



ARCHAEOLOGICAL WATCHING BRIEF

HIGHFIELD PORTMAHOMACK ROSS-SHIRE

SITE CODE: TR06 NGR: NH 915 840

REPORT

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Summary

An archaeological watching brief was undertaken during the construction of two new houses at Highfield, Portmahomack, Ross-shire (NGR NH 915 840). The work was undertaken by Field Archaeology Specialists (FAS) Ltd on behalf of Richard M MacKenzie Ltd. The watching brief was undertaken between the 31st May and 15th June 2006.

An ongoing programme of archaeological research, The Tarbat Discovery Programme, focussed on St Colman's Church and the 6th to 10th century monastic settlement and enclosure, encompasses the area of development and has included geophysical survey and open area excavation to the immediate north, east and southeast. Following consultation with the Highland Council Archaeology Unit, a scheme of mitigation was agreed, based on a sympathetic foundation design, raising the ground level prior to construction and archaeological monitoring. The scheme was designed to minimise intrusion into below-ground deposits by positioning new build in areas already subject to disturbance by the recently demolished agricultural buildings. As a result only a series of stone-lined post-medieval stream feeders and modern foundations associated with the agricultural buildings were encountered during the watching brief.

Acknowledgements

Field Archaeology Specialists Ltd would like to thank Dave Hodgson of the Highland Council Archaeology Unit for his advice and guidance. Thanks also go to Richard M Mackenzie Ltd for its co-operation during fieldwork.

1.0 INTRODUCTION

This document reports on an archaeological watching brief at Plots 1 and 2 Highfield, Portmahomack, Ross-shire undertaken by Field Archaeology Specialists (FAS) Ltd on behalf of Richard M Mackenzie Ltd. Fieldwork was undertaken between the 31st of May and 15th of June 2006. Groundworks consisted of a single service trench and shallow excavation of the raft positions for two houses.

1.1 LOCATION AND LAND USE

The site is located on the southwestern limit of the village of Portmahomack, Ross-shire, approximately 40.0m southeast of the junction with Tarbatness Road and the road to Rockfield village (Figure 1; NGR NH 915 840). The area is bound to the northwest by Highfield house, to the northeast by the glebe field, to the southwest by the road to Rockfield village and to the southeast by set aside pasture.

The area subject to groundworks consisted of scrubland with intermittent grass cover, rubble and concrete footings and occasional wall foundations belonging to the recently demolished agricultural buildings (Plate 1). The route of a foul pipe link to an existing manhole was positioned at the southwestern limit of the glebe field, which was under crop at the time of fieldwork, and flanked the adjacent footpath which is bound by a wire fence with wooden posts. The service trench crossed the footpath and traversed a line of mature trees into the main development area.



Plate 1 Plot 2 prior to excavation

1.2 AIMS AND OBJECTIVES

Since the area of development lay within the 6th to 10th century enclosed monastic site and later medieval settlement surrounding St Colman's Church, the potential for archaeological deposits was high. The nature of archaeological deposits was known, following evaluation and extensive open area excavation as part of the Tarbat Discovery Programme, to vary across the site. The zone closest to St Colman's Church is deeply stratified and complex; areas closer to the monastic enclosure ditch, including the area of the Highfield development, are characterised by features cut into subsoil, more typical of rural archaeological sites. As a result of this deposit model, and following consultation with the Highland Council Archaeology Unit, a scheme of mitigation was agreed, based on a sympathetic foundation design and raising the ground level prior to construction. The scheme was designed to minimise intrusion into below-ground deposits by positioning the new buildings in areas already subject to disturbance by the recently demolished agricultural buildings and where concrete bases were to be left *in situ*. Excavation to the immediate south of the area of development encountered a deep cover of accumulated ploughsoil over the archaeological horizon. In addition to this protective overburden, a layer of hardcore was imported into the site to raise ground level prior to construction.

Following the controlled design of the new development, a watching brief condition (Planning App 05/00221

FAS_phf01_fig1.dwg 250 METRES NORTH SEA TARBAT NESS Dornoch Firth Portmahomack TARBAT PENINSULA Hilton of Cadboll Shandwick Cromarty Firth Moray Firth PORTMAHOMACK NH 291/884

Location of site and area of investigation

&223 (FULRC)) was placed on all ground penetrating work necessary for the construction of the two new buildings and associated service trench. All excavation was subject to strict archaeological supervision and involved the controlled removal of topsoil and overburden. The watching brief was undertaken in accordance with a specification prepared by the Highland Council Archaeology Unit (Appendix A).

1.3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

1.3.1 Discovery of the site

The early medieval site surrounding St Colman's Church was first highlighted by antiquaries in the 19th century as a result of discoveries during grave digging in the churchyard. Fragments of elaborate Pictish cross slabs (Class II and III) and a silver hoard of the late 10th century were published by scholars (Cordiner 1780, Stuart 1856, Allan and Anderson 1903). The most significant sculptural fragment included a unique Latin inscription in insular majuscules, which prompted later scholars to speculate on the presence of an ecclesiastical settlement at the site (Brown 1972, Henderson 1975, Higgit 1982). In 1984, while undertaking aerial reconnaissance, Barri Jones and Ian Keillar identified a large C-shaped ditched enclosure surrounding the church, overlooking the shelving sand beach with the Dornoch Firth beyond. This prompted a small sortic evaluation of the buried feature and further anticipation of an ecclesiastical site (Harden 1995).

In 1993, Professor Martin Carver initiated the Tarbat Discovery Programme as a research project of the University of York at the invitation of the tarbat Historic Trust. Evaluation of the site was undertaken during 1993 to 1995 using geophysical and topographic survey, and test trenches. A Project Design (*PD*) was issued in 1995 (Carver 1995) which detailed excavation and survey comprising a T-shaped sample of 6515m² (0.65ha) within the enclosure (Sector 1 and 2), an area to the north (Sector 3) and the interior of the church (Sector 4). In addition to the nave, the crypt and north aisle of Tarbat Old Church were excavated in advance of its refurbishment as the Tarbat Discovery Centre. Small-scale excavation has also taken place, in response to development associated with the Discovery Centre (Intervention 16 and Intervention 22 service trench excavation, Intervention 26 oil-tank excavation and Intervention 27 statue base excavation).

