly further east with the construction of a new choir in 1265 - although this part of the building has been reduced to little more than wall foundations, an important wall-painting survives on the southern wall, marking the tomb-recess of a bishop interred in 1266. On the northern side, this period saw the addition of a transept chapel to the north of tower, and a lean-to building against the choir, perhaps a sacristy for storing the valuable objects used in church services.

The church was extended even further to the east around the start of the fifteenth century - this time with a cruciform plan, in which a new high altar was flanked by chapels in projecting transepts. The stone platform of the high altar has been restored using a cross-incised altar slab from the original church, although this may have originally belonged to one of the secondary altars in the transept chapels. As Wilson Paterson noted, the position of the original "night stair" implies that the original nave and tower were not immediately taken out of use, and the elongated plan, with western nave, central tower and cruciform east limb, resembles Culross Abbey, but the new part of the building, with a cruciform plan, pointed barrel vault and flagstone roof, is an early example of the architectural style associated with late medieval collegiate churches such as Seton Collegiate Church and **Dunglass Collegiate Church**, and at some point, probably in the fifteenth century, the twelfth-century part of the building was converted from part of the church into part of the cloister accommodation. The new cruciform part of the building became a self-contained church, linked to the cloister only by the night stair.

Monastic life on the island was probably disrupted by English raids in the 1540s, and in 1581, the church was demolished by supporters of the Reformation. Illustrations from the late eighteenth century shows that the ruins had by then reached more or less their current shape. Although the walls themselves have largely been reduced to their foundations, the combination of arcaded screens, thirteenth-century wall-painting, altar slab and night stair, each of which is practically unique in the national architectural heritage, represents an unparalleled assemblage of key fixtures from a medieval Scottish monastic church.

Post reformation developments

By the time the church was destroyed in 1581, the cloister had already been converted into a nobleman's mansion, and thus survived the Reformation, although a number of the architectural features may perhaps be alterations from the post-Reformation secular phase - mention has been made of the two late stair towers, the rubble facing on the lower part of the north wall, the addition of fireplaces, and the insertion of a dovecot in the upper part of the tower. How long the cloister buildings remained in use as a stately home is unclear, but any rationale for regular occupation ended in the late seventeenth century, when the lord of the island built a new mainland mansion at Donibristle - a century later, the cloister was occupied by a fisherman-hermit (who made his home in the tower), subsequently joined by a small garrison of gunners from the Royal Artillery (who converted the refectory into a little barracks); after the soldiers left, the quadrangle was converted into a weekend home for a family from Edinburgh, and then served as an artist's studio, a farmhouse, and agricultural buildings. The cloister was then taken over as officer's quarters in 1914-1918. In the course of these various adaptations, the buildings underwent intrusive modifications, gaining slate roofs, brick chimneys and internal partition walls, and many of the windows were enlarged and modernised - much of the most intrusive work appears to have been performed when the building was rented out as a holiday home, some time between the 1820s and 1840s. These changes did, however, mean that the cloister was not dramatically modified to accommodate the officers in 1914-1918.

Period of State Care 1920s onwards

In the 1920s, when the monastic buildings came into state care, a decision was made to discreetly reverse the nineteenth-century alterations; good evidence for the form of early features such as the flagstone roofs and refectory windows enabled these to be sensitively restored, with only a few details being left to speculation - the original layout of the windows and doorways in the outer walls of the ground-floor cloister aisles is uncertain, while the form of the west-facing windows in the west range is speculative, and the charming but spurious battlements above the entrance gateway, erected around the second quarter of the nineteenth century, have been allowed to remain - perhaps because the restorers were uncertain of their date.

Abbey gardens and landscape

The cloister and church were surrounded by an area of walled grounds, known as a monastic precinct, substantial parts of which still survive. The surviving lengths of the outer walls probably incorporate defensive works from the first half of the fifteen century, designed to protect against English raids, but they also served to symbolically demarcate the area in which the religious community lived their lives of prayer, scholarship and contemplation, and to frame a set of gardens which the canons tended as part of their routine. To the east of the monastery, the medieval wall survives well along the northern side of the isthmus, but modern landscaping has concealed the early layout of the return across the island towards the south - there was probably a wall running south across the island, with an outer gate close to the line of the modern path, perhaps fronting on to a tidal beach splitting the island in two. The area thus enclosed has been levelled up into a flat open space, now laid out as a lawn. The northern wall continues along the shoreline, and also helps to underpin the tower, and creates a platform for a small building of uncertain function north of the cloister. To the west of the monastery are a series of separate enclosures, which can be identified as formal gardens - a source of c. 1700 records a number of the plants then surviving in them (see Section **2.6**). Surviving buildings in this area include a late medieval dovecot, and the so-called "hermit's cell", an enigmatic vaulted building which is generally regarded as an early chapel predating the Augustinian monastic settlement if so, this is probably the same building in which King Alexander I sheltered when he was driven ashore here in a storm in the early twelfth century, and if the traditional interpretation is correct, then this little vault is one of the oldest standing buildings in Scotland, but this much-repaired structure has produced no conclusive archaeological or architectural dating evidence, and the usual interpretation, while certainly attractive, remains somewhat tentative.

As noted above, the strong vaults of the cloister and the outer walls of the monastic precinct are likely to have doubled as fortifications to defend the island against English raids. As such, they represent the first phase of military fortification on Inchcolm. Subsequently, the English occupied the island in the 1540s and built a fort on the eastern headland; this may have been brought back into use when a small artillery battery was set up on the island in the years around 1800 (see Appendix 1, under 1794), as an 1822 plan shows that the new guns were mounted in a semi-ruinous structure on the site of the Tudor fort; this in turn was certainly adapted for modern guns when the military returned in 1914, though after being built in support of the imperial ambitions of Henry VIII, then re-used to defend against Napoleon and the Kaiser, the structure was almost entirely destroyed by the British Army in 1916, when a massive program of refortification was begun; although the damage to the landscape was subsequently reversed as much as possible, traces include the terraced scarring on the southern cliffs, the pier which remains in use as the island's landing place, the building now used as the shop and museum, and a group of searchlight positions on the eastern headland - although the ruinous wall adjacent to them appears to be the rampart of a second artillery position from c. 1800.

To sum up, Inchcolm has a long and complex architectural history. The monastic quadrangle is both the most obvious structural landmark on the island and probably the single most significant item of built heritage, but the complex traces of both military occupation and designed landscape and the hints of older religious veneration provide a context which cannot be ignored. All in all, the various buildings and ruins also attest to the significance of Inchcolm in a wider sense - a place that is important for reasons that are not simply to do with archaeology and architectural history.

2.5 Landscape and aesthetic values

Inchcolm is a small hour-glass shaped island, its narrow, low-lying heart flanked to east and west by prominent hills.

The abbey lies in it's heart, close to water to north and south, the former rocky and the latter a sandy beach. The stunningly sited, yet compact, ruined complex conveys both the scale and complexity of a medieval monastic site.

In the late spring and early summer, nesting birds, mostly gulls, disturb the usual calm and serenity of the abbey.

The island's seascape setting is dramatic, and benefits enormously from the constantly changing visual spectacle provided by the surrounding waters. The rugged coast of Fife to the north, and Edinburgh, with its seated mammoth, Arthur's Seat, to the south, predominate. The panorama westward is dominated by the powerfully impressive Forth Rail Bridge and the more slender road bridge beyond, now joined by the new Queensferry Crossing. To the east, the broad estuary of the Firth of Forth is shielded by Inchkeith and the other outer islands before it opens out to the North Sea.

The feeling of remoteness, combined with the island's natural peace and tranquillity, helps the visitor appreciate the cloistered and contemplative life of the medieval monk.

2.6 Natural heritage values

Inchcolm's natural heritage was disfigured in many ways between 1914 and 1945, by concrete, blasting explosives, and the general detritus and disruption of a large military garrison; its current appearance is the result of two separate phases of large-scale rewilding by the Ministry of Works, in the 1930s and 1950s. Nonetheless, the island's value as a natural heritage site is greatly enhanced by substantial early documentation of the natural habitat found there. These sources are summarised and referenced here

The earliest chance references date from the sixteenth-centuries. William Stewart, writing in the 1530s, describes the "green" around the hog-back stone, and goes on to characterise the western part of the island as a "field" or "plain"; it is not completely clear whether or not these are synonymous references, or if the "green" is a smaller and neater graveyard area. In 1547, two details are remarked on by separate English sources during the

occupation - "two or three small trees" located "above" the abbey, presumably on the higher ground at the west of the precinct, and the large number of rabbits - these are also referred to by several later writers, but this reference, dating perhaps only a few weeks after the withdrawal of the canons to the mainland, suggests they may have been introduced as part of a formal medieval rabbit-warren.

The self-contained geography of Inchcolm island, and its rich and distinctive wildlife and plant life, meant that it subsequently attracted the attention of early naturalists. Sir Robert Sibbald, who visited in the late seventeenth century, recorded its natural landscape in detail.

Sibbald noted that the eastern headland was grassy, suitable to provide grazing for a few sheep (a note which suggests it was already providing that service), and also home to "*verbascum majus*, commonly called the shepherd's club" (better known today as common mullein). On the western part of the island, he again noted the large population of rabbits, and found "very good" grass, with "many fine plants", particularly on the north-facing side, among which he recorded a form of "scurvy-grass with waving leaves" (*"cochlearia* or scurvy-grass, *folio sinuoso*"; it is described in his general index of Fife plants as being "upon the rocks", and seems to be sea scurvy grass, *Cochlearia anglica*), *isatis sive glastum* ("woad or woad"), and what he called *gramen marnium longius*, *gr. junceum* and *gr. minus tenuissimum* ("long sea grass, rush-like grass" is used in contemporary English naturalists' writing for toad rush, *Juncus bufonius*, while the "long sea grass" may be the "tall oat grass" later documented on the island).

There was also a garden, "adjacent to the Monastery", in which he records "the Female Paeony, bearing seed, common borage, and pellitorie, the dwarf elder, the *echium flore albo*, *solanum dictum bella donna*, and the *malva pumila flore alba, tribus lineis rubris distincto*". The common peony, borage, dwarf elder, and belladonna (better known as "deadly nightshade") are all readily identifiable; the name pellitory can refer to a number of plants, but the only other Scottish reference indicates *Anacyclus pyrethrum* or Spanish Chamomile; the other two plants are simply named in Latin: "bugloss with white flowers" - his general index notes that there was "much of" this on the island - and "dwarf mallow with white flowers, distinguished by three red lines" (the scientific name of which is now *Malva neglecta*). It is notable that these are all plants with roles in herbal medicine, suggesting that they were survivors from a monastic herb garden rather than a post-Reformation formal garden.

The same herbal relevance is true of two more varieties which Sibbald adds in his general index of Fife plants, "prunella with white flowers" (*brunella flore albo*), and "root chicory with blue flowers" (*Cichorium sativum flore caerulo*). There were pigeons in the abbey, probably inherited from the dovecot in the tower, and crows' nests "on the rocks", and "good Fishing" around the rocks of the western headland.

Later sources add new information. In the 1790s, Shetland sheep were introduced and grazed on the island. A winter herring shoal which was observed off Inverkeithing in 1792 returned the next year between Inchcolm and Inchgarvie, and stimulated a fishing boom in the are which continued until 1805 (Smout and Stewart (2012), pp. 43-44). In 1794 and 1803, attention turned to a tall grass found on the island, and attempts were made to introduce it on the mainland as a fodder crop; the earlier source states that it "resembles that species called oat-grass in England", while by 1803, whether rightly or wrongly, it was being explicitly identified as "Avena elatior, tall oat grass" (now known as Arrhenatherum elatius). In 1794, it was said that this "is tall and slender, springs as early as rye grass, grows higher, and consequently affords a heavy crop of hay", and that horses would eat it either fresh or when made into hay. In 1803 it was described as being "from three, even to five feet in height, and stated that that in the island "it yields a pretty large crop of hay on a very poor soil"; it was hoped that it might be developed for fodder in the Highlands and Western Isles. In the same year, another source noted that the Earl of Morav had recently made an unsuccessful attempted to cover the island in trees, although this perhaps predated the arrival of the sheep.

An 1819 source asserts that the island produces a large number of onions, and that before the artillery was erected, "a man of the name of Brown from Inverkeithing" had inhabited the island, subsisting on fishing and the sale of his onions; at the time of writing, it seems that this "singular character" was still occupying the island alongside the soldiers. The onions, and "an occasional lobster fishery" recur in Victorian descriptions.

By the 1840s, the island was being used more intensively for agriculture. Most of the sources indicate that it was being used for stock-rearing, with mentions being made of cows, pigs, and a donkey, but as well as describing a large crop of hay, and good pasturage "especially on the western part", the most detailed description also shows that at that date, a crop of barley was also being grown on the island.

2.7 Contemporary/use values

Inchcolm Island can be seen from Edinburgh, the Forth Bridges and the south coast of Fife. Despite its proximity to the populous heart of Scotland, it has a powerful atmosphere of remoteness and antiquity. An attractive and romantic place, it is visited by many during the summer months, the majority coming as part of organised boat trips (operated by various commercial boat operators, not by Historic Environment Scotland). These trips provide visitors not only with a visit to the island but also an introduction to the wider landscape of the Forth and its rich and diverse wildlife, including especially the seals that bask on the rocks around Inchcolm.

Inchcolm is used not just for tourism but also for educational purposes. The property's two 'faces' – the one medieval monastic, the other modern defence of the realm – make it doubly informative. The romantic abbey ruins are

becoming increasingly valued as a venue for the performing arts (eg, open-air theatre). The island figured prominently when the Tall Ships visited the Firth of Forth in 1995. Inchcolm has also figured in literature, most recently Simon Taylor's novel Mortimer's Deep.

The fact that the property is situated on an island means that it does not attract as many visitors as it otherwise might, but equally for those who do visit the boat trip is a very special and exciting part of the experience. For most, the visit is time-limited by sailing schedules and the interested visitor could easily spend the best part of a day inspecting the entire island.

Today, the abbey retains much of its powerful spiritual presence. Its situation on an uninhabited island undoubtedly helps, but so too does its chapter house and cloister, the most complete of all Scotland's medieval monasteries. Here perhaps the visitor can get closest to the medieval monastic ideal than anywhere else. The abbey is still occasionally used today for spiritual purposes, and the congregations of St Fillan's, Aberdour, and St Columba's, Edinburgh, hold services at the church during the summer months. In addition, weddings and baptisms, normally held in the chapter house, are becoming increasingly popular.

3 Major gaps in understanding

- What are the origins of human use of the island?
- What was the history, scale and location of the pre-Augustinian religious settlement?
- What was the form and detailing of the original cloister?
- The abbey's history, both as a monastery and as a land-holding institution, is imperfectly understood.
- A study of the architectural evidence, and its wider context, is overdue.
- The history of the island as a fortification, including in medieval times, is needed. Most urgent, perhaps, is the recording for posterity of the reminiscences of those who served there in WW II before it is too late

4 Associated properties

(other related local sites) - Monk's Cave, Fife; **Aberdour Castle**; St Fillan's, Aberdour; **St Bridget's, Dalgety Bay**.