Excavation has revealed evidence for a 6th to 10th century Pictish monastic settlement enclosed by the large ditch (Carver 2004). Within Sector 4, the monastic church and cemeteries have been identified and sampled; within Sector 1 and 2, areas of industrial craft-working activity, areas for agricultural processing and large features thought to belong to a water-powered mill, have been identified and sampled. Subsequent to monastic occupation, a 12th century parish church was founded and was accompanied by a medieval settlement, dated by East Coast Redware of the 13th to 15th century.

The depth and complexity of the strata encountered in Sector 2 between 1996 and 2001 was unexpected and has been rarely found in rural Scottish archaeology. It provoked the preparation of an Updated Project Design (*UPD*) in 2001 to guide a second campaign (2003 to 2008). It was felt that, to fully understand the sequence of monastic structures and activities in the most deeply stratified area of the site (Sector 2, north), an excavation of unusual precision, carried out by a small professional team over five years, would be required.

1.3.2 The peninsula surveys

In addition to the focussed exploration of the site at Portmahomack, the 1995 Project Design also set out an agenda for peninsula survey to better understand, map and characterise the Tarbat peninsula, particularly the context of the cross slabs at Hilton of Cadboll, Shandwick and Nigg. An evaluation of Hilton was undertaken in 1997 (Carver 1998), a geophysical survey of the area surrounding Shandwick was undertaken in 2004 and a topographic survey of the Nigg promontory area is ongoing. Preliminary results of desk-based appraisal for the immediate environs of Portmahomack has also been undertaken.

Prehistoric activity

Prehistory on the peninsula is represented primarily by funerary evidence; frequently, however, this consists of antiquarian accounts and chance finds, and few remains have been excavated using modern techniques, or securely dated. The best evidence to suggest a prehistoric date occurs in accounts which describe short cists or crouched burials, or those burials which are recorded to have been found in urns, or, on occasion in 'clay vases' which would seem to allude to prehistoric funerary vessels.

In the environs of Portmahomack, possible prehistoric burials occur primarily in the western, coastal part of the village. To the southwest, at Cnoc Tigh, a single short cist was encountered in 1865, and reported to contain calcined bones and an urn (NMR NH98SW13). At Balnabruach, a watching brief encountered human remains in both long and short cists, while to the north of the village, at Chapel Hill, urns, calcined bone and short cists were encountered during levelling works prior to construction in 1840 (NMR NH98SW 3). On the east side of the peninsula, cist burials were noted in 1904 at Ballone castle; a notable concentration of cists occurs on the eastern seaboard of the peninsula, where at least six separate accounts report finds of stone cists and human remains.

Further possible evidence for prehistoric activity occurs in the form of tentatively identified fortifications, generally described as duns or promontory forts, and known in the vicinity of Portmahomack at Castlehaven (NMR NG98NW 5), and at Cnoc Tigh (NMR NH98SW 12), close to the reported cist burial. Such identifications, however, remain uncertain, represented generally by earthworks and dry stone construction, and little evidence for date has been recovered.

Roman activity

Evidence for Roman activity on the peninsula is scarce, as might be expected for such a northern Scottish site. However, chance coin finds of Roman date, and an historical reference to a Roman camp have been identified.

A Roman coin was dug up from the gates of Tarbat Old Church in 1972, and has been identified as an antoninianus of Tetricus II, which was minted in Trier in AD 270-273/4. A second coin from the peninsula was found during trench-digging at Nigg in 1914-18, represented by a coin of Constantius II (NMR: NH87SW 2). Given the evidence from the excavations at Portmahomack, however, it appears that Roman coinage may have been imported to Scotland as scrap metal during the early medieval period, and as such cannot be considered evidence for contemporary activity.

Also of an uncertain nature are references to a 'Roman camp' identified to c.3km north of Portmahomack. The

site, known as *Port a'Chaistell* was described by Reverence Grant in 1822 as 'a beautiful square fortification of about 100 paces a side', and was identified by Crawford as a possible Roman camp. By 1872, however, the site had been largely destroyed during land reclamation, although its site was noted on the 1907 Ordnance Survey map. No trace survived of the site in 1972, and no further work has been undertaken to confirm this identification.

Early Historic activity

The most significant evidence for early medieval activity in the area of Portmahomack is clearly represented by the archaeological discoveries in the Pictish monastic site which, with the Pictish sculpture at Nigg, Hilton and Shandwick, points to high status investment of this period on the peninsula as a whole. The place-name itself is of possible early historic origin, deriving from Port of Colman or Columba, attesting to the importance of the religious establishment from this period onwards.

Medieval activity

Evidence for medieval activity at Portmahomack is primarily of a religious nature. The church of St Colman has long been recognised as a medieval parish church, and a number of possible chapel sites are recorded in the National Monuments Record, although few have been substantiated.

To the north of the village, a discovery was made before 1845 of 'human bones, deposited within rough flags of freestone', which may refer to cist graves, but these finds were believed to be associated with a chapel site, evidenced in the early 20th century by a roughly rectangular area of flagstone flooring, orientated west-east. This is likely to have been removed with the onset of construction in the northern part of the village. Another chapel is reputed to have been located at Balnabruach, although no further evidence is known for this site, while at Bindal, further to the northeast, the traditional site of a hermitage is recorded in the NMR.

Post-medieval activity

The post-medieval period is represented only by numerous rural farmsteads in the area, but also by castle sites and extant buildings within the village itself. Evidence for castles of 16th and 17th century date, both surviving and demolished, occur at at the sites of Little Tarrel (NH98SW 11), Ballone (NH98SW 1) and at Red Castle (NH88SE 1).

Within the village itself, remains of the first pier constructed in the 17th century by Sir George Mackenzie, 1st Earl of Cromarty are retained within the early 19th century Telford harbour (Beaton 1992, 73). Mackenzie's pier was accompanied by a large warehouse, which was later joined in the late 18th century by a southern warehouse, both now Grade A and B listed respectively. St Colman's Church was rebuilt in 1756 to its current form, and the gothic Free Church and school in 1892. These just a few of many developments reflecting the burgeoning fortunes of the village brought by the herring industry.

Modern activity

The 1st edition 1880 Ordnance Survey shows the area of the Highfield steading as unenclosed (Plate 2) and an aerial photograph of 1945 shows the site still to be undeveloped, but recently harvested of its cereal crop and with a small enclosure to the immediate south (Plate 3). The aerial photograph of the enclosure ditch taken in 1984 shows incidentally Highfield house and the extensive dairy and barn complex (Plate 4). The barns were

demolished piecemeal between 2004 and 2005, and were still standing during much of the excavation nearby.

2.0 FIELDWORK PROCEDURE

The watching brief was undertaken as part of the Tarbat Discovery Programme and as such was allocated Intervention 30 from the index of interventions. The recording system, site grid and archive treatment employed during the watching brief are consequently those employed by the research excavation and are summarised below.

2.1 EXCAVATION PROCEDURE

Topsoil and overburden was excavated in spits using a wheeled mechanical excavator fitted with a 0.60m narrow ditching bucket, under strict archaeological supervision to the required depth or the first archaeological horizon. Excavation areas and individual features were located using a Total Station Theodolite using the permanent Tarbat Discovery Programme site grid which was rectified to the Ordnance Survey grid during post-excavation. Alignments refer to the Ordnance Survey grid; heights are expressed in metres above Ordnance Datum (AOD).

The excavation and recording system employed during fieldwork is based on a set of principles known as *Field Research Procedure* (Carver 1999), the standard operating system employed by FAS. The procedure structures excavation data in a hierarchical system. Each stratigraphic unit defined during excavation, which is considered to have been formed by a single deposition, is referred to as a 'context', and where appropriate, contexts are grouped during excavation as 'features'; a single index was created for contexts, starting at C1000, and for features, starting at F1. Each unit has a structured *pro forma* recording sheet to be completed

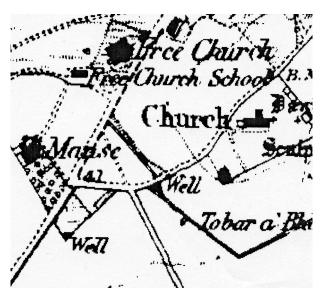


Plate 2 Excerpt from 1880 Ordnance Survey



Plate 3 Aerial view of Portmahomack 1945



Plate 4 Aerial view of Portmahomack 1984

using a series of keywords. Indices of photographic recording, samples and drawings are compiled and cross-referenced with the context and feature indices; a summary of contexts and features allocated is provided as Appendix B and C, and a checklist of the site archive as Appendix D. All plans were drawn to a scale of 1:20

and all sections to a scale of 1:10. A full photographic record was compiled, consisting of 35mm colour photography.

3.0 FIELDWORK RESULTS

The Highfield site was affected by three principal areas of ground penetrating work. The first area encompassed the entire length of a new service trench, running from the northwestern entrance to the glebe field to the northwestern corner of Plot 1, the second and third areas comprised the raft positions for Plots 1 and 2 respectively (Figure 2).

3.1 SERVICE TRENCH

A new service trench was required for the development, to house a foul drainage pipe, which spanned the area of investigation NE-SW, measuring $c.85 \text{m} \log x \, c.0.6 \text{m}$ wide. The trench extended for 30.0m through the glebe field along the western fence line, then turned 90 degrees traversing the footpath and continued west for a further 25.0m, before finally turning to the southwest and running for a further 30.0m to meet a new gully pot adjacent to the northwestern corner of Plot 1.

Deposits excavated within this trench appeared to represent two main phases of activity. Within the glebe field these comprised an early agricultural phase with evidence for a relict ploughsoil followed by modern ploughsoil build-up and a network of field-drains; within the area of development deposits relating to the construction and demolition of agricultural buildings and landscaping associated with the adjacent domestic property to the north were encountered.

The earliest deposits identified along the service trench within the glebe field were represented by rare glimpses of natural sand subsoil (C1006) consisting of a firm mixed orangish-yellow sterile sand overlying wet greenish-grey sand with cobbles and gravel, which showed signs of natural iron-staining noted at 11.80mAOD (Figure 3). This was overlain in places by C1009 a thin layer of sticky bluish-black sandy silt with rare charcoal flecks, which may represent a buried soil.

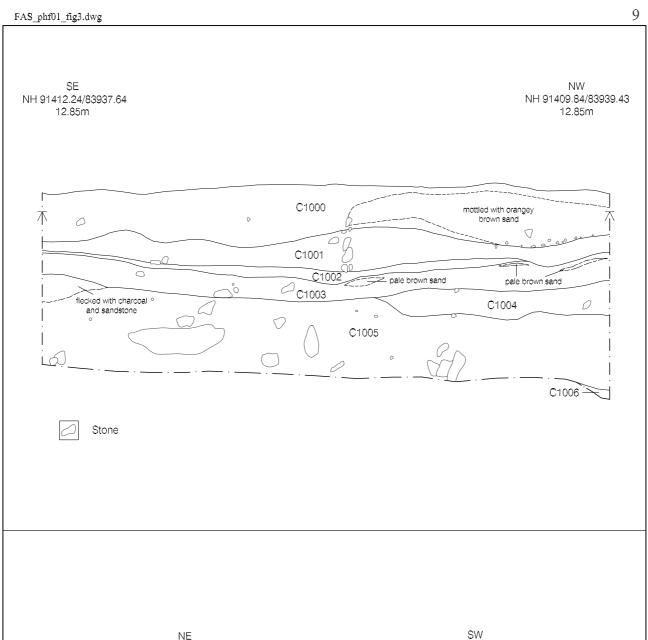
C1009 was sealed by a series of layers thought to relate to a build-up of ploughsoils. The earliest of these was

identified as a thick pack of dark grey sandy silt with gravel and pebble inclusions (C1005=C1013), and was almost indistinguishable from overlying C1003 (Plate 5). A boundary between C1005 and C1003 was identified only by the presence of thin lenses of dark grey silty sands along the interface (C1008, C1007 and C1004) suggesting periodic accumulation. C1003 was sealed by a thin layer of black sandy silt with rare charcoal flecks and small gravel inclusions, possibly representative of a period of consolidation and perhaps the development of turf. In turn, this was overlain by C1001, a fairly firm