(other significant Scottish Augustinian houses) - Cambuskenneth Abbey; Holyrood Abbey; Inchaffray Abbey; Inchmahome Priory; Jedburgh Abbey; Restenneth Priory; St Andrews Cathedral Priory; Scone Abbey. (other octagonal chapter houses) - Holyrood Abbey; Elgin Cathedral (other hog-back stones) - Govan Church, Glasgow; Meigle Museum; St Andrews Cathedral; St Blane's, Bute; St Vigean's Museum. (other WW I & WW II defences) - Broughty Castle; Dumbarton Castle; Inchkeith; Inchgarvie; Inchmickery; Scapa Flow.

5 Keywords

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Appendices

Appendix 1 – Timeline

6th-10th century - tradition associates Inchcolm with St Columba - whence the name. The island later became intimately linked with Dunkeld Cathedral, which became a major cult centre of Columba in the 9th century. Evidence for an early Christian presence is attested by the hog-back tombstone, the carved stone cross-shaft with interlace decoration, and the so-called hermit's cell to the west of the later abbey.

1123 - Alexander I shelters in the hermit's cell during a storm, and thereafter promises to establish a monastery on the island in thanks for his safe delivery. He dies the following year before carrying out his promise.

c. 1140 - Alexander's successor, David I, founds an Augustinian priory on the island, the canons possibly coming from one of the two existing Augustinian monasteries in Scotland, either Alexander I's foundation at Scone or David's own at St Andrews. The new priory also serves as a second headquarters for the bishopric of Dunked, housing a "reformed" community organised on modern European lines to counterpoint and complement the traditional Celtic fraternity of Céli Dé at the venerable cathedral, a role which Kelso Abbey played for the diocese of Glasgow.

1160s - the monastery's earliest extant charter records that Bishop Gregory of Dunkeld has been administering the bulk of the monastery's revenue "until the canons should betake themselves to Inchcolm" (*donec canonici fierent in Insula Emonia*); he now formally transfers that property to the Augustinians, under their Prior Brice. This indicates that the canons had previously based themselves primarily on the mainland, *not* that the community was only belatedly established at this point. It is also indicated that the local churches in which the canons served as priests, such as Aberdour, had been directly assigned to them from the start and were not held in trust by the bishop.

1210 - Richard de Prebenda, bishop of Dunked, is buried in the monastery church at Inchcolm, indicating the significance of the monastery and the prayers of its community within the spiritual life of the diocese.

1214 - John de Leicester, bishop of Dunked, is buried, like his immediate predecessor, in the monastery church at Inchcolm.

1235 - the priory is elevated to abbey status.

1236 - Bishop Gilbert of Dunked is buried in the church at Inchcolm

1265 - a new choir is completed by Bishop Richard, lengthening the eastern part of the church. The next year, the three bishops of Dunked buried at Inchcolm are solemnly moved into new sepulchres on either side of the high

altar, including Bishop John de Leicester (d.1214), whose fine wall tomb survives.

1272 - Richard of Inverkeithing, bishop of Dunked, and sponsor of the new choir of the church on Inchcolm, is buried at Dunked, but his heart is laid to rest in the new choir.

1296 - after Edward I of England's invasion of Scotland and the capitulation and abdication of King John Balliol, Abbot Brice and Prior Adam are among the many Scottish notables who are required to swear fealty to the English king at Berwick-upon-Tweed.

c. 1300 - the chapter house is constructed.

1315 - the first recorded English attack on the abbey takes place, when a force raids abbey land at nearby Donibristle. Further raids are recorded in **1335**, **1336**, and **1385**. A hymn in the Inchcolm Antiphoner reflects this turmoil: 'Father Columba ... preserve this choir, which praises you, from the incursions of the English.'

1335 - an English ship plunders Inchcolm, making off with a statue of St Columba and other church furnishings. but beset by sudden storms, the raiders abandon their plunder on Inchkeith, along with an offering of gold and silver.

1336 - another English ship plunders the church at Dollar, one of the parishes served by the Augustinian canons of Inchcolm, stealing the newly-carved woodwork of the choir; the ship sinks abruptly off Inchcolm.

c. 1340 - the Inchcolm Antiphoner, a choir book of plainchant, is produced in the abbey's scriptorium.

1385 - an English raid, involving 140 armed men, results in yet more plundering of the abbey's ornaments and furnishings. Destruction by fire is avoided by a sudden and unexpected change in the direction of the wind.

1412 - the Earl of Douglas, departing on a diplomatic mission, is driven back three times into the Forth by adverse gales; on the advice of the Earl of Orkney, he makes a pilgrimage to Inchcolm, and is rewarded by fair winds.

1418-1449 - Walter Bower serves as abbot, during which time he writes his famous history of Scotland, Scotichronicon. During his time the abbey buildings are comprehensively reorganised and the island fortified. The works include a new cross-shaped church to the east of the existing one, and a comprehensive remodelling of the cloister. Bower may well have written Scotichronicon in the lodging he created in the upper floor over the old church.

1428 - James I, attempting to assert central authority the north and west of Scotland, arrests the Lord of the Isles, Alexander of Islay, and his mother the Countess of Ross, a great heiress in her own right; the Countess is placed in Inchcolm, but released after a little more than a year.

1421 - a boat bringing supplies capsizes, though the survival of several passengers is attributed to miraculous intervention. At this date, the monastery is only occupied by the canons during the winter months, as the threat of English raids make it too risky to remain there during the summer months, when they reside instead on the mainland; to allow, the monastery is "fortified" to render it secure against raids, a process which can be plausibly associated with the vaulted form of the cloister, which is essentially impregnable against attackers without artillery, and perhaps also involved the construction of parts of the surrounding precinct walls; this process is evidently complete by the 1440s.

1478 - Patrick Graham, Archbishop of St Andrews, is removed from office and confined in Inchcolm.

1508 - King James IV, after visiting the Isle of May, crosses from Aberdour to Inchcolm on 1st July, and apparently stays overnight on the island before landing at Leith on 2nd July.

1511 - King James IV visits Inchcolm again on 10th October, leaving an offering of £4 to pay for four trentals - sequences of thirty masses, or individual masses within those sequences, sung for the redemption of sinners' souls from purgatory, and the physical liberation of Christian communities in the eastern Mediterranean from oppression by non-Christian rulers; both these aims were of strong personal significance to James IV; this is not an unusual bequest by the king (earlier the same month, he had made a bequest for the same number of trentals at Culross, and seven at Cambuskenneth; five more were made later in the month at St Andrews, all in addition to a total of seventy-eight performed by the king's chaplains), but it is noteworthy that this visit immediately precedes his visit to Newhaven for the launch of the *Great Michael*, which the king is thought to have intended as the flagship of a new Mediterranean crusade.

1530 - Robert Richardson, a reform-minded Augustinian canon (successively documented in the houses at Cambuskenneth, St Andrews and Paris), publishes a critique of the Order, in which he nonetheless praises the religious music of Inchcolm, which he notes as being very different from the fashionable polyphonic style; commentators have presumed that this refers to contemporary abbots introducing the simpler musical styles which came to be associated with Protestantism, though he may in fact be referring to the ancient Celtic tradition kept up on the island. Either way, his assertion that music in the same musical style was being composed in the Chapel Royal in Stirling Castle can be connected to the island, as the main music book of the Chapel Royal choir had been presented by the Abbot of Inchcolm around 1500.

1542 - a raid on the island by Englishmen and other foreigners is recorded in October 1542. Other documents show that Aberdour was attacked in early in November by the English navy, and that the English considered establishing a fort on Inchkeith to attack ships sailing between Leith and the North Sea. This leads to the resignation of Abbot Richard, and the appointment of James Stewart, the teenage nephew of Lord Ochiltree; the transfer is ostensibly made in recognition of the military support provided by the Stewart family to defend the monastery, and the new abbot is supposed to be tonsured as a canon and formally appointed by the bishop when he reached the regulation age (either twenty-five or thirty); but the transfer is secured through the intrigues of lawyers and lobbyists, and it is possible that it was a cynical move to divert the revenues of the monastery to the Stewarts. It is likely that the Augustinians abandoned the island as a result of the raid, and the community - which had previously been in a relatively robust state with at least fourteen canons - may never have returned.

1547 - by August 1547, Inchcolm has been occupied by an English garrison; the monks abandon the island, and are redistributed to other Augustinian houses in the region, such as St Andrews and Pittenweem; they are authorised to offer a £500 ransom in an attempt to persuade the English to leave. Any hope of a quick resolution is ended when main English fleet arrives in the Forth, and in the aftermath of the battle of Pinkie, the English decide to install a garrison; on 13 September, the English commander Lord Somerset takes possession of the empty monastery, and on 17th, a garrison is installed, consisting of Sir John Luttrel, 100 arquebusiers (armed with firearms resembling primitive muskets), and fifty pioneers, with two small galley-like warships known as "row-barges" or "pinnaces", named the *Saker* and the *Double Rose*.

In late September, the *Saker* is dispatched to Newcastle and Berwick to collect timber, coal and other supplies from the north of England, but the ship does not return for several weeks. In October, the Scots place Inchcolm under a successful naval blockade, with three Scottish vessels patrolling around the island - two of these completely outmatch the *Double Rose*, as they have enclosed gundecks, and they are soon to be joined by a third of similar design; several additional ships and boats are also being prepared for an attack on the island. Two English supply ships arrive mid-month, but they are effectively trapped at the island as they cannot risk running the blockade. Lack of fuel forces the garrison to burn two of their ships' boats, and chop down a few small trees in the abbey precinct, and then to stage four or five unsuccessful raids on the Fife coast in an attempt to capture Scottish boats for use as firewood. As a result, the garrison lacks cooking fires, and is reduced to eating butter and cheese.

On 24th, the appearance of a large and valuable French merchant ship prompts Luttrell to risk a sortie by the *Double Rose*, counting on the wind and tide to prevent the Scots from catching up, but the English ship is driven off from Leith without capturing her intended prize. Nonetheless, the situation improves slightly at the end of the month: the Scots postpone their attack, originally scheduled for the spring tide on 31st October, because their flotilla is not ready in time; that night, Luttrel's boats manages to capture a collier off Leith, which provides him with two weeks of fuel, and the next day a larger English warship, the *Bark Aucher*, arrives at Inchcolm, sailing south from the other outlying English garrison at Broughty Castle - her arrival is intended to deter the Scottish attack, although she is really being used as a little more than a glorified message boat to request reinforcements, and she soon sails south again.

The Scots do not make their planned attack, shifting their focus to Broughty and probably counting on the blockade to drive the English off Inchcolm. In November, extra guns and ammunition are sent to Inchcolm from England, not all of which manages to get through to the island, but the problem of supply becomes apparent, as the English are unwilling to risk more than one supply ship per month in bad winter weather, and Luttrell is still asking in vain for a stronger ship; the *Bark Aucher* returns briefly in early December, with a convoy of supplies for Broughty, and towards New Year, Luttrell makes a series of petty night raids on North Queensferry, Aberdour and Burntisland.

1548 - In early January, the Saker captures a Flemish merchant ship off Inchkeith on a voyage between Broughty and Inchcolm, a dubious prize as she is under a neutral flag, but Luttrell supplies himself with wine and tar from her cargo; reinforcements are ordered for the garrison, and a carpenter is sent to survey the fortifications, signs which suggest that the English hope to retain their hold, but at the end of February, the English garrison are withdrawn to reinforce Broughy - not without some drama, as the Mary *Hamborough*, a large warship sent to carry them off, is severely damaged by stormy weather off Inchkeith. This event appears to be commemorated in an important allegorical painting by Hans Eworth, depicting a storm-tossed galleon in the background while a naked Luttrell strides through the Forth, shaking his fist at a personification of the subsequent peace treaty. Luttrell asserts that he rendered both the fort and the abbey uninhabitable; the latter claim is patently false, and thus raises questions about his assertion that he destroyed the equipment he was forced to abandon. A force of French troops subsequently occupies the island in August, when the French fleet anchors off Inchcolm. Their presence may have been brief, however, as Inchkeith is already being fortified as the main allied stronghold in the Forth. Under the peace agreement of 1550, the Inchcolm fortifications are to be completely dismantled.

1549 - the semi-retired Abbot Richard dies, and James Stewart, now aged about twenty, gains full control of the monastery; however, he seems to have effectively repudiated a real religious career, and usually describes himself in legal documents as commendator (lay administrator). It seems unlikely that he ever receives the formal benediction by the local bishop which would formalise his inauguration as abbot, which should have taken place when he reached the age of twenty-five or thirty (c. 1554 or 1559).

1560 - James Stewart, in his capacity as abbot of Inchcolm, attends the Reformation Parliament which heralds the formal end of monastic life on the island, although the exact chronology of its decline is unclear (see 1542, 1547, 1577, 1611). The Abbot subsequently reinvents himself as a layman: in 1564, he marries a sister of the Earl of Argyll and obtains Doune Castle, the great stronghold of his ancestor the Duke of Albany; in 1565, he is knighted, becoming Sir James Stewart of Doune - although legal documents adopt a somewhat schitzophrenic form, in which "Sir James" and "the Commendator of Inchcolm" interact with each other as if they were two separate individuals. The abbey is turned into a secular residence for him and his family, being initially given to his brother-in-law the Earl of Argyll, before eventually ending up with his direct descendants, the earls of Moray.

1564 - the first in a series of references to the use of Inchcolm as a quarantine anchorage. On 25th August, three ships inbound from Denmark are told to halt there (five are sent to Inchkeith and two more to Cramond Island); on 23rd September, the lint fibre in the cargo, which is thought to be the source of "most danger", is ordered to be landed on Inchcolm and aired "every second fair day" until 11th November; it is unclear whether the other parts of the process are also to be conducted at the island: barrels of ash are to be fumigated with burning heather, less perishable goods are to unloaded below the high water mark to be cleaned by the passage of the tide, and the ships are to be scuttled, temporarily submerged up to deck level and washed out, while the crew and passengers are to be quarantined. For further examples of related procedures, see below under 1580 and 1864.

1571 - the Burntisland skipper William "Wallange" (Wallace, Valence, or Valoignes?) is commanded to move his ship into quarantine at Inchcolm, and to remain there while his cargo is "lofted" (TA XII.282; presumably this means the cargo was removed and put in storage).

1572 - the monastery is transferred from the Earl of Argyll back to Sir James's eldest son.

1570s - pirates are said to be occupying the island and using it as a base.

1577 & 1578 - the last two known documents produced by the monastic community are signed by just two canons. Only the first of these documents is definitely issued on the island itself. Both men, John Brownhill and Andrew Angus, are first recorded as canons in 1541. After the Reformation, Brownhill held a stipend as "reader" in Dalgety parish church, authorised to lead prayer services though not to preach, perform baptism or administer communion. Angus had been vicar of Leslie before the Reformation, and was authorised as "reader" there in 1562; although he was censored in the 1560s for performing unlicensed baptisms, he remained in his church until at least 1591.

1580 - in September, the *William* of Leith, returning from Danzig, is quarantined at Inchcolm with its crew and passengers; in November, the recovering group are moved to Inchgarvie and Inchkeith for a further period of

observation before landing at Newhaven, and plans are made to land the cargo; in January 1581, the "cleansers" responsible for fumigating the ship and cargo and seeing to the needs of the stranded people are also removed to secure accommodation at Newhaven for observation before release.