Plate 5 Service trench northeast facing section

FAS_phf01_fig2.dwg ST COLMAN'S CHURCH C-SHAPED ENCLOSURE DITCH SECTOR 4 INTERVENTIONS 17, 18, 19, 20 SECTOR 3
INTERVENTION 15 SECTOR 2 INTERVENTION 14 GLEBE FIELD WORKSHOPS MILL POND ENTERVENTION 30 **INTERVENTION 24** PLOT 2 HIGHFIELD **INTERVENTION 25** ENCLOSURE DITCH SECTOR 1 INTERVENTION 11 Scale 1:1000 Figure 2 Location of Intervention 30



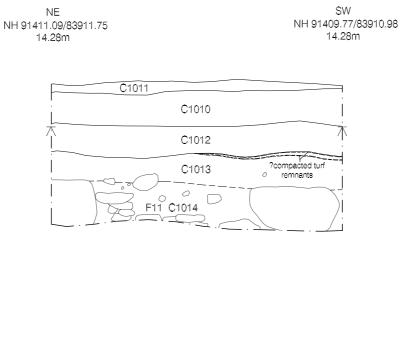


Figure 3

Scale 1:20

Stone

Service trench northeast facing section; F11 northwest facing section

layer of dark grey silty sand speckled with natural iron-staining and inclusions of pebbles and gravel, which appeared to represent a relict portion of the modern plough horizon.

The present agricultural horizon was identified as a rich very dark grey sandy silt ploughsoil C1000=C1012=C1017, mottled in places with redeposited orange sand, and containing animal bone fragments, three sherds of tin-glazed ware, a single residual fragment of East Coast Redware, a fragment of modern ceramic field drain and a 20th-century spoon.

This sequence persisted for the length of the service trench within the glebe field and was reflected, although to a shallower depth within the Highfield site itself. In addition a number of features were encountered (F11 and F1 to F4).

Midway across the Highfield site the course of the foul pipe took a dog-leg changing direction broadly from west to south, and at this point a spread of sandstone blocks c.4.5m across was identified in the base of the trench and were left *in situ* (Figure 4; see Figure 3). F11 consisted of rough sandstone blocks ranging in size from 0.05m to c.0.5m in diameter, within a matrix of very dark grey silty sand likely to equate to C1013. The larger blocks appeared to be lain horizontally, while the smaller sandstone pieces were located mainly in a space between the larger examples and the feature may represent a field drain.

In the length of service trench running north-south through the Highfield site, a series of three cobble-filled field drains were identified cutting the buried ploughsoil crossing the trench and running roughly parallel to one another (Figure 5; see Figure 4). F1, F2 and F3 were similar in make-up, each comprising a linear alignment of mixed small sandstone and quartz cobbles underneath a backfill of loose rounded gravel in a yellow coarse sand backfill. F1 appeared to represent a junction between two conjoining field drains (Plate 6).



Plate 6 F1 pre-excavation

A dump of sandstone cobbles and occasional bricks loosely backfilled into a U-shaped cut (F4) was identified in section as a possible pit or foundation trench located c.5m south of F3, and may be a robbed wall foundation associated with the recently demolished agricultural buildings.

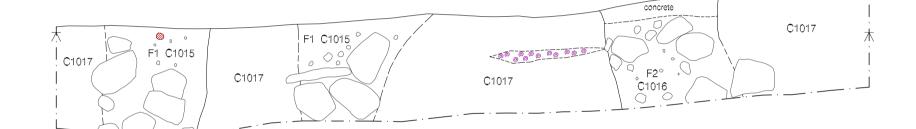
Where the service trench skirted the edge of the existing property to the northwest of Plots 1 and 2 the coarse make-up of a sand and gravel path, C1010, was noted in section, physically sealing C1000=C1012=C1017 in this area. This was overlain in places by a thin layer of crushed tarmac and gravel, C1011, forming the surface of the present driveway.

3.2 PLOT 1

Plot 1 was located in the southwest corner of the Highfield site, close to the road to Rockfield village. Its footprint measured $c.15 \,\mathrm{m}\,\mathrm{x}$ c.8m with additional porch footings $c.3 \,\mathrm{m}\,\mathrm{x}$ $c.1 \,\mathrm{m}$ located centrally to the frontage



N NH 91408.78/83905.29 14.51m S NH 91407.95/83900.87 14.51m





Stone



Copper pipe



Shells



(see Figure 3). No features or deposits of archaeological significance were identified within the area of the excavated foundation trench for Plot 1.

Subsoil was encountered at the base of foundation trenches at a depth of c.14.70m AOD and appeared as iron-stained yellow sand allocated C1026. Subsoil was overlain by two thin layers of relict ploughsoil, the first appeared as a sterile grey sandy deposit banded with natural iron-staining and containing rare inclusions of rounded gravel (C1028). This was overlain by C1027, a thin deposit of mixed light grey sand with rare inclusions of gravel and occasional flecks of iron-staining. The relict ploughsoil was sealed by modern ploughsoil C1000=C1012=C1017.

3.3 PLOT 2

Plot 2 was located close to the northeastern boundary of the Highfield site towards the glebe field. Its footprint measured $c.15 \,\mathrm{m} \times c.8 \,\mathrm{m}$ with additional porch footings $c.3 \,\mathrm{m} \times c.1 \,\mathrm{m}$ located centrally to the frontage (see Figure 3). No features or deposits of archaeological significance were identified within the area of the excavated foundation trench for Plot 2, although some post-medieval and modern features were encountered.

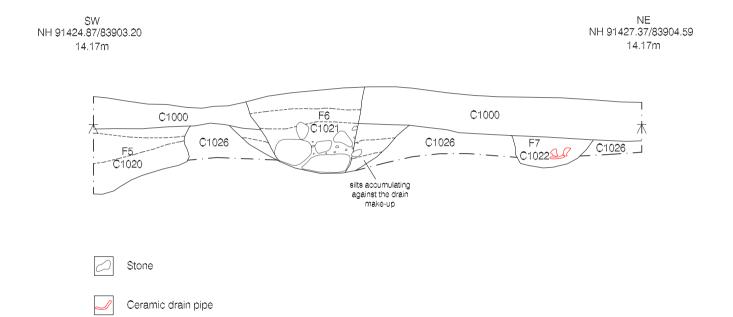
Subsoil C1026 was encountered in small areas of the base of the foundation trench for Plot 2 at an average depth of c.14.15m AOD. Two probable tree boles (F5 and F9) were identified within C1026 (Figure 6; see Figure 3). Both consisted of shallow irregular scooped features backfilled with very mixed sterile lenses of mottled grey and buff sands with natural iron-staining. The boles were sealed by modern ploughsoil C1000=C1012=C1017 present across the entire area of Plot 2.

A cobble-lined field drain, similar to those identified within the service trench, was noted running approximately north-south through Plot 2 (F10). F10 appeared as a U-shaped cut backfilled with rounded and sub-angular sandstone cobbles. F10 cut bole F9, and was in turn truncated by later wall F8. A later drain (F7) was also identified and consisted of a ceramic horseshoe drain, housed in a U-shaped cut orientated north-south.

F6 and F8 were identified as the remains of walls orientated north-south and east-west cutting modern ploughsoil and truncating F9 and drain F10. F6 was encountered in two sections and consisted of a U-shaped sand filled construction cut filled with the robbed rubble remains of a wall footing. F8 measured 0.30m wide and was constructed of concrete blocks each measuring 0.23m x 0.11m x 0.07m and bonded with a cement mortar.

4.0 DISCUSSION

Due to the implementation of a design solution which minimised the impact of the development, the results of the watching brief were limited, restricted to deposits and features related to relict ploughsoils and land drainage improvements, followed by the remains of the walls and foundations of the later barn complex.





Plot 2 southeast facing section

Scale 1:120

Figure 6

4.1 TOPOGRAPHY AND GEOLOGY

The topography of the site at Portmahomack is formed largely by the raised beach and consequently the glacial subsoil system consists of sterile sands over stony boulder clay. During the watching brief, subsoil was recorded intermittently and was glimpsed only rarely. However, levels recorded during fieldwork suggest that the majority of the development area occupies a fairly level terrace of land sloping down by c.2.5m towards the central glebe field. This low point was traversed by the service trench and may be owed to the position of a buried stream exploited during the monastic period as a source for a mill dam and later by the village of Portmahomack as a source for a well. Within this low point the sand overburden above boulder clay of the natural system was noted to be far shallower than encountered elsewhere and may have been eroded by water action, although no direct evidence was identified. In addition, this low point is masked by and appeared to have encouraged the deep accumulation of ploughsoils encountered where the service trench cut through the glebe field.

4.2 AGRICULTURAL ACTIVITY

The earliest archaeological deposits identified related to a medieval relict ploughsoil identified in the length of service trench through the Glebe field, and can probably be equated to a principal horizon identified across Sectors 1 and 2 of the Tarbat Discovery Programme excavations. Results of the Sector 1 excavations and study of aerial photographs showed extensive evidence for ridge and furrow features running NW-SE across these fields.

Drainage improvements

The Highfield was crossed in a number of places by narrow linear cobble-constructed drains to improve soil suitability for arable farming. F1, F2, F3, F6 and F10 were identified as examples of these stream-bed feeders, indeed F10 can be projected south to join up with drain F274 recorded in Intervention 11 of the main excavations linking the stream-bed feeders noted in the watching brief with the wider drainage network of the neighbouring fields.

4.3 BARN COMPLEX

Three features identified may relate to the foundations or demolition of the agricultural buildings. F4 was recorded as a loose voided dump of sub-angular sandstone cobbles and occasional bricks; when positioned over the footprint of the buildings F4 appeared to represent the east wall of the westernmost structure suggesting the feature may represent the original foundation trench. F8 was identified as the remains of a concrete wall associated with internal divisions within the westernmost structure. Likewise, F6 is located along the same line as the western external wall of the easternmost building in the barn complex.

5.0 ARCHIVE

A very limited assemblage of artefacts was recovered during the watching brief, all of which appeared to relate to 19th or 20th century activity, apart from a single residual fragment of jug handle of probable medieval date,

and all of which were recovered from modern ploughsoil. The finds assemblage will be retained and subsumed into the wider archive of material recovered during the excavations of the Tarbat Discovery Programme. All finds from the project are declared to the Treasure Trove panel; the assemblages have been awarded, by the Queen's Treasurer and Remembrancer, to the National Museum of Scotland.

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APPENDIX A BRIEF FOR ARCHAEOLOGICAL WORK, CONTROLLED TOPSOIL STRIP

Highland Council Archaeology Unit

1.0 BACKGROUND

These applications are for new houses and associated infrastructure at Highfield, Portmahomack. The application area lies within the core of the historic settlement of Portmahomack, close to the early medieval church site and within a large enclosure that surrounds it. There have been a number of excavations in the general area with resultant finds leading to the suggestions that the site is an early medieval religious complex with associated industrial areas. The remains that have been excavated to the north east of the development can be seen as being of national importance.

The application area was until recently covered by farm buildings which have now been removed. The depths of archaeological deposits in the areas nearby are believed to vary in depth, some being greater than the apparent level of disturbance in the application area. In addition reports to the SMR indicate that metal detecting on the site has revealed a potentially early medieval find. There is therefore still potential for significant archaeological deposits, structures and finds to lie in this area.

By raising the ground levels and using existing raft foundations the potential impacts on buried archaeological deposits can be reduced. As such the threat the buried deposits will be restricted to the excavation of service trenches.

Archaeological recording is required at this site because there is a potential for finds or features of interest to be discovered during site works. A controlled topsoil strip will enable any discoveries to be recorded quickly and efficiently as they appear with minimum delay or disruption to the development.

2.0 TERMS OF REFERENCE

This brief specifies what is considered to be the minimum acceptable standard of work; proposals that present a higher standard may be offered and accepted. It is assumed that this will form the basis of an agreed approach unless changes are agreed with Highland Council Archaeology Unit in writing before the start of any site works.