1581 (April) - the civic government of Edinburgh begins negotiations with a merchant in Queensferry to buy a large consignment of squared ashlar masonry and flagstone roofing from the monastery; in June, they close the deal and decide it should be used to rebuild the city's Old Tolbooth, and in July, the ashlars are brought up from Leith to St Giles' churchyard in advance of the work, while the roofing stones appear to be used to repair the pavements of Leith Walk. This almost certainly represents the demolition of the abbey church. It is unclear if this is done with the permission of the Stewart family.

1581 (November) - the Abbot, *alias* the Commendator, *alias* Sir James Stewart of Doune, is raised to the peerage as 1st Lord Doune; simultaneously, his eldest son, James Stewart, younger, who has been legal possessor of the monastery buildings since 1571, makes a very advantageous marriage with his distant cousin Elizabeth Stewart, Countess of Moray, and becomes Earl of Moray as a result. The new Lord Doune transfers the position of "abbé and commendator" of Inchcolm to his second son, Henry Stewart, in a similar way to that in which the abbacy was originally ceded to him by Abbot Richard in the 1540s. This creates a somewhat complex legal situation, in which Henry, the younger brother, is *lord* of Inchcolm in his capacity as commentator of the abbey, while his elder brother the Earl of Moray, is its legal occupier as his tenant-*laird*, although he apparently makes his Fife home on the mainland at Donibristle. Due to his tall good looks, he is known as the "Bonnie Earl of Murray".

1591 - Andrew Angus, canon of Inchcolm and pre-Reformation vicar of Leslie, is still serving as "reader" there.

1592 - the "Bonnie Earl of Murray" is staying at Donibristle, when the Earl of Huntly arrives with an armed following - he states that he has come to arrest him due to his association with the outlawed Earl of Bothwell, but the "Bonnie Earl" fears assassination due to the blood feud between their families, and a skirmish develops, as a result of which the "Bonnie Earl" is slain; his young son, no more than about ten years old, succeeds him as 3rd Earl of Moray, but until he comes of age, his uncle, Henry Stewart, commendator of Inchcolm, assumes control of his affairs as his guardian, with the title of "Tutor of Moray".

1593 - an English ship arriving from "Prestoun", suspected of infection, is quarantined and unloaded at Inchcolm.

1606 - Shakespeare's "Scottish play" opens with a scene which retells the legend that a number of Viking chieftains, slain after a battle against the Scots, were buried on Inchcolm.

1611 - following on from preparatory legislation in the 1609 session of the Scottish parliament, Inchcolm is belatedly converted from an Augustinian abbey into a secular lordship, when Henry Stewart exchanges his position as commendator of Inchcolm for a peerage as a lord of parliament, taking the title Lord St Colm. The document asserts that he is accompanied at the ceremony in London by the "convent" of the abbey - perhaps simply a legal fiction, over fifty years after the Reformation Parliament. The abbey buildings are the centre of the geographical lordship granted to him along with the title, but they continue to be held feudally from Lord St Colm by his nephew, the 3rd Earl of Moray.

1612. A complex legal situation arrises: Lord St Colm, who is heavily involved in the complex financial arrangements of his wife's family, contracts a debt of £2,400 Scots (£200 sterling) to a local miller. The miller's rights as creditor are subsequently transferred to the Earl of Morton, the lord of Aberdour Castle on the adjacent mainland, who has the legal ownership of the monastery buildings formally transferred to him as security on the debt. It is possible that this is simply a matter of legal form which does not affect the Stewart family's possession of the monastery, but the situation does have the potential to disrupt their control.

1620 - The legal status of the monastery is involved, when the 3rd Earl of Moray gains secure possession of the abbey buildings and the lordship of Inchcolm, by buying out the creditors of his cousin Lord St Colm, and acquiring a new royal charter to affirm his control.

1627 - the island and its "monastery or manor-house" are made over by the Earl of Moray to his daughter-in-law, Margaret Home, Lady Doune, as part of her dower, although there is no evidence to show whether she and her husband Lord Doune (later the 4th Earl) ever reside there.

1639 - an English fleet arrives in the Forth, and takes control of Inchcolm; this expedition is part of the Civil War or "Wars of the Three Kingdoms", which divided Scotland, England and Ireland into rival factions. The English fleet is commanded by the Scottish Marquis of Hamilton, on behalf of the Scottishborn King Charles I, and is deployed against the "covenanters", Scottish allies of the English roundheads; some newly-recruited soldiers are landed on Inchcolm and nearby Inchkeith in order to train them, but their effectiveness is hampered by a lack provisions.

1670s - work is underway on the new Palladian mansion at Donibristle; Inchcolm is repurposed as a ruined centrepiece for the vista from the new house.

c. 1700 - the antiquary Sir Robert Sibbald visits Inchcolm, describing the abbey and the hogback stone, and documenting the flora and fauna of the island.

1779 - a squadron of American and French warships, led by John Paul Jones, sails up the Forth past Inchcolm, in an unsuccessful attempt to attack Leith and Edinburgh. It may be at this point that a gun battery is built on the island, located on top of the island's rocky eastern half (see below, 1794).

1784 - two drawings of the monastic buildings are made by an unknown visitor. These are an important source for the appearance of the buildings before their modernisation to act as barracks. They later find their way into the antiquarian collection of General Henry Hutton, who himself visits the island in 1822.

1780s - around this time, a Thomas Brown from Inverkeithing takes up residence on Inchcolm, supporting himself by fishing and growing onions; he apparently remains on the island alongside the garrison until at least 1819. An account from the 1840s says that he abandoned a family to move to the island, and describes him letting his hair and beard grow long, living in the abbot's chamber in the tower, and sometimes sleeping under his upturned boat.

1792 - the Earl of Moray offers the use of Inchcolm to the newly-found British Wool Society, as pasture for a flock of fine-wooled Shetland sheep.

1794 - This is the conventional date for the construction of the gun battery (derived from Arnold (1868-70), p. 58), though the available evidence is inconsistent and unclear: the battery is described as "erecting" (i.e. under construction) in a topographical survey published in 1796, but a source of 1814 states that the fort was originally built "during the American War", which would suggest a date between 1777 and 1783 (see above, 1779); the work in 1796 may therefore have been a refit of the defences, and a source of 1822 suggests that they underwent another reconstruction around 1808. As documented in 1822, the defences consist of two separate fortifications - a circular redoubt on top of the eastern headland, only the southern half of which is in good repair (possibly a refitting of the old Tudor fort), and a smaller rampart below it on the south-eastern promontory of the island. Simultaneously, the abbey, whose vaulted roof and solid construction mean that it is still habitable, is modified to accommodate the garrison - a Royal Artillery detachment, small enough to be commanded by a sergeant rather than a commissioned officer.

1795-99 - the Russian fleet deploys a squadron to British waters, to reinforce the outnumbered Royal Navy during the war with revolutionary France. A source of the 1820s claims that a Russian hospital is set up on the island to serve ships lying in the Firth, but no documentary support has been found, and the suggestion appears to be an attempt to explain burials already documented in the 1530s.

1822 - General Henry Hutton, a noted antiquary, visits the island, and draws up plans showing both the abbey and the fort in great detail, and writes a set of notes on the recent history of the island. Whereas earlier records had

asserted that there were ten cannons in the fortifications, Hutton indicates no more than seven guns: four 24-pounders in the upper battery, while the lower position has mountings for three more of unknown calibre.

1846 - a visitor to the island reports that the island had passed back into civilian use. It has previously been used as a second home by "an Edinburgh citizen", who has made a number of modernising changes to the cloister buildings; the new tenant is using much of the cloister as a barn, although an artist's studio has been set up in one of the larger rooms.

1854 - Captain Bayly of the Royal Engineers visits the island for the Ordnance Survey, and reports that the south range of the abbey is now occupied by a shepherd and his family. A paper in the 1855 volume of *PSAS* mentions pigs and a cow in the "hermit's cell", and another *PSAS* article from 1869 asserts that the pigs are being housed in the vaulted basement of the twelfth-century nave.

1864 - smallpox breaks out aboard the Royal Navy warship HMS *Racoon*, which is anchored at Leith - Queen Victoria's second son, the nineteen-yearold Prince Alfred, is serving aboard as a lieutenant, and the captain is her nephew Count Gleichen; in time-honoured fashion, the crew are encamped in quarantine on Inchcolm until they are declared clear of the disease, and the ship is anchored off the island to be fumigated, although Prince Alfred disembarks at Leith, and is allowed to lodge in an Edinburgh hotel.

1908 - Plans are made to strengthen the defences of the Firth of Forth with a "middle line" between Aberdour and Cramond, intermediate between the existing "outer" and "inner" lines, centred on Inchkeith and the Forth Rail Bridge. Inchcolm is identified as a key location on this proposed new perimeter.

1914 - after the outbreak of WW I, a coastal **gun** battery is constructed, part of a scheme to protect the Rosyth naval base, Forth Bridge and Edinburgh. The initial fortifications are based around 14 fast-firing medium-calibre guns, with the main gun position in the refitted Napoleonic fort, but amid concerns that these guns are not strong enough to stop German destroyers, a massive rebuilding is undertaken in order to install heavier guns, which dramatically reshapes the eastern headland with terracing, underground tunnels, and concrete and brick reinforcement. By 1917 the modifications are complete: the battery is armed with 10 heavy guns and three smaller ones, and a sprawling camp of prefabricated huts surrounds the abbey buildings, with a narrow-gauge railway running the length of the island to move ammunition.

1916 - Vice-Admiral Beatty's Battle-cruiser Fleet sails past Inchcolm on its way to the battle of Jutland.

1919 - it is decided to withdraw the garrison from Inchcolm; in 1920, the huts are auctioned off, and although most of the guns are initially left in place, it is decided to transfer the abbey to the Ministry of Works for conservation.

1922 - the abbey is taken into state care, along with its grounds in the centre of the island, and in 1924-1926 J. Wilson Paterson, the Ministry of Works' architect, supervises its repair. Among the discoveries made during the Ministry of Works' clearance works are many floor tiles. The most significant discovery was the painted mural tomb on the south side of the choir, believed to be that of John de Leicester, bishop of Dunkeld (d. 1214, reinterred here in 1265). Also in 1924, the government takes a 99-year lease of the island from the Earl of Moray, backdated to 1922, as a condition of which it agrees to reinstate the natural landscape.

- the island is fully demilitarised, the guns are removed, and guardianship is transferred to the Ministry of Works, so that unemployed labourers can be used to remove the remaining military structures and reinstate its natural appearance, in accordance with the terms of the lease.

– following the outbreak of WW II, the island is again fortified, although the guns are less powerful and numerous than before. The Duke of Kent fires the first round from the eastern battery – whence its name 'Kent Battery'. A garrison of 500 temporarily occupies the abbey buildings until purpose-built accommodation is provided, now located on the western half of the island out of the way of the historic monastery buildings and their grounds.

- the battery is put on a reduced "care and maintenance" basis; the armament is finally removed in 1954.

- the Northern Lighthouse Board erects a fog signal station on the island.

– Excavation in advance of constructing a drain showed that the north wall of the chapter house belonged to an earlier building, and that there were additional earlier buildings to the south of the chapter house.

– During works to relocate the hog-back stone indoors, an area around the stone was excavated to try to establish whether a stone cross had stood near the hogback, as mentioned in a 16th-century reference. Around the stone were four pits filled with human bones, probably representing reburial of bones found during recent construction work on the island. No features were found which could be related to either the cross or the hog-back stone.

– Pits for modern septic tanks beside the visitor centre and steward's house revealed midden material.

In the 1540s, religious life on the island was disrupted by renewed English military pressure, but although an English garrison was quickly forced out, and the peace treaty in 1550 agreed that the island should be demilitarised, it is not clear if the monastic community ever returned.
Appendix 2 - Detailed Architectural Analysis [This has been moved from Section 2.4 and replaced there with a shorter version]

Inchcolm Abbey has a complex architectural history, parts of which are not well understood. What follows is a detailed discussion of the evidence previously summarised in **Section 2.4** above, outlining the development of the monastic complex and the other structures associated with the island.

The modern scholarly understanding of the architecture of Inchcolm Abbey is based on the work of John Wilson Paterson, Chief Architect of the Office of Works in Edinburgh, who surveyed and discreetly restored the buildings in the 1920s. The resulting report, published in PSAS (Wilson Paterson 1926), served as the basis for the subsequent description in the RCAMHS inventory (RCAHMS 1933) and also for the text of successive guidebooks until the 1980s. More recently, an important reevaluation has been provided by Prof. Richard Fawcett (Fawcett 1998, Fawcett 2011).

Appendix 2.1 The Abbey Church

The abbey church had a long and complex building programme spanning the 12th to 15th centuries. During this time the church moved progressively eastward, whilst the early church was converted for other uses.

Phase I - The first church

The first church was probably built in the early/mid 12th century, in the reign of King David I. Precise dating is uncertain - the west doorway might be from "the central decades of the century" or as early as "the 1120s" (Fawcett 1998, p. 96, Fawcett 2011, p. 18). Although its structure has been heavily modified, its complete plan and most of its architectural details can be reconstructed from surviving elements: it comprised a three-bay nave and a narrower onebay chancel. Built in a comparatively simple style, its design is characterised by the careful construction of purely architectural features, notably the use of squared ashlar, and it has some fine details, including a splayed plinth and a moulded string-course. There were three round-headed doorways at the west end of the church - one in the west front, flanked by sculpted columns, and two more facing north and south in the western bay of the nave; the rest of the church was lit by six tall round-headed window, arranged in pairs in the north and south walls of the two other nave bays and the chancel, and possibly by additional windows in the east wall of which no trace survives. The roof was evidently of simple timber-framed construction, its structure indicated by the angle of the west gable.

As the building now stands, various different types of masonry appear in the external facing of the walls, with ashlar restricted to the upper two-thirds of the western and northern walls. This discrepancy has been used to suggest that there were in fact two distinct construction phases in the history of the early church (Fawcett 2011 pp.17-18), but it could also be explained by the subsequent replacement of robbed-out lower masonry (Wilson Paterson 1926, p. 231): the plundering of the church for ashlar building stone in 1581 provides an obvious context. The loss of the ashlar in the south wall is less

surprising, as the original facing has largely disappeared, due to external strengthening in its lower section, and reorganisation of the fenestration above.

The church's simple form did not provide a clear architectural division between separate spaces for the lay congregation and the canons' choir, and this has been used to suggest that it was not built for monastic use, and thus to support a hypothesis (Fawcett, 1998, pp. 93-94) that the actual establishment of the Augustinian priory only took place later in David I's reign or even under his grandson Malcolm IV (1153-1164); however, although the Augustinians seem to have resided principally on the mainland until the 1160s, this does not imply a delay in the actual formation of a community, and the conventional pattern of spatial subdivision which emphasised the monastic choir as a separate architectural space was only emerging in the first half of the twelfth century: it may be that Inchcolm simply retained the older layout in which the choir stood in the eastern part of the nave without any marked architectural differentiation from the area for the lay congregation. This would be particularly logical at Inchcolm, as the island is unlikely to have had a significant lay congregation, requiring only a small western section reserved for visiting pilgrims - they could for instance have stood between the doors while the canons worshipped in the two more brightly-lit eastern bays of the nave.