This briefhas been produced for the applicant, who will be responsible for the work, including any tendering and contractual arrangements. It sets out in detail who is responsible for what, as well as the terms of reference, objectives, method, monitoring and reporting arrangements.

The area to be covered by this assessment will be the entire development area: including any proposed services, access roads, works compounds, borrow pits or other ancillary works.

Where archaeological work fails to meet the standards set out here, the applicant will be in breach of any archaeological planning condition until matters are rectified. The Planning Authority reserves the right to refuse to accept work from, or otherwise take action against, archaeologists who fail to carry out work to these standards. The work will be carried out by, or under the immediate direction of, a member of the Institute of Field Archaeologists to ensure that work is carried out to professional standards.

The Archaeology Unit can comment on tenders submitted in confidence. Tenders should be accompanied by a project

design, statement and evidence of competence, including the CV of the Project Director.

The brief has been produced specifically for this scheme based on documents supplied at the time it was issued. It is valid for one year from the date of issue.

Before site works start, the proposed arrangements, including a timetable for the work should be agreed with the Highland Council Archaeology Unit in writing.

3.0 OBJECTIVES

To identify and record any features or objects of archaeological importance that could be damaged or destroyed by this development, while minimising any delays or disruption to the development project.

4.0 METHOD

4.1 DESK-BASED ASSESSMENT

A check of all relevant archaeological / historical records, maps and aerial photographs should be undertaken. At least the following sources should be checked:

- The Highland Council Sites and Monuments Record (SMR). Please note the online SMR 'Am Baile' is not designed for use in development control or for constructing management policy of sites. In order to source the full SMR information required for such studies all consultants should approach the Highland Council Archaeology Unit directly.
- The National Monuments Record of Scotland (NMRS)
- Vertical stereo aerial photographic coverage held by RCAHMS and the Highland Council Archaeology Unit.
- Ordnance Survey map coverage from 1850 onwards, and any other readily available early cartographic sources held at the National Library of Scotland Map Library.
- Bibliographic references and early parish accounts.

4.1.1 Controlled Topsoil Strip

The line of the service trenches where not within the original area of the agricultural buildings will be marked off and stripped of topsoil and overburden under controlled conditions.

A plan showing the location and extent of all sampled areas will be included in the report.

Any archaeological features revealed by the topsoil strip must be cleaned by hand before recording. Scale plans and sections of all trenches excavated must be made, as must scale plans, sections and photographs of all archaeological features noted.

4.1.2 Important Note for architects, builders and site contractors

Those carrying out site clearance and excavation works will need to work closely with the archaeologist and provide all necessary access and other arrangements. They may need to use differing work practices on site than usual to enable the

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archaeologist to complete the work, for example:

Where excavating machinery is used, a straight-edged bucket must be used on a back-acting machine. Care will need to be taken to avoid over excavation, and the advice of the archaeologist on-site should be adhered to on this.

- Archaeologists may need to get quickly into recently cleared areas and this may mean that drivers of excavators may sometimes need to wait briefly.
- Each excavating machine needs to be watched by at least one archaeologist at all times (1:1 ratio). Work should not begin on site until this cover has been set up.
- Because the archaeologist must be able to record any archaeological remains encountered during the work to professional standards, site clearance works may take slightly longer than normal. This should be allowed for in the development project timetable.
- be needed since there will be limited opportunities to preserve features in situ. Human remains must be immediately reported to the local police and to the Highland Council Archaeology Unit and should not be excavated as part of this work.

Once areas have been cleared, and any archaeology present recorded, there should be no need for further archaeological work in these areas.

5.0 REPORT

A report must be produced which sets out the results of the work and makes recommendations for any required further work.

The Council will assume author's copyright unless advised otherwise. However, HCAU reserves the right to make the report available for reference and research purposes, either on paper, or electronically. The completed report will be made available for immediate public consultation for research purposes at the Highland Council Sites and Monuments Record, and through the public library service. The Archaeology Unit will acknowledge copyright in all cases.

Content

The report must include as a minimum:

- Location plan (bound into the report) showing the project area; area of watching brief; and relevant archaeological
 sites and features in the vicinity. The location plan must also show the position of features identified during the
 work.
- A detailed site background, including reference to previous work conducted in the wider area on similar developments and the results of such work.
- The circumstances and objectives of this work.
- An analysis of the project results drawing in comparative data; a statement regarding the potential for, and survival of, buried prehistoric sites in this area; and a statement of the significance of the results as per the Burn Charter.
- Scale plans, sections and photographs of all archaeological features noted.
- A full index to any records or other material generated by the project including the archive location.
- A list of finds, as appropriate, set out in the required format for Treasure Trove reporting.
- Details of the sampling and finds retention policies and their justification,



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- A copy of this Specification for the required work, presented as an Appendix.
- Weather and other conditions affecting fieldwork
- Proposals for presenting the results of the work to the local community where appropriate.

Distribution

The archaeologist appointed is responsible for making sure copies of the report have been received by the recipients listed below. The archaeologist appointed should allow for all costs when estimating for the work. We require archaeologists to submit satisfactory reports within the agreed deadline.

Apart from any copies required by the client, at least four copies of the project report must be produced by the archaeologist. These must be submitted to all of the following within 4 weeks of the completion of the field work,

- One paper copy for the Council's Area Planning and Building Standards Manager
- One paper copy to be deposited with the Council's Senior Librarian Information Co-ordinator, Libraries Support Unit, 31a Harbour Road, Inverness IV1 1UA. This will be available for public consultation through the public library service.
- One paper copy to be deposited with the Council's Assistant Curator (Archaeology), Museum & Art Gallery, Castle Wynd, InvernessIV2 3EB (*This copy will only be required if there are finds*).
- One digital copy for the Archaeology Unit, Planning and Development Service, Council Offices, Glenurquhart Road, Inverness 1V3 5NX. The report should be supplied by email or on a computer disc as a *pdf* file. Please ensure that all drawings and photographs are included.

Other Products of the Work

Where significant archaeology has been found, the archaeologist must arrange a presentation of the project results, to the local community within a year of the completion of the fieldwork. This is the responsibility of the Archaeological Contractor, and will not be funded by the Highland Council.