The eastern chancel was slightly narrower, and entered through a tall archway. Wilson Paterson found evidence in the upper walling to suggest that it was possibly roofed with a stone vault, which would have enhanced its acoustics. It was designed around the altar, where the eucharistic service consecrating bread and wine took place; this was the focus of worship, and was an area of the church where extra architectural emphasis had been encouraged since the eleventh century. The subsequent development of the church was designed in part to increase this emphasis, and unique documentary sources give insights into the ceremony, music and prayer around which the architecture was developed.

For clarity, it is useful to draw attention to certain subtleties of terminology at this point: the "chancel" refers to the easternmost architectural section of a church, often delineated by an internal archway, or more literally to an area separated off by a screen known in Latin as the cancella; the chapel-like area around the altar, often architecturally identical with the chancel, is known as the "presbytery" (from a Greek word meaning "place of the priests or elders"). The more neutral term "eastern limb" is used to indicate an architecturally differentiated eastern section, defined by a change in width and/or height compared with the section to its west, which does not necessarily correspond precisely to the chancel or presbytery. The term "choir" or "quire" is often used synonymously with "chancel" or "east limb", but strictly speaking it refers to an area to the west of the presbytery, where singers were positioned during services; as this distinction was a key aspect of the spatial layout within monastic churches, it is retained here. Subsequently, the church was lengthened to the west, and the boundaries of the areas demarcated as the congregational nave, monastic choir and presbytery changed more than once; for clarity in what follows, the original nave and chancel will be referred to respectively as Space 1 and Space 2.

Phase II - The tower and the new presbytery

In the mid-12th century, or else "around 1200" (Fawcett (1998), p. 96), the church was enlarged and adapted to a more sophisticated plan: a bell tower was built above the original chancel (Space 2), and a new extension was added to the east end (an addition which will be referred to as Space 3). The tower is built of cubical ashlar, with tall belfry openings on the upper storey, each of two lancets beneath a round-arched hood-mould - both similar to work in Aberdour Castle and St Fillan's, Aberdour. The same masons may well have been employed on all three projects. An intermediate level beneath the belfry contains a spacious chamber with windows and window-seats on the north and south sides, an entrance in the south-west corner, and a doorway originally leading eastwards, into the roof space above the new eastern part of the church. The role of this chamber is unclear, but it may have served as a strongroom or schoolroom. The lowest storev of the tower formed a part of the church - a tall space built into the volume previously occupied by the original chancel (Space 2), interconnecting with the nave to its west (Space 1) and the new eastern section (Space 3).

As with the earlier twelfth-century church, the architectural details of the reconstructed Space 2 can still be identified. These include a formal entrance doorway in the southern side of the tower, and an adjacent spiral stair at the south-east corner, which is one of the oldest intact staircases in Scotland, and still provides access to the upper part of the tower. The chief interest today lies with the two stone screens inserted into the east and west sides of the old chancel. Although these were blocked up at a later period, most of their key architectural features remain visible and their layout can still be easily appreciated. The west, or rood, screen had two doorways at ground level with two tall open arches above. The east screen, conventionally described by scholars as the pulpitum, was triple-arched above a slightly lower screen with a central entrance through it. The two sets of arches must have presented a visually stunning feature when viewed along the church. The new eastern section in the area beyond the tower and the eastern screen (Space 3) has largely been reduced to foundations, but a substantial fragment of its south wall survives as the gable of adjacent range, which shows that it was at least two bays long, with two arched windows whose blocked arches are clearly visible. It was probably no more than three bays long in total, as architectural features a little further east are connected with a subsequent extension of the church in the 1260s.

The screens and the south doorway are distinctive details of monastic architecture, and the enlargement of the building had a practical purpose, to create a church better suited to monastic use. The nave could now be given over completely to lay worshipers, with its own altar set against the solid central section of the western screen, beneath a crucifix which gave the barrier its name of "rood screen"; the door on the south side of the tower was the canons' processional entrance from their accommodation to the south, and led into an eastern part of the church reserved for monastic use. However, the layout of this section requires some careful analysis.

The second screen beneath the eastern arch of the tower has previously been interpreted as the "pulpitum", a screen located at the western end of the choir area (its name means "speaker's stage" in Latin, denoting the proximity of a raised position where Bible readings and sermons were delivered during services). This interpretation would define the space beneath the tower as a retrochoir, a sort of fover designed to allow the canons to reorganise their procession between entering through the south door and advancing into the choir proper, and where monks who were unable to fully participate in the choir services would stand. However, this reconstruction would require the extension to its east (Space 3) to accommodate both the "choir" area where the canons performed their daily cycle of sung prayers, and the "presbytery", the separate eastern chapel where the main altar was located; this pair of spaces would be rather constricted in the the short eastern section known to have existed at this date, and Inchcolm seems to be the only monastery in the British Isles in which the arrangement of separate rood screen and pulpitum is represented by two upstanding barriers (Culross Abbey, a little over a dozen miles down the coast, also had two screens beneath the tower, but this represents the distinctive architecture of the Cistercian Order, which required two distinct choir areas for lay brothers and monks, and the space to the east there was much more extensive, suitable to accommodate both the monks' choir and the presbytery).

At Inchcolm, an alternative layout can be proposed which is perhaps easier to reconcile with the available space: the eastern screen combined the functions of rood screen and pulpitum, so that Space 2 beneath the tower was designed as the "choir" of the church, where the canons sang their hymns, psalms and prayers. The second partition in the eastern archway would therefore be the chancel screen, designating the entire eastern area of Space 3 as the presbytery for the the altar and the associated eucharistic liturgy. The staircase adjacent to the rood screen may have led up to a raised speaking position level with the arches (the pulpitum proper), from where members of the community would read out Bible passages and preach sermons during the services, while the eastern screen, with its triple archway above a relatively low partition with a central doorway, has basic features which conform to the typical design of a chancel screen. This amounts to a new appraisal of the layout of this phase: the monks' choir was located within the tower (Space 2), while the eastern section (Space 3) would have contained the chancel and the high altar.

We know something of the style of the eucharist around which the new chancel at Inchcolm was built - in fact, the Augustinian community appears to have been at the forefront of liturgical development: before 1250, the canons had adopted the new ceremonial practice of elevation, where the consecrated bread and wine were lifted up into the view of the worshipers, and Bishop Geoffrey of Dunkeld had made an endowment to provide incense, sweetsmelling smoke to act as a visual expression of worship and prayer at this climactic moment.

One uncertainty in this phase concerns how the tower and the new eastern section were roofed - as noted above, Wilson Paterson thought that the Phase I chancel which previously stood in Space 2 may have been vaulted, but although the part of the church within the tower was certainly vaulted at some point, he regarded this as a secondary insertion at a later date, and documentary evidence shows that Space 3 was covered by a timber roof as late as the 1380s; Wilson Paterson seems to have believed that it was never vaulted.

Other architectural alterations probably coincided with the lengthening of the church. The south wall of the tower was built flush with the south wall of the nave rather than set back from it as the wall of the original chancel had been, suggesting that a flat south facade was preferred over conventional axial symmetry, and the southern wall of the nave was subsequently thickened outwards, a development which was evidently connected with a lowering of the ground level immediately to the south: both of these decisions seem to be associated with the provision of cloister accommodation to the south (discussed in more detail below in Appendix 2.2). At some point in the thirteenth or fourteenth century, a transept was added to the north side of the tower, containing a self-contained chapel entered from the nave by an aisle on its western side, which would have also provided space for lay worshipers within the chapel itself; this was perhaps a Lady Chapel dedicated to the Virgin Mary, or perhaps a shrine chapel for relics of St Columba; it also served to provide buttressing for the tower, which does not seem to have been adequately underpinned on this side. However, its date cannot be determined with much confidence, and it may have been associated with the next phase of construction.

An image of the church in this period survives, in the form of the sculpted depiction on the seal of the abbey - the wax fob appended to its official documents and used to authenticate them, produced by a carved matrix of metal or ivory. This clearly shows the nave, tower and presbytery, and accurately represents the base-course and the string-course; a cross stands atop each gable, the tower is surmounted with a spire and another cross, and two tall round-headed windows in what is either the south side of the nave or the north side of the presbytery, depending on whether the view is read as being from the north or south; the silhouetted gable of another building abuts the other limb of the building - presumably either the north transept, or an early cloister range.

Phase III - the extended choir

In 1265, Bower's Scotichronicon records the completion of a new choir, which extended the length of the eastern limb. At this point, Space 2 beneath the tower evidently did become a retrochoir, and the choir moved beyond the tower into the second-phase presbytery, Space 3, while the church was extended with a new presbytery set even further east (henceforth Space 4).

Little remains of either structure, but a fragment of wall tomb in the south wall retains part of a fresco depicting a funeral procession, and this is thought to be the monument of Bishop John de Leicester, whose body was re-interred on the south side of the new presbytery in 1266. Corroboration of this arrangement is provided by Abbot Bower's account of an English raid in 1384, which indicates that a lean-to range stood on the north side of the choir. This can be associated with a set of foundations on the north side of Space 3, discovered during repair and consolidation work in 1920s. This structure was perhaps a sacristy, where the more valuable and important objects used in church services were kept. Further east on the north side of the presbytery were two more sepulchres for other bishops of Dunked, built at the same time as that of bishop John to the south, and probably similar in design.

This extension of the eastern limb reflects a continuing desire to enhance the architectural setting for the liturgy of choir and altar. In 1265, the same year that the enlargement of the abbey church at Inchcom was completed, the Italian philosopher and theologian St Thomas Aquinas wrote words and music for a sequence of hymns for a new holy day known as Corpus Christi, dedicated to the celebration of the consecrated bread and wine of the eucharist as tokens of redemption and the forgiveness of sins. This service began to be widely adopted in the 1310s, and the fourteenth-century Inchcolm Antiphoner contains an early copy of these hymns and their music, showing that the canons had added the service to their liturgical year at an early date.

Phase IV - the cruciform church

In the late 14th or early 15th century, the focus of the church shifted to a new cruciform structure to the east of the earlier work, flanked by symmetrical north and south transepts beyond the east wall of the third presbytery completed in the 1260s, and concluding with a new presbytery even further east (as the entire area functions as a single architectural unit, it will be designated here as Space 5). The approximate date of the building can be inferred by the erection of its south transept, which was built to serve as a Lady Chapel, dedicated to the Virgin Mary, and was completed in 1402. Although the whole church may not have been finished by this date, the full plan must have been decided on, and construction was well underway.

Of the new choir and presbytery, only the south transept now stands to any height. This contains two altar positions, one of which was probably an addition during its use, and the bases of columns flanking the entrance from the nave, showing that it was entered by an arched opening; it has a pointed barrel vault, suggesting it was roofed with stone flags, a feature still seen at several contemporary Scottish churches (eg, **Seton Collegiate Church**), and supported by a statement that roofing flagstones ("thak staynis") were a major component of the architectural masonry removed from Inchcolm in 1581. The north transept was probably very similar in layout, but a cursory examination of the architectural fragments housed in the original nave suggests that they include elements of structural rib-vaulting, which imply that at least part of the building was roofed in this more ornate and structurally complex way - probably the presbytery and perhaps also the choir. The 1581 document also

refers to ashlars, and the remaining stonework and the amount of robbing-out on the external faces of the south aisle confirms that the walls were extensively faced with this polished and squared stonework. Ashlars plundered from Inchcolm were subsequently used to rebuild the Old Tolbooth, a public building in Edinburgh, which also featured a set of five medieval niches that are likely to have come from the abbey church - they would have contained statues of saints and other important figures in the church's history, and probably adorned its external buttresses; footings for three such buttresses, seemingly secondary additions to the plan, are visible in the foundations of the north transept (Fawcett (1998) p. 101), and there may have once been others defining the bays and angles of the nave and south transept (as secondary features, the lack of bonding with the walls would make it easier to rob out their foundations completely). In the the south wall of the presbytery, adjacent to the arch of the south transept, there is a hint of the sedilia - a triple seat for the priest and his assistants. The stone platform of the high altar is a reconstruction, although it uses one of the church's medieval altar slabs, ornamented with incised crosses - a very rare survival indeed. This is generally stated to have belonged to one of the altars from the south transept, but the earliest plan, dating from 1922, shows it in lying the nave outside the transept, and its original position is not entirely clear.

The intended liturgical layout can be inferred from the location of the night stair descending from the canons' dormitory to the south: this needed to lead into the eastern part of the church reserved for the canons, but it also had to end slightly to the west of the choir area proper. What was identified by Wilson Paterson as the original night stair enters into the eastern end of Space 3, which had been the canons' choir in Phase III; this implies that the choir proper had been moved even further east, and that Space 3 now formed part of the retrochoir. It is likely that the original nave was still used by lay worshipers - the only alternative space would be within the tower, but there would be no practical way for layfolk to enter this area without keeping the nave in use in the first place. If the position of the night stair has been correctly identified, then contrary to what has been previously assumed, it thus implies that the intention at this date was to use the full length of the church from its original east gable to new eastern presbytery.

The resulting layout closely resembled Culross, with a congregational nave separated by a tower from a very long eastern limb containing monastic choir, transepts containing chapels, and an eastern presbytery. However, it is unclear if the church was ever actually finished in this form, and it is possible that the stair into Space 3 was never in fact intended as a night stair - but even if it was, its design promptly underwent another substantial revision.

Phase V - reduction in scale.

The final major pre-Reformation phase in the architectural development of the abbey church involved a dramatic reduction in the length of the church. The reasons for this are not hard to infer - it seems likely that the tower required structural reinforcement, which rendered its interior unsuitable for use as part of the church, and there may have also been a preference for abandoning the

timber-roofed parts of the building (Space 1 and Space 3) and focusing within a stone-vaulted space. These modifications can be dated to the first half of the fifteenth century, based on their architectural relationship with changes in the adjacent cloister which were probably completed before 1450 (see **Appendix 2.2** below). The chronological relationship of these changes with Phase IV above is very unclear, but they are described separately here for clarity.

The story of these changes begins in the tower, which was strengthened at several levels, and can be most clearly considered by dividing into upper and lower sections: in the upper part of the building were three elegant pointed tunnel vaults, identified by Wilson Paterson as insertions of this period - one at the level of the church roof in Space 2, one in the early chamber above it, and third above the belfry which gave the building a raised caphouse above its parapet; at a lower level, a barrel-vaulted basement was inserted into Space 2, and the northern transept was superseded by a buttress-like structure containing a small vaulted chamber at first-floor level; mention can also be made of a retaining wall to the north, which serves to underpin the entire building. It is clear that the purpose of these changes was at least partially necessary to stabilise the building (the tower has a slight lean to the north). It is also likely that they were intended as part of the same programme of quasi-defensive vaulting characterising the adjacent cloister (Appendix 2.2 below). It is unclear whether all these changes were made as part of a single strengthening project which inevitably took it out of use as part of the church, or if the elegant upper vaults were intended to enhance the church, but proved too heavy, and required the addition of the basement and buttressing to stabilise the building.

The 12th-century church (Spaces 1 and 2) was abandoned as a place of worship and made over to domestic use, whilst the area between the tower and transepts (Spaces 3 and 4) probably became the western nave of the new church. In response to this rearrangement, a new night stair was built, entering the church further east, and indicating the new limits of the congregational nave and choir, approximately corresponding to the division between Space 3 and Space 4. The door in the north wall which had previously accessed the lean-to building on the north side was probably repurposed to provide separate access for lay worshipers. The transepts and presbytery further east in Space 5 remained in use essentially unchanged. Space 1 and Space 2, the original nave and the tower, had ceased to form part of the church, and their subsequent use is covered below within **Appendix 2.2**, in the context of the cloister buildings.

There is uncertainty about the evolving use of Space 3, standing immediately east of the tower, which is presumed to have been converted to act as the nave. Wilson Paterson asserted that also rapidly ceased to function as part of the church, with the staircase entering here being repurposed as a "day stair" connecting areas of the adjacent monastic accommodation - indeed, it is possible that this was its function from the start, and that it was never repurposed as the nave. Wilson Paterson also believed that Space 3 was subsequently demolished or unroofed, leaving the truncated church totally separated from the original structure, and linked to the cloister only by the night stair passage. If this was the case, the position of the night stair entrance in the church would have left only a small atrium for lay worshipers between the staircase door and the new western gable. It is certainly true that Space 3 was by now poorly lit, and apparently never covered by a stone vault, but the hypothesis of its unroofing should be approached with some caution the only evidence from which its demolition can be directly inferred is the construction of a stair turret in the angle between the adjacent tower and cloister buildings, and this may have taken place after the Reformation, responding to the demolition of the church as a whole. If the stair was not used as a day stair, it was probably simply demolished, and this area could have served as the nave of the church until its post-Reformation demolition.

The new cruciform church, if it was indeed separated completely from the bell tower and cloister, more approximates to a Greek than a Latin cross, with the monastic choir in the west arm and the presbytery in the east arm. The north and south arms, or transepts, each held two chapels, representing the multiplication of altars in late medieval churches, while the presbytery contained the high altar. This layout, aisleless, approximately equal-armed, and characterised by multiple chapels, is particularly associated in Scotland with late-medieval "collegiate" foundations (communities of priests and other clergy bound by looser vows than the Augustinian canons), but Inchcolm may be one of the earliest examples of the layout.

Phase VI - post-Reformation demolition

In the immediate aftermath of the Reformation Parliament of 1560, the monastery appears to have been repurposed as an aristocratic residence by the family of the abbot, but in April 1581, we have clear evidence that part of the buildings had been demolished - a large consignment of squared ashlar masonry and roofing flagstones from Inchcolm Abbey was sold to the civic authorities of the city of Edinburgh, who used it to rebuild the demolished Old Tolbooth on the Royal Mile, and apparently also to repair the pavements of Leith Walk (Marwick 1882, pp. 204, 210). It seems likely that the church had been deliberately destroyed in order to profit from its masonry as architectural salvage, although there may also have been a Protestant intention to inhibit any return of the monastery to religious life.

We would therefore expect the reused fabric of the demolished church to be visible in the Old Tolbooth in Edinburgh, a prominent building next to St Giles' Kirk, the appearance of which is extensively documented in a number of illustrations done between 1647 and its demolition in 1817: it consisted of a tower-like eastern section built of squared ashlar and adorned by five empty Gothic statue niches on its street frontage, and a larger range of rubble masonry extending west along the south side of the Royal Mile. At least part of the vaulted basement probably predated the reconstruction, and the eastern tower has also been regarded as a survival of the pre-1561 building based on the evidently medieval nature of its architectural details, but its ashlar construction corresponds with the Inchcolm masonry that is known to

have been purchased for reuse in the building. Other architectural elements may have also been borrowed from Inchcolm: the ogee-arched entrance might have originally been an internal doorway such as the entrance from the night stair, some illustrations suggest that the stair-turret windows had lancet heads, and the unusual moulded surrounds of the square lights on the main block may have used reassembled elements from the windows of the abbey church. Other buildings on the High Street were also constructed from reused ecclesiastical masonry at around this time, notably Gourlay House, built in the 1560s on the site now occupied by the Missoni Hotel on George IV Bridge.

Further research into the visual evidence for the Old Tolbooth may discover additional dislocated architectural details from Inchcolm. Another source of potential knowledge is found at Inchcolm itself, in the miscellany of architectural fragments stored in the vaulted basement now occupying the footprint of the original nave in Space 1, among which elements of a ribvaulted ceiling appear to be visible.

By 1784, an antiquarian sketch shows the church in very much the same condition which it retains today. The main architectural loss is the section of the south wall screening the night stair, which contained a squint through which the interior of the church could be viewed from the top of the stairs, and which seems to have remained substantially intact as late as the 1860s. During WW I, a narrow-gauge railway was run through the ruins, although a raised ground level appears to have protected the wall footings and other archaeological traces. In the 1920s, debris was cleared and limited restoration took place, repositioning the altar table in the presbytery, and revealing details such as the walled-up columns of the screens in the tower, and the remains of wall-painting dating from 1266 in the tomb-recess of bishop John de Leicester. Even in its fragmentary state, this assemblage of early architectural details is unparalleled in Scotland.

Appendix 2.2 The Cloister

Adjacent to a monastic church stood its cloister, a quadrangle with a central lawn or garden, surrounded by walkways with arched openings, where the members of the community would sit during their free time - perhaps talking together, reading, writing, or composing music. The north side of the cloister was typically formed by the south wall of the church, while ranges of buildings surrounding the quadrangle on its other sides contained the community's accommodation, the most important elements of which were a dormitory or "dorter", and a dining hall, normally described as the "refectory" or "frater". These were usually placed on the east and south sides of the quadrangle. Inchcolm's cloister is the best preserved in Scotland. Most of what remains, however, dates from the 14th/15th centuries and represents the result of a long process of development, producing a far from typical arrangement; it has also been altered in detail by post-medieval adaptation, and by a sensitive restoration in the 1920s after the buildings were brought into state care.

Phase I/II - the early arrangements

There is no architectural or archaeological evidence for accommodation contemporaneous with the phase I church, but this in itself suggests that the layout was less formal than a conventional cloister, perhaps with a freestanding lodging somewhere to its south. The earliest arrangement for which evidence survives was associated with phase II of the church, and is known from alterations to the south facade, and from structural footings, detected archaeologically during the restoration of the buildings in the 1920s. These indicate that the cloister was originally laid out on a smaller scale, with the cloister walkway projecting directly south from the processional doorway in the south side of the tower, and then turning west across the south side of the quadrangle - the wall-line is indicated by a buttress built into the staircase in the south-west corner, which serves no obvious architectural purpose, and plausibly represents a fragment of early masonry.

A few further hints of the surrounding buildings can be inferred from surviving details. The west side of the quadrangle probably stood on the same alignment as the current cloister wall, and Wilson Paterson documents a roof-raggle in the south wall of the church (Wilson Paterson (1925-6), p. 231) which might indicate a west range or a freestanding cloister walk; this second option would have the effect of leaving all three of the doors at the west end of the church outside the cloister, accessible for lay worshipers. The other two sides of the cloister probably did have buildings behind them, to provide sufficient accommodation in the classic layout, though they need have been no more than one storey high.

The south range, sited behind the walkway, was probably in the same position as its successor, and is likely to have already contained the refectory. It has been asserted that the current south range contains earlier masonry in its lower walling, which might perhaps date back to this phase (cf. Fawcett, 1998, p. 104), but further inspection would be necessary to confirm this. The east range presumably contained the dormitory at its southern end, but there are traces of a rectangular building projecting back behind its northern end, which may have been the chapter house (Wordsworth (1984), p. 7, cf. Wilson Paterson (1925-6), pp. 231-232); based on the alignment of this building and the early cloister walk, the original east range was set conventionally at right angles between the tower and the south range - a line that would not be retained by its successor.

Phase III - changes in layout and the chapter house

A programme of rebuilding designed to enhance the cloister accommodation began in the late thirteenth century, probably soon after the Phase III extension of the church was finished in 1265. This is the first stage of the cloister from which clearly identifiable structures have survived: it included the splendid new octagonal chapter house, and it was evidently decided from the outset to rebuild the adjacent east range of the cloister once the chapter house was complete: a new rear wall was laid out for the cloister range, swung outwards to the east from the point where the existing east range met the church, and set at an obligue angle to the rest of the quadrangle. Wilson Paterson offered a credible explanation for the change in alignment - the new wall was built around the entrance of the new chapter house, and if this had been built directly adjacent to the existing dormitory wall, a large hole would have had to be knocked through into the canons' quarters to accommodate the laying out of the foundations, and then left open throughout the building works, while the chapter house was erected up to gable height.

The 13th-century octagonal chapter house is the oldest surviving structure in the cloister. It has a ribbed vault with a central opening for a suspended lamp or candelabrum, a trio of arcaded seats in the east wall for the abbot, prior and sub-prior, and a stone bench around the other sides for the brethren. Although relatively small in scale, its size enables it to be roofed with a freestanding stone vault, rather than a lightweight wooden imitation or a circular aisle around a central supporting column. Its acoustics mean that softly spoken words can be heard right across the room. In the 14th century (but still within Phase III), an upper floor was added, a relatively unusual alteration. In its current form, this room has a hearth in its north wall, and a vaulted roof of unconventional design: a pointed barrel vault connects the east and west walls, a pair of triangular gables are set up on the north and south walls (with the northern gable containing the chimney), and four segmental vaults close in the gaps at the angles: the result converts a room with a centralised floorplan into a space with a clear north-south axis. This vault may be a secondary addition replacing a more straightforward conical wooden roof, and can be plausibly associated with the fifteenth-century Phase IV/V, when the removal of vulnerable timber elements from the construction of the cloister was given priority; it is also unclear whether a hearth and flue in this room would have been practical before the vaulted roof and gable were put in place, a point which has important implications for its original purpose.

The hearth suggests that the upper floor was used to provide a warming house, the one room in the monastery apart from the kitchen where a fire was allowed: the monks were allowed to come in here to warm themselves up in front of the hearth when they got too cold, and as such, it came to be used as a common room during times of day when they did not have other scheduled activities; it may have also served as a heated alternative to the cloister during winter months, and it might be used periodically for purposes such as medicinal bloodletting, taking hot baths, and waxing their working boots (because the polish needed to be relatively warm). However, if the hearth was a secondary addition in Phase IV/V, this room must have been originally intended for a different role: the closest architectural parallel, the room above the chapter house at Lichfield, was designed as a treasury and quickly came to double as library. The room at Inchcolm may have originally been intended for a similar purpose.

Certainly belonging to Phase IV/V is a well-preserved Latin text inscribed on the wall of the warming-house next to the fi<u>re</u>place. This is dated from the style of writing to the mid-to-late fifteenth century, and although sometimes described as "pious graffiti", it is more plausibly regarded as a piece of formal interior decoration, perhaps originally part of a larger scheme of inscriptions (Davies, Sharpe and Taylor 2012). It consists of four Latin sayings attributed to the ancient Roman philosopher Seneca, though its immediate source is the Manipulus Florum ("Handbook of Flowers"), a collection of sayings and quotations compiled around 1300 by Thomas Hibernicus, an Irish-born scholar at the medieval University of Paris; the full text can be translated as follows:

It is foolish to fear what cannot be avoided. The safest thing is to fear nothing but God. Nothing produces a fearful soul except the bad conscience of a blameworthy life. Let conscience overcome whatever evil the tongue will have composed.

The RCAHMS survey asserted that traces of another painting were visible on the east wall of this room, including a pot of lilies; this was interpreted as part of a mural depicting the Annunciation, with the angel Gabriel informing Mary that she would be the mother of Jesus (RCAHMS 1933, p. 11).

The building of the realigned wall outside the chapter house indicated an intention to rebuild the entire east range, and also allowed the cloister to be slightly enlarged, but it is unclear how much further this building campaign was initially carried through. Wilson Paterson believed that the rest of the cloister (Phase IV/V) followed promptly in the fourteenth century, and most modern reconstructions of the building sequence are based on his work, but Prof. Richard Fawcett has gueried whether there would be sufficient opportunity between the English invasions of this period, and has argued that the reconstructed cloister fits better both contextually and stylistically in the early fifteenth century (Fawcett 1998, pp. 93, 104); this also seems to be borne out by documentary evidence discussed below. However, Fawcett asserts that the lower walling of all three cloister ranges contains earlier masonry, some of it apparently "thirteenth century or earlier" (Fawcett 1998, p. 104), and insofar as the Phase I/II west range was a simple cloister walk, while the original east range was set on another alignment, any structural walling on these sides of the cloister must represent a survival from Phase III.

Further survey would be necessary to better understand the cloister buildings of this phase, but two indicative details can be noted: the door of the chapter house opens directly through the wall of the east range, too far south to leave adequate space for a ground-floor dormitory beyond it, while the line of the western cloister arcade was adopted as the line of the west range, leaving inadequate room for a new aisle projecting inwards beyond it: these details hint that the canons may have already decided to adopt Inchcolm's distinctive cloister layout, incorporating the cloister walks into the ground floor of the accommodation ranges.

Phase IV/V - the developed cloister.

The cloister underwent another reconstruction in the first half of the fifteenth century, which saw it assume its mature form, with a strongly vaulted

structure and a minimal use of timber. This date has been convincingly inferred from indirect evidence (Fawcett, 1998, pp. 93, 104), but is also implied by a passage in the Scotichronicon, which indicates that the monastery was being "fortified" in the 1420s, but that the scheme was essentially completed by the 1440s. The developed cloister at Inchcolm is unusual in several respects. As noted above, its Phase II precursor had originally followed the normal arrangement, with the lean-to cloister alleys abutting against the walls of the surrounding accommodation ranges, a plan which allowed the walkways and window-seats of the quadrangle to be enclosed within a lighter and more decorative structure of pillars and vaulting, which did not need to support anything more solid than rainwater on the roof. Now, however, perhaps following on plans laid out in Phase III, the covered alleys of the cloister were placed directly within the accommodation buildings, taking up the entire ground floor of all three ranges, and strongly vaulted to support the accommodation placed directly above them; this layout appears to have been unique to Inchcolm. Although a somewhat similar arrangement was found at Jedburgh Abbey and Inchmahome Priory, where parts of the cloister on one side of the building were integrated into the range behind them in the form of a portico, with the upper floor oversailing their vaults, the integration of the aisles into the accommodation ranges at Inchcolm was far more complete. Two reasons for the adoption of this plan can be inferred. It enabled the canons to create a larger central guadrangle within the walling inherited from earlier phases of the cloister, and it also made use of the substantial vaulted basements necessary to support a quadrangle constructed entirely of masonry without conventional timber flooring and roofing - an architecture apparently designed to protect the cloister against English raids, not only reducing the potential for fire damage, but effectively rendering the building impregnable to attacks that did not involve heavy artillery, and allowing the monks to simply sit out English raids.

The layout of the cloister walks is not the only unusual feature of this phase. The original church on the north side of the cloister was converted into a part of the accommodation ranges, and both the nave and the tower (Spaces 1 and 2) were strengthened with the insertion of a vaulted basement, with the abbot's guarters on the inserted floor above. Wilson Paterson argued that the vaulted basement initially served as the north alley of the cloister, and that a more conventional lean-to alley was subsequently added to its south side, allowing the vaulted basement of the old church to be converted to storage. This argument is not entirely convincing: the basement is a dark space which lacks the amenity of well-lit window seats and is only awkwardly connected to the other three sides of the cloister. This vault may instead have served as the storage cellar - it certainly sits in the traditional location for a monastic cellar, the basement beneath the abbot's quarters, and there is nowhere else in the cloister where it could be located. The west and south doors were eventually blocked by the completion of the west range of the cloister, but the original north door of the church probably remained in use, and would have provided direct access to the cellar for stores and supplies arriving on the island.