A brief summary of the results must be sent to the Council for Scottish Archaeology for inclusion in *Discovery and Excavation in Scotland*.

6.0 MONITORING

The archaeologist appointed is responsible for agreeing arrangements for monitoring with Archaeology Unit staff. We will monitor projects as necessary to ensure that minimum standards are met.

Prior notice of fieldwork starting dates - with contact names, telephone numbers and arrangements for access - must be given to the HC Archaeology Unit by the archaeological contractor.

Any unexpectedly significant or complex discoveries, or other unexpected occurrences which might significantly affect the archaeological work and /or the development must be notified by the archaeologist immediately to the applicant and the Senior Archaeologist. The finds or features must be left *in situ* until arrangements have been agreed for safeguarding or recording them. In the meantime work may continue on other areas of the site.

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7.0 FINDS

Chance finds can be made during any archaeological fieldwork. Archaeologists should note that advice and facilities for emergency conservation and temporary storage can be offered by Inverness Museum. All finds should be notified for Treasure Trove.

8.0 INSURANCE

The archaeologist appointed must take all necessary measures to conform with the Health and Safety at Work Acts and be covered by all necessary insurance. Section 24 of the Highland Council's revised Contracts Standing Orders states:

"All specifications issued by and contracts entered into with the Council in connection with the carrying out of work or the provision of services shall provide that the contractor holds a valid insurance policy, approved by the Council, for:

- 1. Employers liability minimum limit £10m (statutory limit)
- 2. Public liability minimum limit £5m."

9.0 GENERAL

The archaeologist agrees by undertaking this work to the terms of this brief, including the following:

The archaeologist appointed must:

- carry out the work according to the Code of Conduct, standards and guidance of the Institute of Field Archaeologists.
- agree a timetable for the work with the client and the HC Archaeology Unit.
- not comment to the press or other media without prior approval from the applicant and HC Archaeology Unit.

This brief has been produced by the Highland Council Archaeology Unit, to whom any enquiries should be addressed. No one else has authority to vary its terms.

Highland Council Archaeology Unit Wednesday 24 May 2006

APPENDIX B SUMMARY OF CONTEXT RECORDS

	Int	Identity	Feature	Description	Munsell
1				rich dark greyish-brown sandy silt ploughsoil, seen	
İ				across the whole stripped area, and found to be more	
1000=1017	30	ploughsoil	-	compact west of the footpath and tree line; measured	10YR 3/1
İ				0.34m thick at maximum and used as recovery	
İ				context for finds collected during machining	
İ				speckled dark reddish-brown silty sand showing signs	
1001	30	layer	-	of iron-staining and inclusions of mixed gravel and	7.5YR 3/1
İ				pebbles, measured 0.28m at maximum thickness	
İ				thin layer of black sandy silt, where it thickens to a	
1002	30	layer	-	maximum of 0.08m, inclusions of mixed gravel and	10YR 2/1
İ				occasional charcoal flecks were identified	
İ				dark grey sandy silt with occasional mixed gravel and	
1003	30	layer	-	pebble inclusions and lenses of light brown sand,	10YR 3/1
İ				measures 0.15m at maximum thickness	
İ				mid-grey slightly silty sand layer with a silvery	
1004	30	layer	_	appearance, measured 0.15m thick and contained rare	2.5Y 3/1
İ				small mixed gravel	
İ				thick pack of dark grey sandy silt with sandstone	
İ				inclusions including one large angular block lying	
1005	30	layer	-	horizontally with a reasonably level top, measured	10YR 3/1
İ				c.0.45m at maximum thickness	
İ				firm, sterile banded sand and gravel subsoil varying	
İ				in colour from bright orange and yellowish-brown to	
1006=1026	30	subsoil	-	greenish grey, soon became waterlogged with water	various
ı				showing signs of iron-staining	
İ				small u-shaped pocket of loose gritty mid grey sand	
1007	30	deposit	-	measuring 0.4m wide by 0.18m thick	10YR 3/2
İ				dark brownish-grey sandy silt with a bluish	
İ				appearance, contained rare flecks of charcoal and	
1008	30	deposit	-	small gravel inclusions, measured $c.0.15$ m at	2.5Y 3/1
ı				maximum thickness	
İ				thin layer of sticky bluish-black slightly clayey sandy	
İ				silt, measuring c.0.12m at maximum thickness,	
1009	30	layer	_	included rare charcoal flecks and small gravel, along	Gley 2.5 N
1				with a wet fibrous black material much like decaying	-
İ				grass	
İ				loose modern deposit of pale yellowish-brown gritty	
1010	30	layer	_	sand with gravel, pebble and cobble components,	10YR5/6
				measures c .0.22m thick	

Context	Int	Identity	Feature	Description	Munsell
1011	30	make-up	-	thin surface of compressed gravel and crushed tarmac forming	various
1012	30	layer	-	firm very dark grey layer of silty sand with rare gravel and flecks of charcoal	10YR 3/1
1013	30	layer	-	dark reddish-brown silty sand layer, measuring c.0.2m thick, with occasional charcoal flecks and gravel and pebble inclusions, capped by c.0.02m thick of hardened iron-pan like material sandwiching a brownish grey silty sand, possibly relating to burnt turf	10YR 3/2
1014	30	dump	-	spread of horizontally lain large subangular sandstone blocks measuring $c.0.55 \text{m}$ wide by $c.0.25 \text{m}$ tall alongside smaller more irregular pieces	various
1015	30	backfill	1	large sub-rounded cobbles heaped in linear alignments, a matrix of coarse brownish-yellow sand with frequent inclusions of rounded gravel had been tipped in over the cobbles	10YR6/4
1016	30	backfill	2	single large angular block and several large rounded cobbles surrounded by a coarse yellow sand with a high content of rounded gravel	10YR 6/4
1017=1000	30	ploughsoil	-	very clean homogenous dark greyish-brown silt containing a lens of shells and rare angular gravel	10YR 3/2
1018	30	backfill	3	large mixed cobbles surrounded by coarse yellow sand with a high content of rounded gravel, sealed by a concrete cap	10YR 4/6
1019	30	backfill	4	modern void-ridden dump of loosely packed sandstone pieces, <i>c</i> .0.1-0.3m diameter, and occasional bricks, measuring 0.75m wide overall sterile backfill sequence of irregular shaped tree bole,	various
1020	30	backfill	5	measured 0.35m thick, comprised a lowest lens of pale bluish-grey sand overlain by a lens of mottled grey and brown sand with occasional iron-staining, overlain by more sterile grey sand	various
1021	30	backfill	6	cobbles measuring c.0.1-0.2m in diameter and mixed gravel in a dirty dark grey silty sand matrix	10YR 3/1
1022	30	backfill	7	slightly dirty pale grey sand backfill housing a ceramic field drain with a 'D' shaped section approximated 0.1m in diameter	various
1023	30	make-up	8	very pale whitish-grey concrete brick and concrete mortar make-up of east-west aligned wall, each brick measured 0.23m by 0.11m and 0.07m thick	various