The foundations and roof-raggle of a more ornamental north cloister arcade survive outside the church. Wilson Paterson believed this to be a later insertion, but it fits with the 15th-century date now asserted for the cloister. The other three aisles are architecturally plain, with few details apart from their round barrel vaults, and the arched window seats along their inner sides, but they gain an impressive and distinctive grandeur from their combination of scale and monastic simplicity. A few details can be noted. In the south alley are two features of interest – a stone cresset (lamp support), and a lavatorium or laver (washing place, used by the canons for formally washing their hands before and after meals; it was inserted in a blocked doorway, and fed by rainwater from the roof: Watson Paterson, p. 237). Toward the south end of the western alley is the entrance to a staircase, which projects into the cloister enclosure and leads up to the south and east ranges. The eastern aisle contains the 13th-century doorway of the chapter-house. A number of details have been changed during later phases - a sketch of 1784 suggests that the doorway leading outwards at the north-west angle is a subsequent addition, while there was originally a lancet window at the east end of the south aisle. Apart from a doorway in the back of the cellar, the only medieval ground-level entrances to the cloister appear to be the doors at either end of the eastern aisle, leading north to the Space 3 area of the church and eastwards past the chapter house, and the blocked south door whose embrasure is occupied by the lavatorium, which also stood near the south end of the east aisle. The location of the "day stair", the main route down from the monks' dormitory, is uncertain, and will be discussed below.

Other than the chapter house, the main rooms of each range are at first-floor level. These are covered by pointed barrel vaults beneath stone-flagged roofs. Over the east alley was the dormitory, from where a rather "awkward" stair in the east wall leads up to the warming house above the chapter house, while a doorway in the southern wall gives access via a bridge to the reredorter (latrine) in a separate range to the south, discussed below in **Appendix 2.3**. At the north end are the doorways for two stairs leading into Space 3 and Space 4 within the church; as noted above, these have previously been interpreted as two successive "night stairs" leading into the building, but it is possible that the western stair, leading out of the north wall into Space 3 may in fact be the "day stair" leading into the cloister, constructed after that part of the building was taken out of ecclesiastical use, and even if it was not designed as such, it is possible that it took on that role when the focus of the church was shifted eastwards.

It is not easy to find another location for the day stair - Wilson Paterson suggested that a wooden stairway led down into the cloister from one of the enlarged windows at either end of the dormitory's western wall - the northern window is the more probable candidate, as its jambs do not match the others, suggesting either modification or a different purpose from the outset, and there is a rational exit route here, stepping down the end of the pend roof of the projecting cloister walk, and then entering the cloister via a spiral stair in the angle between the projecting walk and the west range; in contrast, a stair descending from the south window would impinge on the cloister arches underneath. Aside from one of these windows or the stair into Space 3, the only alternative route for a day stair would be to leave the cloister by the door leading towards the latrines at the south end of the dormitory; this would have been a convenient location for the day stair when the cloister was originally planned, as there was evidently a timber platform outside the door and an adjacent ground-floor doorway leads back into the quadrangle, but this route was closed off when a more substantial bridge/gatehouse complex was built between the cloister and the latrine, and the ground-floor door was blocked to create an embrasure from the lavatorium; once these changes were complete, the only way to leave the cloister here was to pass the latrines, and use the spiral stair in the south range (discussed below in **Appendix 2.3**), then walk across the entrance path, and re-enter the cloister by the door at the south end of its east aisle.

Little is known about the internal fittings of the dormitory. It may have retained the simple layout favoured down to the fourteenth century, in which it was an open space, perhaps equipped with little more than straw mattresses, but in the later period, it was sometimes partitioned into individual spaces known as "cells", to allow each member of the community some privacy, and these could be furnished with a bedstead and reading desk. It is not clear which system was used at Inchcolm. Wilson Paterson suggests that the blocked window in the south gable belonged to a chamber for the sub-prior, but there is little obvious rationale for this unless the day stair exited here.

The south and east sides were connected to the cloister by a shared staircase. Over the south alley lay the refectory. The ghosting of a curved canopy at its east end indicates the position of the high table. To its south is a rare example of a pulpit used for reading out religious texts during mealtimes (another survives in **Dunfermline Abbey**'s refectory). At the refectory's west end was an area used as the monastic kitchen, organised around a hearth in the centre of the floor, beneath a circular opening in the vaults to let out the smoke; this may have been a relatively sophisticated structure, with a hood over the hearth and a chimney flue, and the area was also lit by an oriel window high up in the west gable. This unusual layout brought monastic simplicity to the living arrangements, while also allowing the the hearth to lend its warmth to the refectory. The west range has undergone the most extensive process of adaptation and restoration of any part of the cloister. It originally had a symmetrical layout: at the south end stood the entrance from the cloister stair, and opposite this, another doorway, giving access to a similar covered staircase on the west side (now demolished), which was probably the main external entrance to the cloister; the northern part was lit by two pairs of windows. In the north wall, a doorway led into a small lobby with a guardrobe (toilet), which also provided access to the lodging in the north range, while an aumbry-like recess in the south wall was identified by Wilson Paterson as a serving hatch opened from the kitchen area of the refectory, allowing hot food to be delivered.

The provision of a private toilet and perhaps food-serving facilities suggests that the west range was an area designed for people who were not members

of the monastic community: it was interpreted by Wilson Paterson as a guest hall to accommodate lay visitors to the abbey, but this seems incompatible with its role as the entrance space from outside, and with the means of access into the abbot's quarters; it is perhaps more likely to have been the "outer parlour", a formal space at the entrance to the cloister where the abbot or individual canons could meet visitors, and where members of the community could go to talk during the hours when silence was kept in the rest of the monastery.

As noted above, the original nave and the tower were taken out of use as part of the abbey church, and converted into a north range of accommodation with the insertion of a vaulted basement. The inserted floor above these vaults became a comfortable three-room lodging – it shared the private guardrobe in the angle with the west range, and contained a good-sized hall in what had been the 12th-century nave, the only part of the cloister to retain a timber roof (Space 1), a square, vaulted chamber with a south-facing lancet window in the tower (Space 2) which was perhaps a bedroom, and a small inner chamber in a buttress wing built on the site of the north transept, which may have been a study or oratory. The spiral staircase in the tower provided a private means of access downwards to the cloister through the cellars, and also gave access upwards to the pre-existing chamber in the second floor of the tower with its window seats. This suite of rooms has been plausibly identified as the abbot's residence - perhaps where Bower wrote his Scotichronicon?

Phase VI - sixteenth-century alterations

The final phase of medieval building work in the cloister involved the addition of two stair towers with spiral stairways. The larger and more prominent staircase is located in a square tower toward the west end of the south range, and contains a wide spiral stair designed to provide a formal route of access to the upper floor; it is surmounted externally by a parapet, the corbels of which are authentic although the current flat wallhead is a modern reinstatement - the 1784 sketch shows that the original parapet had by then been stripped away, and suggests that the tower was topped by a southfacing pend roof, flanked by crow-stepped gables. Internally, this staircase leads into the refectory, in which the cooking area was now screened off into a separate kitchen by a partition wall, and its central hearth was replaced by a more conventional flue against the gable wall, blocking the oriel window.

The other sixteenth-century staircase was inserted in a curved turret occupying the corner angle between the tower and the north gable of the dormitory, and must have been added after the demolition of the section of the church in Space 3: lit by small glazed windows, it served to provide direct access to the first-floor "abbot's chamber" in the tower, and also opened onto a timber gallery projecting outside at this level, and ascended to a new mezzanine chamber inserted in the chamber's roof space - a proliferation of private spaces typical of élite residences in the Scottish Renaissance. Some earlier sources incorrectly assert that this staircase also gave access into the west range of the cloister, but there is no suitable opening.

These towers and the associated internal rearrangements have been regarded as late pre-Reformation alterations to the monastic buildings, but they may in fact have been built during the conversion of the cloister into a nobleman's residence after 1560 (cf. Fawcett (1998), p. 104). The new layout can certainly be read as a way of adapting the building for a nobleman's accommodation, with the refectory repurposed as a ceremonial hall, with paired entrances at its "low" end - the new door from the staircase tower was directly opposite the landing at the top of the courtyard stairs - while both the west and north ranges were incorporated into an enlarged residential suite. and the kitchen was discreetly tucked into the angle between hall and residential suite. The rear staircase is certainly intended as a private means of access tying together a new suite of apartments and a less formal external door. The same phase may have also introduced more modern square windows, both in the "abbot's chamber" in the tower, where a south-facing lancet has been replaced, and in the west range of the cloister, where the 1784 sketch shows similar square openings.

Some other small alterations may also date from this period: the insertion of a fireplace and projecting chimney breast into one of the first-floor window embrasures in the west range of the cloister, the conversion of the mid-level chamber higher up in the tower into a dovecot with nesting niches in its walls. and the refacing of the lower part of the north wall of the phase I nave in rubble masonry, which probably represents repair after the robbing-out of the original ashlar walling in 1581. It may have also been at this point that the staircase in the south-west angle of the cloister was blocked off, and its upper section was converted to serve purely as a corridor between the refectory and the west range, and as the refectory now lacked a hearth, it is possible that one was inserted towards its western end - early photographs suggest that a flue was inserted here, trunked around the corner of the courtyard to a chimney above the blocked staircase, its passage being disguised by a small turret corbeled out in the angle of the courtyard, though this caprice could conceivably have been added around the second guarter of the nineteenth century.

The monastic dormitory was not incorporated into the new layout, perhaps suggesting that the reconstruction took place in the late sixteenth century, when there were still some canons who could claim rights of residence. The night stair probably now served as a separate external entrance to this range, isolating it from the cloister.

Phase VII - repurposing and restoration, c. 1790-1930

As noted above, it is hard to say how long the abbey buildings continued to be occupied: they may have been effectively abandoned in the late sixteenth century, but it is equally possible that they were used by the Earls of Moray as their main Fife residence for much of the seventeenth century, until work began on the Palladian mansion at Donibristle in the 1670s. Around 1700, a description of the abbey buildings by the antiquary Sir Robert Sibbald

indicates that they were in much the condition in which they remain, and this is corroborated by two sketches of 1784.

Nonetheless, the early modern period saw alterations to the buildings, which have been largely concealed by modern reinstatement. Around 1800, the cloister ranges were modernised to serve as accommodation for a small garrison of soldiers from the Royal Artillery. After the garrison was withdrawn, the buildings were rented out, firstly as a second home by a visitor from Edinburgh, and then by a tenant of the Donibristle estate who used the island for agriculture, with part of the cloister serving as a herdsman's cottage and other parts used as barn storage - the chapter house was used as a hay-loft, for example - although in 1846, one room was being used an artist's studio. A garrison reoccupied the island in 1914-1918, and the abbey was used as officers' quarters. Externally, modern slate roofs were added, and several embrasures were enlarged to take modern rectangular sash windows. These changes took place in at least two phases.

In the first phase, complete by 1822 and probably predating 1800, the south range was brought back into use to accommodate a garrison. Its new slate roof had a much sharper pitch than the medieval vaults, perhaps to accommodate a garret, and the gables were built up to support it at either end. To avoid an awkward intersection with the vaults in the east and west ranges where they oversail the south range vault, short wing roofs were built out over the ends of these sides of the cloister, ending at another pair of gables built up from their vaults. The western wing roof covered the kitchen, while at the east end, the southern end of the dormitory was also brought into use, and a doorway was knocked through the dividing wall. The blocking of the stair down to the cloister, discussed above under Phase VI, may have also occurred in this phase.

A number of changes can be dated to between 1822 and 1869, and many of them were evidently imposed when the abbey was being used as a second home, at a date before 1846. The most obvious of these is the insertion of the spurious but charming battlements above the gateway/bridge connecting the cloister and south range, and it was probably also in this period that the west range was brought back into use, roofed with a slate roof set at a lower pitch directly over the vaults. Once this had been done, the first floor chamber was subdivided into two, with three larger rectangular sash windows inserted in enlarged embrasures in the west wall, and the ruinous external stair was demolished. The refectory was similarly subdivided into two rooms and a corridor, and the two western window embrasures, now forming a distinct room, were modified to take smaller rectangular sash windows. A total of five new brick chimney stacks appeared - one seems to have reused the kitchen flue, but others are recorded at the top of the two staircases, atop the two new partition walls, and in the eastern wall - additions which must have impacted somewhat on the fabric, including the vault. The tracery of the oriel in the west gable was also blocked or removed, leaving only the semi-circular hood moulding visible. On the ground floor, the south aisle of the cloister was also divided into three rooms, and the west aisle was converted into storage. A

sash window in the "abbot's chamber" in the tower suggests that this part of the building was also refitted, and according to a visitor in 1846, this was the accommodation occupied by Thomas Brown, a "recluse fisherman" who had inhabited the island in the period c. 1780-1820.

However, these alterations were not as severe as they could have been - the new slate roofs were built above the original vaults, which thus survived largely intact, and where possible, it seems that new windows were set into existing medieval embrasures. The most significant change was the enlargement and modernisation of five windows on the south and west exterior faces of the cloister, a change that has since been discreetly reversed.

Perhaps surprisingly, it does not appear that the fabric of the cloister was significantly affected during 1914-1918, notwithstanding the reoccupation of Inchcolm by a garrison, the installation of officers' quarters, and the dramatic changes to the island in this period.

In the 1920s, a decision was made to remove the Georgian alterations and reinstate the medieval appearance of the cloisters as much as possible; the principal changes were the restoration of the stone-flagged roof and original roofline, and the restoration of medieval-style lancets to replace inserted modern windows. Inserted walls were removed, and the door between the refectory and dormitory was blocked. In the refectory, two pointed windows were reinstated - their original design could be accurately reproduced because a third matching window to their west was immured by the sixteenthcentury stair tower (RCAHMS 1933, p. 12). Significant changes were made on the west side of the cloister: internally, the blocked staircase was opened up and its ceiling and doorways were repaired; externally, the roofline was simplified, removing the traces of a corner turret, and the adjacent chimney stack was shortened and straightened, removing the inward stepped profile visible in the earliest images. On the west side of the parlour, two windows and a doorway were also restored to an approximation of their medieval appearance, though less guidance as to their original form was available here than in the refectory, and no attempt was made to reconstruct the external staircase. On the ground floor, a rough opening at the north end of the western aisle of the cloister was converted into a doorway: this has no precursor visible in the 1784 sketch or the plans of 1822 and 1869, but in the MacGibbon & Ross survey, published in 1896, it is either shown as blocked masonry or perhaps deleted as a correction to the plan; its original age is very uncertain. Another area where consolidation work has occurred is the stair turret in the angle between the tower and dormitory range, where the masonry has been levelled off below its original height, and the doorway of the mezzanine level to which it originally led has been concealed. Various other minor alterations have already been noted in the survey of the buildings. Overall, this was a sensitive and minimal act of repair which did much to restore the medieval appearance of the cloister, and stands in its own right as a stage in the history of the abbey buildings; but the very success of the work poses a challenge for curation - the fact that areas of the masonry are

restoration work is almost invisible today, but their existence and location needs to be borne in mind in any evaluation.

Appendix 2.3 Auxiliary Buildings and Precincts

To the SE of the cloister lay a complex of auxiliary buildings which served several simultaneous purposes, and developed over several phases. The closest to the cloister, extending to the south of the dormitory was the "reredorter" or latrine; this was originally a small separate building, accessed from the dormitory by a timber bridge, and consisting of a chamber above a basement which was open towards the water through a pair of arches on its south side, and thus flushed by the rise and fall of the tide from the beach; it has the look of a relatively early building (Fawcett (1998), p. 104), but it is laid out on the new alignment adopted for the east range in Phase III, so it cannot be earlier than the late thirteenth century. The drain from the lavatorium in the cloister ran down the west side of the building, and would have further helped to flush away remaining waste. The reredorter was subsequently extended further south over time as the original openings silted up. A new basement was built on the south side of the previous one, and an enlarged latrine chamber above was connected to the cloister by a solid bridge, with an enclosed room on top, and an entrance pend passing underneath its vault, complete with adjacent porter's lodge. All this evidently took place after work on the west range of the cloister was well advanced, as the window in the south gable of the dormitory was evidently intended to be external. Wilson Paterson regarded the chamber above the bridge simply as an extension of the dormitory to provide increased accommodation, but alternatively, it may have been a misericord (Latin misericordia, "mercy"), a space notionally outside the cloister in which more relaxed behaviour was permitted (for example, in monasteries with austere rules on what could be eaten in the refectory, it often functioned as an alternative dining room serving more meat at mealtimes); at a later date, however, this space was unroofed, and a small two-storey apartment resembling a miniature tower-house was built up against its south gable, although access to the latrine was retained. The position of the two-storey building in between the dormitory and the latrine suggests that it was the apartment of one of the senior canons, the prior or sub-prior.

Extending eastwards from the latrine, but separated from it by a dividing wall, is a block which contains a vaulted basement with ovens built into its walls, evidently a bakehouse or kitchen, and a sequence of four first-floor rooms, now ruinous, that has previously been interpreted as the infirmary, but whose layout seems more appropriate for use as a private lodging; in this context, it has been variously identified as the abbot's lodging or a guest house for lay visitors. This upper storey is now very ruinous, but old illustrations and an early photograph, show that this was an elegant and sophisticated building, and a close analysis makes clear that it actually comprised two separate apartments: the bay nearest the latrine contained another two-level suite above a self-contained cellar, linked together by a spiral staircase, with a private exit beside the porter's lodge, but also interconnecting on its upper floor with the chamber on the bridge and thus the cloister; effectively another

miniature tower-house, it has a very strong claim to be the prior's lodging, which would imply that the apartment on the bridge was either the subprior's lodging, or else a replacement for this suite (if, for example, it became necessary to use the staircase here as the day stair from the dormitory).

The other three chambers formed a separate self-contained suite, accessed by a separate stair tower, covered by a vaulted roof which remained intact into the nineteenth century, and adorned with buttresses and south-facing windows; an elegant pointed window in the western chamber survived into the era of photography, as did traces of a similar arch in the middle bay, and the early robbing-out of the third suggests that it may have been even more impressive; this end chamber also has a narrow pointed east window, which has prompted the suggestion that it functioned as a chapel - it is certainly higher than it would need to be unless it had an altar beneath it. This range has been proposed as an alternative location for the abbot's lodging (Fawcett (1998), pp. 104-105), but it can also be interpreted as a guesthouse, used as accommodation by high-ranking visitors such as the Earl of Douglas in 1412, and political prisoners like the Countess of Ross and the Archbishop of St Andrews. James IV may have also stayed here, as he seems to have passed a night on the island in 1508.

North of the church stands another ruinous building, freestanding and much smaller, whose exact purpose is unclear, although its design and the height of its foundations, which oversail the early north transept of the church, suggest that it is a relatively late addition to the site, and its L-plan in layout and suggestions of fireplaces suggest a domestic purpose. Its main range is oriented north-south, with its north gable built atop the retaining wall which underpins the northern flank of the site, and stands two storeys high with a basement and a gabled upper storey; a pend at the northern end of the basement provides access along the wall-line, and although it has been heavily restored, a sketch of 1784 confirms that this is an original detail of the design. The upper chamber was evidently spacious and well-lit. A projecting wing to the west, the south wall of which is aligned with the south gable of the main range, may have always been single storey - this wing was heavily damaged by having a narrow-gauge railway-line run through it around 1916, and although the lower walling was protected by a raised ground level, the standing masonry may be partially restoration work.

The retaining wall bounding the northern part of the site was probably necessary to underpin the north transept of the church and possibly to provide additional support for other parts of the building, and is thus unlikely to be later than 1450. Based on the sketch of 1784, its original height at the western end was probably about level with the eaves of the building built into it. To the east of the cloister, this wall is pierced by slits which may be defensive in origin, and encloses a level area which is now laid out as a lawn. It is unclear exactly how this area was closed off on its eastern side. One early drawing, which must date to the eighteenth century if it depicts the buildings accurately, shows a ruinous wall continuing the line of the auxiliary range eastward from the latrine, and then returning northwards at approximately right angles, but the question is rendered more complex by evident changes to the topography here: Sibbald, writing c. 1700, states that there was then a tidal beach separating the monastery from the eastern headland, which was only passable when the water was out, and although Hutton's plan of 1822 and the first Ordnance Survey map, dating to 1895, both indicate a dry passage at high tide, the earliest photos show that it consisted of little more than a stretch of beach; no doubt the tide and the movements of the sand have reshaped this isthmus, possibly sweeping away an early retaining wall on this side of the precinct, and the isthmus may not have become level ground until the early twentieth century - a pier was jettied out on its northern side which may have affected the currents and stabilised the sandbar, followed during WW I by a more permanent wharf and the construction of access routes across the isthmus, including a narrow-gauge railway. Even today, a low sea wall retains the ground to the south of the pathway.

To the west of the monastery there is a more complex precinct, the layout of which is documented in successive plans since 1822: another retaining wall runs along the southern flank of the isthmus, extending westward from the monastic latrine, behind which a complex group of walled areas extends across the entire eastern part of the isthmus; three of these immediately adjoin the monastic buildings, the southernmost of which is an irregularlyshaped area directly behind the wall, containing the well, and the modern custodian's cottage; in the nineteenth century a ruined building with "a stone trough", which would identify it as a stable or byre, stood at the south-west angle of the enclosure. The middle area is rectangular, and incorporates the "hermit's cell" (discussed separately below) within its northern wall; it was originally subdivided by a north-south wall screening off the area immediately adjacent to the cloister. The northernmost area is rather anonymous, and continues to the northern bulwark; the 1822 map reports ruins here, but no indications now remain. Further west beyond these enclosures, are three more areas: at the north-western area is a large guadrangular area, now marked by little more than low ridges around a lawn - identified since at least 1822 as a walled garden, with the site of a circular dovecot of late-sixteenthcentury type in one corner, it was perhaps originally a post-Reformation addition; the central area due east is unenclosed, but leads up to the hogback stone and is identified by Hutton as a "Burial Ground", while on the south, the end of the bulwark encloses a small area of level ground beneath a steep slope.

It is likely that a considerable part of this layout of enclosures originated in the monastic precinct of the pre-Reformation period, but it may also embody aristocratic landscaping during the post-reformation phase, and remnants of early fortifications. A description 1530s indicates that the hog-back stone then stood in a "green", while references from 1547 record two or three trees within the precinct, perhaps a small orchard (which the English governor was compelled to cut down for firewood) and an abundance of rabbits on the western part of the island. Details of the documented flora and fauna beginning c. 1700 are recorded in **Section 2.6**.

Hermit's cell

To the NW of the abbey stands a building known as 'the Hermit's Cell', traditionally said to be the place where Alexander I sheltered in 1123. It is a simple structure oriented east-west, with a pointed tunnel vault, an entrance at the east end of the south wall, and a single-splayed rectangular window in the east gable, approached from the south by a sunken and revetted pathway. Since the nineteenth century, it has been recognised that it bears broad comparison to surviving buildings on early monastic sites in Ireland such as Gallarus and Skellig Michael, and to Eileach an Naoimh in the Hebrides, probably the only undisputed site of this type in Scotland; it has also been recognised that it resembles a small chapel rather than a cell, corresponding with medieval accounts describing the building in which Alexander I sheltered as a "little chapel". The opinion that it was a monastic structure is not new: Sir Robert Slbbald, who visited the island c. 1700, wrote that "some cells of the monks" remained intact in the area of the garden and the well, a reference which suggests that at that date, others similar buildings may have still been recognisable nearby (although this may simply be a misinterpretation of the recessed entrance passage as a roofless range at right angles, an interpretation followed by General Hutton in 1822).

Scholars have generally conceded that the walls could be 10th/11th century, but buildings of this period are practically unknown in Scotland, and to find one with an intact roof would be unprecedented; at the very least, the ashlar facing on the pointed tunnel vault is more likely to be 15th century or later, and the overall resemblance of its form to a Gothic arch makes it hard to assert a definitive date. The building has been heavily restored at least once. in the mid-nineteenth century (quite apart from any basic repointing work, an improvised entrance towards the east end of the north wall was filled in, and the top of the east gable was built back up). More recent photographs indicate a substantial repair in the centre of the roof. A more cautious analysis is provided by the RCAHMS report on Fife, which insists that the building is "apparently not earlier in date than the 16th century", and that the resemblance of its pointed vault to the roof design of early Irish chapels is "superficial" (RCAMS 1933, p. 7) The structure is said to have been used as a family mausoleum in the 17th century, though primary sources for this assertion are hard to trace; the RCAHMS report asserts that it is referred to as the "Deid House" in "the 17th century" (RCAHMS 1933, p. 7), but no primary source supporting this assertion has been discovered, and the date seems rather early for this term, which in any case denotes a public mortuary rather than a "mortuary chapel" or mausoleum. The 1822 map states that it was "called The Dead House", indicating that it was then regarded as a mortuary, and there is no guarantee that this is any more reliable than the same map's identification of the chapter house as a chapel and the apartment next to the latrine as the confessional.

Appendix 2.4 Hogback stone and other early sculptural fragments The hog-back tombstone is believed to date from the mid-10th century. It is a type of monument strongly associated with the Viking period (there is another in state care at St Blane's, Bute, plus others at Meigle and Glamis), although this association is principally chronological rather than any clear guide to identity - while their shape is inspired by Viking-style buildings with their distinctive curved or "hog-backed" roof-ridges, these monuments are typically found in Christian contexts throughout the British Isles, and do not necessarily have any specifically "Viking" connotations - the Inchcolm hog-back is no exception. Although severely weathered, most of its details can still be identified; it has carved beasts at either end of the roof ridge, and an extremely weathered representation of a human figure in the middle of one of its vertical faces, and a representation of a "Celtic" cross in the other. The stone formerly lay on a hillock to the SW of the abbey, but was moved to the visitor centre in 1993 to prevent further weathering. It has attracted the attention of visitors since the sixteenth century, and a body of documentary and sculptural evidence shows that it was originally part of a larger group of early monuments on Inchcolm.

In the early sixteenth century, the historian Hector Boece claimed that there were a number of early medieval sculptural monuments on Inchcolm. These he regarded as "very notable monuments of the Danes, sculpted upon the stones with their insignia" (nostissima Danorum monumenta, lapidibus insculpta eorum insignia), and associated them with a story of Viking leaders defeated by Macbeth and buried on the island around 1040. This may be an attempt to equate the iconography of the monument with the lions and hearts of Danish national heraldry.

William Stewart, who translated Boece's work into vernacular verse in the 1530s, added additional details based on his own knowledge:

With Makcobey than trewis haif tha thane, Quhill all thair men suld erdit be ilkane Into an vle callit Emonia. Sanct Colmis hecht now callit is this da. Quhair that thair banis restis git to se In sindrie partis in so greit quantite, Our all the yle quhlik makis giy sic cummer, Weill ma the wit ge men were out of number Tha banis aucht, ha that can weill considder, Into ane place war tha put all togidder; As I myself quhilk hes bene thair and sene. Ane corce of stone thair standis on ane grene Middis the feild guhair that tha la ilkone, Besyde the croce thair lyis ane greit stone; Wnder the stone, in middis of the plane. Thair chiftane lyis quhilk in the feild wes slane.

("Then, they made a truce with Macbeth / Until all their men should be buried, every one, / In an island called Emonia, / Which today is now called Inchcolm. / There their bones rest still to be seen / In various places, in such great quantities / Over all the island, which make it so encumbered / That you might well believe that they were men beyond number / who owned the bones, as you would be able to see, / If they were all put together in one place; / As I myself have sometime been there and seen. / A cross of stone stands there on a green / In the middle of the field where everyone is laid; / Beside the cross there lies a great stone; / Under the stone, in the middle of the plain, / Their chieftain lies, who was slain in the battle")

It is clear from this description that in the early sixteenth century, the hogback stood alongside a stone cross, surrounded by other, less monumentally prominent burials. What is not so clear is whether this area, "the field where everyone is laid", was simply the wide area of scattered burials which Stewart believed to be Viking, or a more defined monastic graveyard in use at that time.

By c. 1700, however, it appears that only the hog-back stone remained visible, although at first sight, it is not clear that all the early antiquarian narratives place it in the same location. Sibbald, who visited around 1700, places it "to the west" of the monastery and precinct, on the east side of "a fine level walk" running about 100 yards from north to south. Pennant, who visited the island in 1769, places the monument to "the south-east side of the building, on a rising ground" - if this was accurate, it would mean that the monument had been relocated to the eastern headland and was then moved back again when the battery was set up here, but it is more likely an error for "south-west". Hutton's map of 1822 places it due west of the cloister, oriented east-west, although his geography of this part of the island is relatively inexact, and it is possible that its location should be towards the south-west, where it is indicated that it stood by the 1860s. It is clear that the various writers' sense of "north" or "west" was inexact, and likely - though not totally certain - that all the references indicate the monument in the same place, exactly where it had stood in the sixteenth century.

Two more sculptured stones are also known from Inchcolm, both now displayed alongside the hog-back. The first of these is the fragmentary shaft of a cross-slab, which was discovered in the mid-nineteenth-century "about the garden wall" (i.e. on the east side of the rise where the hog-back stone stood); as depicted in early illustrations, this took the form of a shaft standing about two feet high, but now only three relatively small fragments remain; this damage appears to have been inflicted when the island was garrisoned during WW 1 (RCAHMS 1933, p. 22) although when the fragments were belatedly surveyed in the 1950s, the varying levels of weathering led to speculation that this was all that had actually remained when the slab was originally discovered. These fragments were originally presented in reconstructed form with the gaps between them filled in, though they have more recently been reset into a plain support block. It is possible that these are remains of the cross-slab documented alongside the hog-back stone in the 1530s.

In addition, the shaft of another early Christian stone cross was recently found built into the ceiling of the refectory stair, and is now housed along with the hogback and the fragments of the first cross-slab. This may be the stone referred to in the footnote in the 1856 volume of PSAS, which is there described as being built into the ceiling of the spiral staircase in the tower. It thus seems likely that the two sculptural monuments documented on the island in the 1530s were originally part of a larger assemblage of sculptures, of which other elements may survive undetected. The hog-back stone was simply the last to remain intact in its original position.