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Context	Int	Identity	Feature	Description	Munsell
1024	30	backfill	9	sterile pale grey sand, overlain by a lens of mixed silt and sand banding	various
1025	30	backfill	10	rounded cobble make-up within a dirty dark grey brown silty sand matrix, cobbles measured $c.0.1$ - $0.25\mathrm{m}$ in diameter	10YR 3/1
1026=1006	30	subsoil	-	clean sterile yellow sand subsoil, flecked with natural iron-staining	various
1027	30	layer	-	mixed pale grey sand, measuring 0.06-0.08m thick, with few pebble and gravel inclusions and occasional evidence of iron-staining	various
1028	30	layer	-	heavily banded but very sterile sandy deposit, measuring $c.0.07$ -0.10m thick, comprising very thin layers of grey and brown iron-stained sand with rare gravel inclusions	various

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APPENDIX C SUMMARY OF FEATURE RECORDS

Feature	Int	Identity	Contexts	Description	Profile
				junction between two field drains, comprising large mixed	
				cobbles of sandstone and quartz surrounded by pebbles in a	
1	30	drain	1015	yellow sharp sand matrix; appears as two u-shaped cuts in the	u-shaped
				northwest facing section, and as a single drain cut in the	
				southeast facing section	
				stone-lined field drain, orientated NW-SE, comprising large	
_				cobbles predominated by a single large angular block,	
2	30	drain	1016	surrounded by rounded gravel and yellow sharp sand capped	u-shaped
				by concrete 0.2m thick	
				stone-lined field drain, orientated NW-SE, comprising	
3	30	drain	1018	angular and rounded cobbles in a matrix of yellow sharp sand	u-shaped
				and rounded gravel, capped by concrete 0.2m thick	
				comprised sandstone cobbles and occasional brick rubble	
				forming a dump with frequent voids, crossing the service	
4	30	dump	1019	trench on a north-south alignment, in a u-shaped cut c .0.75m	u-shaped
				wide	
				probable tree bole cut into subsoil and characterised by layers	
				of sterile grey sand and a more mottled buff sand with iron	
5	30	tree bole	1020	staining, within a shallow irregular scooped cut with concave	not seen
				sides	
				cobble-lined drain running north-south across the foundation	
				trenches for the eastern plot, u-shaped with steep sides and	
6	30	drain	1021	damp silty sand deposits built up on either side as a result of	u-shaped
				wash	
				shallow scooped cut containing a ceramic field drain,	
7	30	drain	1022	orientated north-south, within a sterile grey sand matrix	u-shaped
0	20	wall	1022	wall footing orientated east-west, comprising long concrete	1
8	30	wan	1023	bricks set in a concrete mortar, though the cut was not visible this feature truncates F9 and F10	rectangular
0	20		1004	partially glimpsed pit or tree bole, backfilled with sterile grey	
9	30	tree bole	1024	sand overlain by a more mixed sand and silt deposit, cut by	not seen
				F8 and F10	
				north-south aligned drain comprising large rounded	
10	30	drain	1025	sandstone cobbles in a dark silty sand matrix, measured	not seen
				<i>c</i> .0.45m wide	
				spread, $c.4.5$ m across, of horizontally lain large sub-angular	
11	30	hard standing	1014	sandstone blocks measuring alongside smaller more irregular	not seen
				pieces	



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APPENDIX D INDEX TO FIELD FILE

CODE		DESCRIPTION	RECORD	FORMAT
	ı	Indices	I	I
YO1		Index of notebooks	-	-
YO2		Index of contexts	1	A4
YO3		Index of features	1	A4
YO4		Index of structures	-	-
YO5		Index of drawings	-	-
YO6	0	Index of photographs	3	A4
	0	Index of film processing	1	A4
YO7	0	Index of finds	1	Digital
	0	Index of finds by context	-	-
	0	Index of finds by grid square	-	-
	0	Sample Register	-	-
	0	Artefact Register	-	-
	1	Finds Storage Register	-	-
YO8		Index of geophysical data files	-	-
YO9	0	Index of survey stations	-	-
	0	Index of co-ordinate files	-	-
	0	Index of topographic files	-	-
YO10		Index of interventions	1	A4
Y1		Notebooks		
	ı	Contexts	1	ı
Y2	0	Context Record	29	A4
	0	Skeleton Record	-	A4
	0	Coffin Record	-	-
	0	Masonry Record	-	-
	0	Timber Record	-	-
	ı	Features	I	I
Y3	0	Feature Record	11	A4
	0	Auger Record	-	-
	ı	Structures	1	1
Y4		Structure Record	-	-
	1	Site drawing		1
Y5	0	Legend	-	-
	0	Plans	1	-
	0	Maps	-	-
	0	Sections	5	-
		Photographs		
Y6	0	Black and white negatives	-	-
	0	Colour negatives	36	35mm
	0	Colour slides	-	-
	0	Colour enprints	36	35mm
	0	Black and white prints	-	-
	1	Finds		
Y7	0	Finds Location Record	-	-
	0	Artefact Record	-	-
		Survey		
Y8	0	Record of geophysical data files	-	-
	0	Record of .RAW data file	-	-
	0	Record of .FLD data file	-	-
	0	Surface Reconnaissance Record	-	-