2.5 Military Structures

15th and 16th centuries

The earliest reference to fortifications on the island dates from the first half of the fifteenth century, when the abbey was "fortified" to allow the canons to sit out English raids. This was designed to make the cloister impregnable to raids by English naval forces and pirates, and allow the community to stay in the abbey through the summer months. The reference may simply be to the selfcontained strength of the rebuilt cloister and the tall outer walls of the surrounding precinct, which would be sufficient to shut out attackers who did not have artillery, but is possible that these structures were actively fortified with features such as arrowslits, gunloops, iron yetts, and battlements.

The next documented phase of military work occurred in 1547-1548, when the English occupied the island. A garrison of 150 men is deployed, one-third of them being pioneers whose role was to construct fortifications on the island. Lord Somerset, who ruled England in the name of the young King Edward VI, visited the island in person when the garrison first landed, and desired to build a fort on the west of the island, probably in the expectation that its guns could control the deep-water channel leading to Leith, but the garrison's commander, Sir John Luttrell, focused his attention on the eastern headland, where he built a fortification with "platforms and traverses", i.e. gun positions protected by flanking ramparts. References to the need to supply lime for mortar and masons and guarriers for the stonework show that the fort was designed to incorporate masonry ramparts, although it is unclear how complete these were when the garrison was abandoned at the end of February 1547. It is possible that this Tudor redoubt was refurbished when the island was refortified in the late eighteenth century: a plan of 1822 shows the island's main strongpoint as a semi-runious fort on the summit of the headland, approximately semi-circular at either end, with straight ramparts along the sides.

Inventories of the fort's armament in 1547 record that the largest two guns were a "culverin" and a "demi-culverin", constructed using the new cast-iron techniques being pioneered by the Tudor government (approximately equivalent to later 18-pounder and 9-pounder cannons), but neither was useable; the culverin was broken at the muzzle, while the demi-culverin was so badly made that it was not thought safe to use. The effective armament thus consisted of eight or nine smaller cannons of the types known as "sakers" and "falcons" (approximate precursors of the 6-pounder and 4-pounder; two or three of these were of the more reliable bronze construction, but a discrepancy between different versions of the garrison inventory makes is possible that one of the cast-iron falcons had already failed catastrophically

in the first weeks of the occupation). Cast-iron cannons were primarily intended for fortresses artillery, while bronze guns were favoured for army and shipboard use. There were also guns of several unconventional and distinctively naval types, examples of which are known from the Mary Rose: two "port pieces" and four "fowlers", old-fashioned wrought-iron bombards firing stone cannon-balls, and designed to smash the bulwarks of opposing ships at short-range. Fourteen "bases" (small wrought-iron swivel-guns firing lead shots wrapped round cast-iron cores) were also supplied, but these were taken from a stock of broken weapons and had never been serviceable. Hand weapons included arquebuses, bows and arrows, pikes and halberds. In November 1547, the depot at Newcastle was therefore asked to send a serviceable culverin, six stone-guns, six bases, and a substantial supply of ammunition, hand weapons, and carpenter's tools.

Inchcolm was also used as the base for two small English warships, the Saker and Double Rose, and we have similarly detailed inventories for these two ships. The Anthony Roll of 1546 slightly predates the expedition and probably enumerates an idealised armament for each ship, but is illustrated with a sketch of each vessel, while the Inventory of King Henry VIII records them as they were late in 1547 when they were actually deployed at Inchcolm.

The Saker was named after a type of hawk, or rather, after the type of gun named after one; she had two of these weapons, little bronze cannons mounted on classic naval gun-carriages, firing cannonballs of about 6lbs weight - a well-preserved example of this type of gun is in the Royal Armouries collection at Fort Nelson; there were also two wrought-iron "fowlers" firing stone shot, and a dozen swivel-mounted "bases", all but two of which were "double", meaning that they were larger in some way. The Saker's crew was officially established at 60 men of whom six were gunners, but actually numbered 50 including four gunners; they were well-armed, with 20 bows, 30 quivers of arrows, twenty-five bills, halberd-like weapons with chopping blades and hooked ends, and 30 long "moorish" pikes, plus two dozen "top darts" to throw down from her crow's nest. It is hard to evaluate the precise layout of the Saker's armament and accommodation based on the somewhat stylised illustration of her in the Anthony Roll, but she was evidently the bulkier of the two ships, probably due to a roomier and more seaworthy hull with a full deck and a hold, designed primarily to be sailed rather than rowed; but this meant she was often absent from the garrison for extended periods, carrying messages and bringing supplies.

The Double Rose, named for the red-and-white rose which was the heraldic badge of the Tudor dynasty, was optimised for rowing, with a slender, shallow hull and a team of oarsmen, about fifteen per side, sitting in an undecked area amidships; but she was a ship-shape vessel nonetheless, with a quarterdeck, forecastle, and three masts, and she carried a more powerful armament than the Saker, centred on a "bastard culverin", a brass cannon firing a shot of around 12lbs weight - the guns of this type from the Mary Rose are among the best-designed examples of Tudor artillery, long and heavy so that a strengthened powder charge could add to the force of their shots; this was supported by a 6-pounder saker and a "falcon" firing shot of around 4lb weight, and in the manner of a Mediterranean galley these three guns were probably all placed in the bows firing forward, with the bastard culverin in the centre and the smaller cannons on either side. Beyond this, the ship had just six "bases", of which only two were "double" - probably two on either side of the quarterdeck, and perhaps two more in the "fighting top" or crow's nest at the mainmast, or else a pair flanking the three bronze cannons in the bows. The crew consisted of thirty-nine men and four gunners, and in combat, around thirty men would usually be rowing, but they nonetheless had twenty bows, thirty quivers, fifteen bills and fifteen pikes between them. The Double Rose was permanently based at Inchcolm, to support the garrison.

The intention was evidently that the fort and the warships would disrupt Scottish shipping in the Firth, but in spite of its extensive resources, the garrison found itself effectively besieged by a flotilla of Scottish privateers. In the event, once the Saker left to collect supplies, she seems to have been unwilling to risk running the blockade to return, while the Double Rose is only known to have made one brief move out of the safety of her anchorage, an unsuccessful attempt to capture a richly-laden French merchant ship. When supply ships did get through, they were often unable to leave, and large warships needed to be used as couriers and escorts. The island was evacuated by the English at the start of March 1548, allowing the Scots and their French allies to reclaim control. Although a French contingent may have briefly reoccupied the fort in August 1548, there is little evidence that they properly garrisoned the island, turning instead to Inchkeith, and the peace treaty of 1550 agreed that it was to be demilitarised.

17th and 18th centuries

Another brief English occupation in 1639 may have resulted in a refurbishment of the Tudor fort or the addition of new fortifications, but no explicit evidence has been located. The island was certainly refortified in the late eighteenth century, although the exact date is unclear - some sources state that this took place in the American War of Independence, while other sources indicate that it was not fortified until after the French Revolution (see under 1794 in Appendix 1 for details).

19th century

The south range of the abbey cloister was fitted up as quarters for the garrison, a small detail of Royal Artillery gunners commanded by a sergeant, and written sources of the early nineteenth century state that the island was armed with ten guns. A plan of 1822 shows positions for only seven guns, however, divided between two fortifications on the south-eastern headland: low down at the extreme end of the island was a straight rampart pierced by positions for three guns, while the summit above it was surmounted by a rampart with rounded ends and straight flanks. Only the southern half of this upper fort is shown in good repair, consisting of a masonry rampart with four positions for 24-pounder cannons on "traversing carriages", a modern style of gun-carriage with its front end fixed against the rampart by a pivot, wheels at

the rear allowing it to be swung from side to side, and the gun mounted on a sliding upper section which absorbed the recoil; the design prevented the gun from randomly shifting position every time it recoiled and was run out again, and thus enabled more accurate gunnery, by allowing it to be moved back to exactly the same position where it had been during the previous shot, and then adjusting the aim if required. Inside the fort behind the guns were a guard house, store shed and an ammunition magazine set within an embankment to prevent gunpowder explosions doing too much damage. The western and northern sides of the fort seem to consist of little more than an overgrown bank, which may indicate that the fortification was of earlier origin, and that only part of it had been fully refurbished: the rationale for this is not hard to see, however, as this was the position from where heavy guns could control the main sea-lane in the Firth of Forth..

By the 1850s, the garrison had been withdrawn, and the south range of the cloister had been given over to a herdsman and his family; but although the guns were removed, the fortifications on the headland remained relatively intact, and would be reused in 1914.

Appendix 3

20th century military heritage

Inchcolm was heavily fortified in World War I and World War II, to defend against the threat of a German naval raid on the anchorage at Rosyth and Port Edgar, and later to guard against Luftwaffe raids. These activities changed the appearance of the island, and have also left significant structural remains.

A full report by Dr Gordon J Barclay on the role of Inchcolm during both world wars is available on request. The following paragraphs, extracted from the report, provide a summary.

Introduction – pre First World War

Inchcolm operated as one of a group of fixed defences within and around the Forth and which were viewed as a single fortress unit rather than operating independently. The need for defences was recognised in the 19th century (as of course it had been throughout history) and as the strategic value of the naval anchorage west of the Bridge grew, provision was made in the 1880s for a controlled minefield in the river, just below the Rail Bridge, as a form of harbour defence. Lines of mines were tethered to the sea-bottom in lines. Each line or group was connected to a shore control station that overlooked the minefield, from which they could be detonated on the basis of observations from shore. To protect them, guns were mounted on the north and south shores of the river. By the turn of the century, in the face of the growing naval strength of potential enemy states, the need to improve Britain's naval and coastal defences became apparent. This became critical at the Forth with the establishment of the naval dockyard at Rosyth.

First World War

The Forth defences during the WW1 included systems of obstacles – booms, nets and mines, guarded by guns used in conjunction with powerful Defence Electric Lights – searchlights. These were to counter threats from ships, submarines and torpedos. Around the Abbey (part of which was used for accommodation/storage) a temporary encampment was set up housing several hundred men as the war progressed.

Second World War

While some of the WW1 buildings were demolished or removed after the conflict was over, a fair bit of infrastructure remained and was brought into use or adapted during WW2. Again, defensive systems were installed, DELs and gun emplacements. Again, large hutted encampments were constructed.

The key surviving structures visible on the island are listed below: Western Lobe

- the post-1916 4.7-inch gun emplacements (some minor clearance needed);
- the WW1 Battery Control Post (?WW2 Fire Command Post); concrete cracking, steel corroding; partly overgrown;
- the 4.7-inch magazines and buildings; probably under the debris of their upper parts;
- the post-1916 anti-aircraft site (some minor clearance needed);
- two WW1-period buildings in the camp;
- o the abbey, used for officers' accommodation;
- the custodian's house (officers' quarters from 1914-15);
- the pier at the western end of the island;
- the northern WW2 boom anchor;
- traces of other camp structures and might be found by survey and fieldwork;

Eastern Lobe

- WW2 buildings on the crest of the hill;
- WW2 12-pdr gun emplacements on the remains of WW1 6-inch gun emplacements;
- 2 x WW2 6-pdr emplacements, with elements of layout still; clear, but partly overgrown;
- o tunnel through hill;
- WW1 4-inch magazines to either side of tunnel (partly collapsed and sealed up);
- o hatch and hoist from tunnel to hilltop;
- WW2 tramway (vegetation clearing needed to establish whether this went to the two WW2 6-pdr emplacements);
- WW1 4-inch emplacements (now very heavily overgrown);
- 2 x WW1 12-pdr emplacements probably survive under heavy undergrowth;
- $\circ~$ WW1 or WW2 timber building now used to store lawnmower, near pier.
- 6 x WW2 Defence Electric Light emplacements with uniquely surviving glasswork and timber interiors; largely inaccessible to visitors, used for storage, metalwork, glass and timber;

- WW2 engine houses, one of which used as scaffolding store;
- WW2 southern boom anchor;
- WW1 and WW2 piers;
- the remains of other structures, such as the foundations of the Hydrophone Hut and WW1 and WW2 tramway systems, might be found by vegetation clearance or limited excavation.

Summary Statement of Significance of the 20th century military remains

The significance of the 20th-century remains is addressed under the following headings: Evidential; Historical; Architectural/Design; Social, which are considered together below. The nature of these well-documented structures means that the four categories are inextricably linked.

The <u>evidential</u> significance can be assessed in three ways: visible, potential and documentary.

The remains on Inchcolm are the least well-preserved of all the defended islands of the Forth (Inchgarvie, Inchkeith Inchmickery), apart from Cramond Island. The remains of the mainland batteries at Hound Point, Charles Hill, Braefoot and Kincraig are also better-preserved. The development, nature, and purpose of all these batteries was, however, different from Inchcolm, with the exception of Inchmickery. The small size of Inchmickery has meant that later work inevitably demolished, disrupted or buried what went before, whereas on Inchcolm, older work has survived.

The <u>rare or unique elements</u> of the surviving remains at Inchcolm are as follows:

- glass survives in the DEL housings, including one opening with glass prisms;
- the DEL housings retain their doors (albeit much corroded) and their internal steel shutters;
- the DEL housings retain their internal wooden partitions, and some flooring;
- o the engine rooms retain their steel doors and shutters;
- the now metal-clad wooden building used for storage near the ticket office is a unique survival in the Forth, and rare anywhere.

The <u>potential</u> of the island lies in its status as the only purpose-built 20th century defence complex in state care, and one of only two open to the public in Scotland (the other being Ness Battery in Orkney). The history of coast defence, of the great naval base in the Forth and its defence, and even of the home front in war, can be told using the surviving and potentially displayable remains, and the supporting archival material.

<u>Historically</u>, whereas Scapa Flow has been the centre of the story of naval warfare in Scotland in the 20th-century, it was used as an anchorage only for a handful of years. The Forth, in contrast, was one of only four modern Royal Naval Dockyards, operated for over 60 years, and, in both wars, was a key

base for operations, convoys and crucially for the repair of the largest warships.

The history of the island as a defence installation from 1908 to 1977 is well documented on files held at the National Archives at Kew, Scotland's National Records, the Imperial War Museum, and the Map Libraries of the National Library of Scotland and the British Library. The wider tactical, strategic and historical context for the defences of the Forth and of Inchcolm are also welldocumented in the archives. In particular, the plans in National Archives series WO 78 give very detailed information about the location and function of structures.

In terms of <u>design</u> the remains on the island offer a rare and important opportunity for the public to explore and understand the complex nature of a coast defence site, in relative safety. While the quality of the plans, elevations and cross-sections for the defences is very high, one needs to experience these sites in three dimensions. The better-preserved remains on Inchmickery and Inchkeith are very unsafe; the remains at Braefoot, on the Fife coast just NW of Inchcolm, have been made safe in such a way that the visitor cannot enter any structure.

Unlike the hastily-constructed defences of Scapa Flow in both wars, the defences of the Forth and in microcosm those of Inchcolm, reflect the changing designs and purposes of coast defence installations for a century. In <u>social</u> terms, the remains on Inchcolm offer an opportunity to an audience in southern Scotland to comprehend the important role played in Scotland's naval wars close to the main centres of population.